elia group

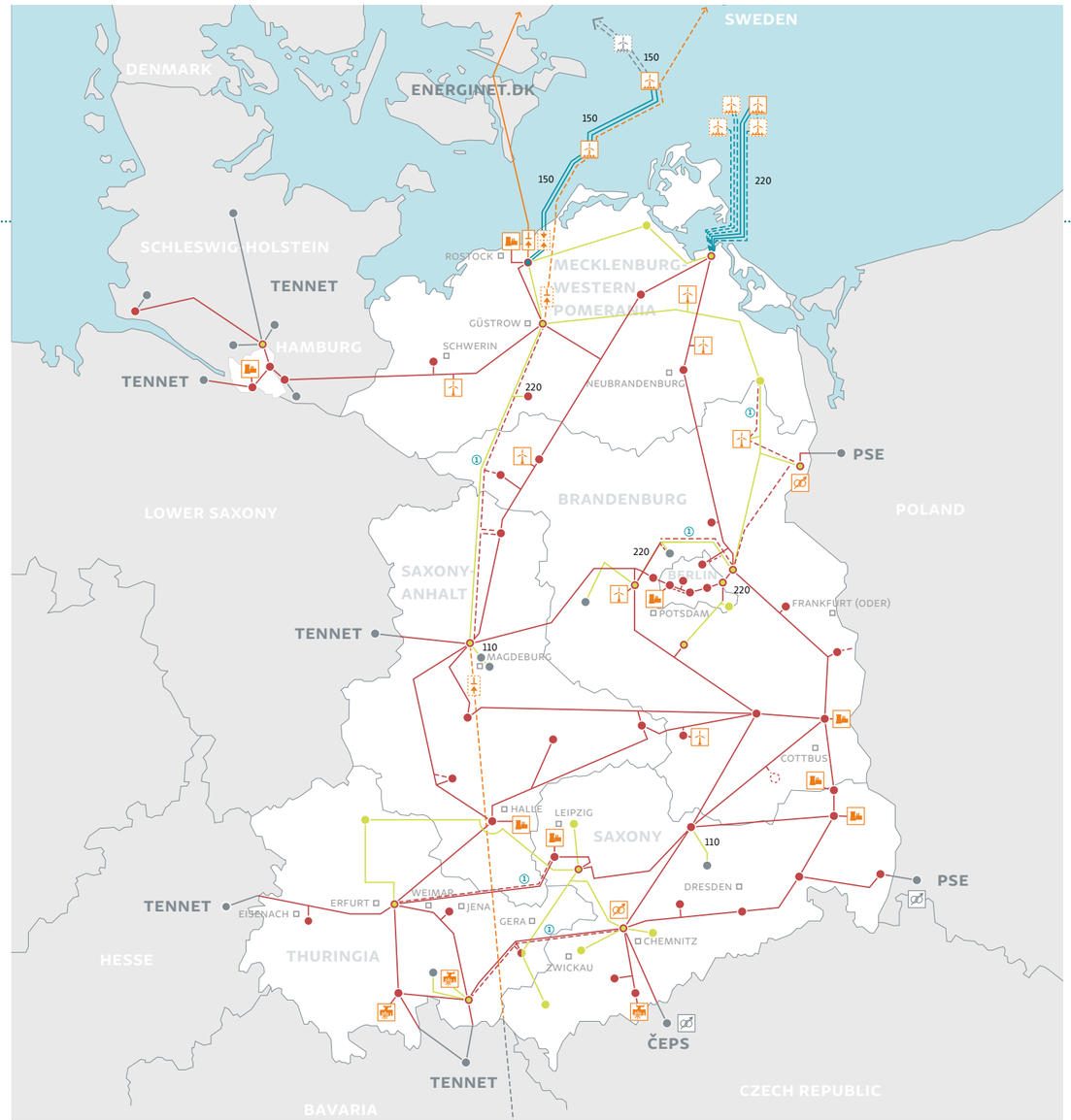
Elia | 50Hertz | EGI

Ready to accelerate

Activity Report 2019

Grid Map Elia

Grid Map 50Hertz



Content

About this report	2
We connect generation and distribution	4
Interview with Chris Peeters and Bernard Gustin*	6
The context of the Energy Transition*	10
Our story*	12
A stable and secure grid around the clock: interview with Stefan Kapferer, CEO 50Hertz	14
Sustainable actions in the interest of society*	16
2019 in numbers	18
Elia Group in 2019	20
Fifth anniversary for Elia Grid International: interview with Didier Wiot, CEO EGI	24
Our Strategy*	26
Building Block I: We ensure a secure, reliable and efficient grid*	30
Building Block II: We deliver the transmission system oft he future*	42
Building Block III: We develop the electricity system and the markets*	60
Building Block IV: We cooperate to create value for society*	72
Buidling Block V: We align culture with strategy*	86
Building Block VI: We have our eyes wide open for innovation & growth opportunities*	102
Corporate bodies	114
Corporate governance declaration*	116
Legal structure	148
The Elia Share in 2019	150
Management Discussion*	153

* These chapters from the annual report cf. article 3:32 of the Belgian companies and associations.

For a successful energy transition in a sustainable world

We create and deliver the infrastructure of the future and provide innovative services that enable a reliable and sustainable power system, with the interest of society at the heart of every decision. We keep the lights on and make the energy transition happen by serving our customers in a responsible, highly efficient and non-discriminatory way, while protecting the safety of our personnel, subcontractors, and anyone in contact with our infrastructure.

About this report

The Annual Report 2019 consists of three parts: the Activity Report, the Sustainability Report and the Financial Report where we inform our stakeholders about our company, corporate social responsibility, and financial results. You are currently reading the Activity Report.

Please visit **www.eliagroup.eu/publications** to consult parts two and three.

Activity Report 2019

This report explains who we are and what we do, the context in which we operate, and includes the risks and opportunities. It outlines our strategy and the progress we have made towards achieving our goals. It also covers our approach to corporate governance and provides an introductory analysis of our 2019 results. The Activity Report concerns regulated information, published on 14 April 2020 after trading hours.

GRI Standards: Core option

This report has been prepared in accordance with the GRI Standards, the first global standards for sustainability reporting. The applicable GRI-Standards performance indicators are highlighted in the report wherever Elia Group has reported on economic, environmental or social impacts. Consult the GRI Index on page 73 of the Sustainability Report for a full overview.

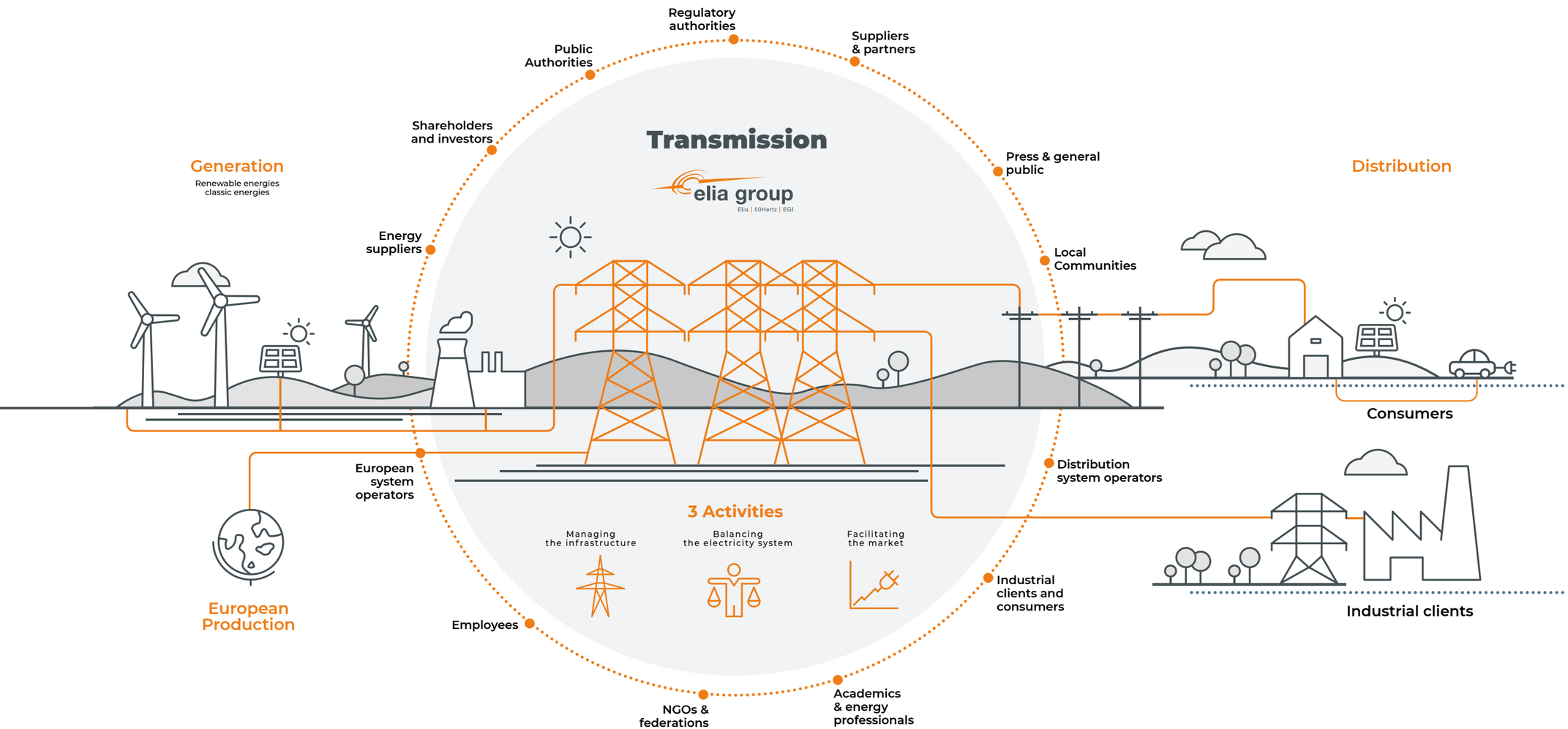
The online references in this report provide more in-depth information on a subject by way of video, brochure or webpage.

Ready to accelerate...

... to realise the next phase of the energy transition in a timely and secure way bringing maximum welfare to society

GRI 102-40, GRI 102-9

We connect generation and distribution



Watch the video
http://bit.ly/GuardiansOfTheGrid
and get to know the energy players of the energy landscape.

Ready to accelerate

Interview with Chris Peeters and Bernard Gustin, CEO and Chairman Elia Group

GRI 102-14
GRI 102-15

The transition of Europe's energy system is, without a doubt, one of the greatest challenges faced by society this century. The shift to a low-carbon society is sure to happen all the faster given the ambitious course set by the European Green Deal, which aims to make Europe the world's first climate-neutral continent by 2050. The energy transition is Elia Group's number-one priority. With our retooled strategy, updated development plans, new corporate structure and additional capital, we are ready to accelerate.

> **We are increasingly carrying out our activities in an international context, and it's important that we adapt to reflect this.**
>
> **Chris Peeters**

The Green Deal was not the only defining feature of 2019. The climate marches and yellow-vest protests shaped the year too. How is Elia Group dealing with these issues?

Bernard: "Until recently, calls for climate action were mainly the preserve of non-governmental organisations and lobby groups. But political players are gradually starting to take the lead too: there are more and more climate ministers, and ambitious plans are being drawn up. At the same time, though, there are concerns about the cost. We don't want to burden future generations with the consequences of climate change, but we don't want to saddle them with a mountain of debt either."

Chris: "That's why it's important to know which path to pursue when it comes to adopting climate measures. Some decisions will have a greater impact on the current situation than their cost would suggest, whereas it may take time for the effects of other decisions to be felt. As grid operators, we need to take extremely complex decisions at an early stage, facing all kinds of NIMBY (not in my back yard) backlash in the process. And yet in the context of the energy transition, we are the ones whose actions will cost consumers the least and will make the biggest difference in terms of CO_2 reduction. We strive for the best possible social and environmental solutions. That is why the interaction with our various stakeholders is so important. We want to be a transparent and reliable advisor to policy makers. In addition, when planning new infrastructure, all stakeholders are involved at a very early stage of the project. Their input is integrated in the various planning phases."

Bernard: "Today, the electricity grid is the focus of the energy transition. For the next two years, Elia and 50Hertz will be investing a staggering € 1.1 billion per annum in the integration of renewable energy, development of an offshore high-voltage grid and in the construction of interconnectors to facilitate the integration of the European energy market. On top of that, we want to harness digitalisation and innovation to open up our grid to new players, different industries and new technologies. While this approach creates certain expectations and puts us under a lot of pressure, we can see that it really appeals to young people. We're attracting new profiles. Young engineers who, until recently, wanted to work for the Googles of this world are now choosing to come to us instead. Here, they will find a mix of technical complexity and digitalisation, as well as the chance to contribute to fighting global warming."

Elia successfully carried out a capital increase worth €434.8 million in 2019. Looking back, what are your thoughts on the transaction?

Bernard: "A capital increase is like a health check for a company – it tells you whether the market understands and believes in your strategy. The capital increase showed us that our current shareholders have a lot of faith in us, but it was a huge success on the market too. Our share price hit an all-time high, reflecting our ambitions and showing that the market believes our strategy is intelligent."

Chris: "We've noticed that we're attracting a new kind of investor. Our share is increasingly being viewed as an attractive tool for investment. Institutional investors want to be part of our growth journey. They don't just look at us as a bond share anymore. That is an important observation."

Won't you need to launch another capital increase quite quickly if you put your growth strategy into action?

Bernard: "It's important to strike a balance between adjusting our plans to the market and achieving our own goals. Both the Board of Directors and the management team are willing to look out for opportunities, and if they're positive for the group, we'll seize them. There's been a new dynamic within the group since we acquired the additional stake in 50Hertz. Our teams are ready for action."

Chris: "If the authorities need to speed up the energy transition, additional investments will be required, so capital increase for organic growth can be postponed. However, the major unknown is non-organic growth."

In 2019, the corporate structure was adjusted and Elia Group became a holding company. What was the rationale behind the change?

Chris: "We are increasingly carrying out our activities in an international context, and it's important that we adapt to reflect this. We have just as many activities abroad as we do in Belgium. Under the new corporate structure, our German subsidiary 50Hertz is a business unit with equal standing. The change has enabled us to strike the right balance between group dynamics and local identity."

Bernard: "We're on the lookout for synergies in strategy, finance, innovation, safety, and more within the group. And we're also prioritising a local approach. It was a conscious decision to give preference to a German minority shareholder in 2018. Our relationship with German development bank KfW is going really well because everyone involved feels that it's a good deal. That much is clear from KfW's extremely active involvement in our management bodies. KfW helps us to make better decisions because they have a better insight into the local context."

Will the future internationalisation of the group affect the make-up of the Board of Directors?

Bernard: "Until now, we've been bound by the Belgian Electricity Act. But the holding company is a non-regulated company, so we can adapt the make-up of our management bodies to reflect our actual situation. Since half of our activities are located in Germany, it seems only logical, in the long run, to have board members who have a firm grasp of the local situation and can advise us on it."

Another major highlight of 2019 was the launch of Elia's first offshore projects in Belgium. The sea sounds like a risky place for an electricity system operator to work.

Chris: "That's why we took so much care over the projects. Both the Nemo Link cable (interconnector with the United Kingdom) and the Modular Offshore Grid (switching platform 40 km off the coast, for connecting offshore wind farms to the mainland) were delivered on time and on budget, and both met the required quality standards. Nemo Link was the first interconnector to manage that. The MOG was a stupendous achievement too. Just two and a half years ago, the project hadn't even been set down in law. Today, the first offshore wind farms are already connected to it. I am exceptionally proud of what our teams have achieved."

Bernard: "50Hertz has more experience with offshore projects, so we were able to put their skills to good use. Our combined experience is a key driver for our future growth. Most reports place offshore wind potential at 400 GW, with about half coming from the North Sea. We're currently sitting at 25 GW, so a massive increase is needed. Moreover, the grid is to be connected at European level, and we're ahead of the pack there too. With its Combined Grid Solution project, 50Hertz is currently working on the first hybrid interconnector between Danish and German offshore wind farms."

Elia Group wants to be a leading European energy company. How did this aim manifest itself in 2019?

Chris: "Our international position means that we examine complex problems from multiple angles. We have strong teams in both countries, and they don't always agree. Working together yields constructive solutions: our first joint study on the future of the European electricity system (Future-proofing the European energy system towards 2030) is proof of that. We are thinking ahead, rather than simply responding to developments as they happen."

Bernard: "The fact that we have activities in two countries makes us somewhat atypical for our sector. But that is precisely what gives us a broad outlook. Our in-house change process was instigated by a German who speaks perfect French and understands Dutch. Our operational activities are managed, at group level, by a committee with equal numbers of Belgian and German members. By looking around ourselves, we can identify new needs faster and take action to address them – digitalisation being just one example. We're actively seeking partnerships, too. I'd also like to mention Elia Grid International. Their consultancy position enables them to provide interesting leads for the group. They are an important part of the puzzle."

Chris: "Then there's technical leadership too. The 50Hertz grid has one of the highest proportions of renewable energy (60% in 2019). You can't really tell at first glance, but there is a great deal happening behind the scenes to keep the grid stable without impacting consumption behaviour. The SuedOstLink will be the first time that underground cables with a voltage level of 525 kV have been used, while the Combined Grid Solution will be the first project in the world to connect two offshore wind farms."

> **We don't want to burden future generations with the consequences of climate change, but we don't want to saddle them with a mountain of debt either.**
>
> **Bernard Gustin**

His Majesty the King visited the Modular Offshore Grid (MOG) at its inauguration on Tuesday 10 September 2019.

The energy transition means an increase in electrification. To what extent has there already been convergence with sectors like transport and heating?

Chris: "Since we're a regulated monopoly, we have a specific role. We're also not the only system operator. That said, I'd like to highlight the IO.Energy project in Belgium – it's a project that was devised within Elia and aims to get consumers actively involved in the electricity market. Following analysis, together with Belgian DSOs, we launched a call for cooperation in late 2018, and we're currently testing the first projects on smart buildings and local energy communities."

Bernard: "We're not trying to do anyone else's job – not the distribution sector's, and not the commercial market's. If we all work together, we can come up with the best solutions for the customer. Thanks to this approach, our work is truly consumer-centric."

What do you need to focus on in 2020?

Bernard: "We've created a lot of expectations regarding integration and synergies with 50Hertz. Now it's time for us to deliver. We've set up some exciting initiatives centred on digitalisation, to name but one example. At the same time, we're also thinking about our next big project. I firmly believe that companies grow by undertaking projects and setting ambitious goals. The last two years have been fantastic for us. Now we need to make sure that we can keep on growing."

Chris: "We're standing on the threshold of something new and exciting. The good news is that the various focal points underpinning our strategy have shown us the best way to move forward. Digitalisation will become increasingly relevant at European level, and we have opportunities to achieve more organic growth. We've laid the foundations. Now it's time for us to build on them. For instance, we're about to see a new wave of offshore projects. We need to make the most of the opportunities we have now so that we can take further steps in the future."

> **Our German partner KfW helps us to make better decisions. It has a better insight into the local context.**
>
> **Bernard Gustin**

Last but not least, who would you like to thank?

Chris: "From a CEO's point of view, there are a number of critical relationships that are vital for success. One of those is the relationship between the CEO and the CFO. These are two complementary roles that balance and challenge each other. Just as critical is the relationship between the CEO and the Board of Directors, which largely comes down to the CEO's relationship with the Chairman of the Board. With that in mind, I'd like to thank Catherine Vandenborre and Bernard Gustin for our excellent partnership. I'd also like to say a special word of thanks to all the employees who have worked so hard to get Elia Group where it is today. Our achievements are the result of major efforts by a great many people at Elia and 50Hertz. And then there are all the departments that constantly strive to ensure that the lights stay on and the grid, system and market are ready for the future. Finally, I'd like to thank the authorities and the regulators. Our discussions with them have been constructive, which has enabled us to implement the projects that are needed for the future."

Bernard: "It's great to see how well our teams in both countries are coming on. A lot of that is down to Chris. He takes a real interest in the field. The management team also sat on all the working groups with the Board of Directors, contributing in a very natural, open way. That kind of transparency is important, and fosters trust. Then there are the regulators and the authorities, who fully understood our aims and gave us all the support we needed. When we were expanding our German management team, we were able to draw on the assistance and advice of our German partner KfW, with whom we have a very positive relationship. Finally, I'd like to thank our shareholders, who made our capital increase such a success and thus demonstrated their faith in us."

The context of the energy transition

GRI 102-15,

As transmission system operators, Elia and 50Hertz lead the way in the energy transition. Our grids have a crucial role to play in the decarbonisation of the energy sector and society in general.

Besides the rise of renewable generation, the energy transition is also bringing other changes: increasing decentralised generation, more supranational coordination and the emergence of innovations such as the Internet of Things (IoT), artificial intelligence (AI) and blockchain that are contributing to the fast-paced digitalisation of our society.

As a result, new market players and technologies appear such as electric vehicles, battery storage, Power-To-X technologies, etc. In a future, decarbonised and progressively digital world, managing the power system becomes increasingly complex. Not only will electricity generation become ever more weather-dependent, it will also be produced by millions of assets connected everywhere in the European grid. Both transmission and distribution system operators will need more flexibility to keep the system in balance and to manage congestions and voltage issues.

Current trends and evolutions

Increasing shares of renewables

The decarbonisation of the energy sector based on increasing shares of renewables will remain the most important driver of change in Europe. This trend is propelled by the political objective to counter climate change and build a sustainable energy future, but is also supported by the rapid development and declining costs of renewable technologies themselves. In addition, the current design of electricity markets is driving the decarbonisation trend because of the zero marginal costs of renewables. We expect to see this trend pick up speed, which has important direct repercussions on grid development needs and on system operation, but also indirect consequences, such as increasing societal and political expectations that companies should be playing their role in combating climate change.

Supranational coordination

The increasing share of renewables and the trend towards more decentralised generation with a much larger number of players is making the behaviour of the power system more variable and complex. In addition, all over Europe we are seeing grid development lag behind rapidly evolving renewable generation. This is causing congestion problems and considerable redispatching costs in some European countries. Given the already high degree of interconnectedness and integration of the European power system and markets, responding to these challenges often requires a supranational approach.

Decentralisation

Following the trend of decarbonisation, we believe that the move towards more dispersed, smaller and local generation sources, which mainly connect to lower voltage grids, is also likely to continue. “Prosumer” numbers will rise and they will move to the forefront of the electricity system even more, empowered by technologies that allow them to play a much more active role. New technologies, increasing electrification and sector integration also stimulate the emergence of new players such as service providers targeting end-consumers. For example, balancing service providers are exploring the potential of delivering flexibility to different players along the value chain.

Digitalisation

The fourth trend, which is being introduced at a rapid pace, will accelerate the speed of the decarbonisation and the decentralisation of production. Elia Group expects to see massive amounts of renewables coming online at all levels of the grid, electrification powering activities such as mobility and heat & cooling, more international cooperation, and millions of people producing and storing their own electricity. To respond to this, the Group believes that a new way of managing the future power system is required in order to maximise the benefits of the energy transition. This will be possible thanks to the digitalisation of the power system connecting all electrical devices and various players in the system. The emergence of new digital technologies will allow new capabilities for improving the gathering, transfer, processing, and visualisation of data, as well as the automation of decisions and actions in managing the power system. Some of these digital technologies include (but are not limited to) the Internet of Things, cloud computing, big data, artificial intelligence and blockchain.

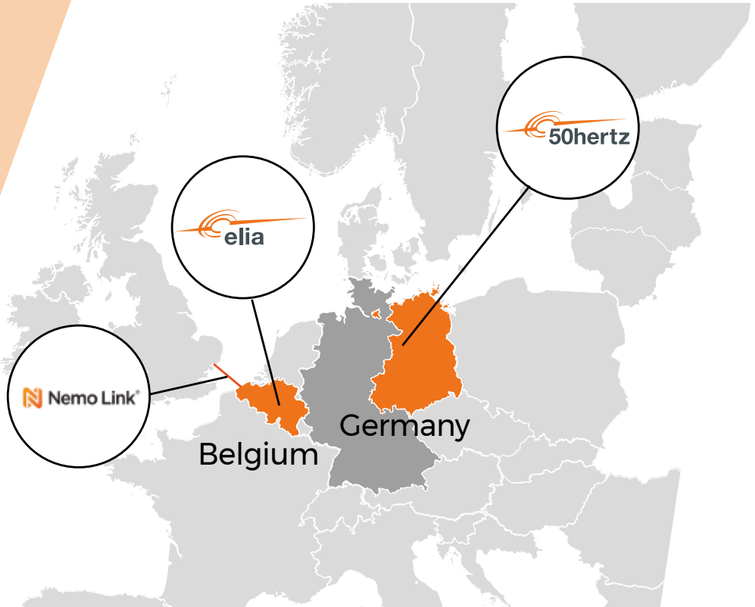
Our story

A European top 5 TSO

GRI 102-1

Elia Group is active in electricity transmission. We ensure that production and consumption are balanced around the clock, supplying 30 million end users with electricity. With subsidiaries in Belgium (Elia) and northeast Germany (50Hertz), we operate 19,271 km of high-voltage connections. As such, Elia Group is one of Europe's top 5 TSOs.

In addition to our activities as TSO, Elia Group provides various consulting services to international customers through our subsidiary Elia Grid International (EGI). Elia is also part of the Nemo Link consortium that is operating the first subsea interconnector between Belgium and the UK.



Our core tasks

GRI 102-2

GRID OWNERSHIP

We deliver the infrastructure of the future

We develop, build and maintain our transmission infrastructure according to long-term needs. We heavily invest in the integration of renewable energy, the development of an offshore high-voltage grid and the construction of interconnectors to make the energy transition happen and to facilitate the integration of the European energy market.

MARKET FACILITATION

We are part of the European integrated market

Elia Group makes its infrastructure available to all market players in a transparent, non-discriminatory way. Digitalisation and the latest technologies offer market players new opportunities to optimise their electricity management by selling their surplus energy or temporarily reducing consumption. We develop services and mechanisms allowing the market to trade on different platforms, which promotes economic competitiveness and the wellbeing of society.

TRUSTEESHIP*

We transparently integrate renewable energies into the market

The German legislator has transferred the responsibility for coordinating and processing legal levy systems to promote environmentally friendly technologies to the transmission system operators. 50Hertz collects these levies as a trustee, administrates them and coordinates their distribution to the recipients. If the electricity from renewables is not marketed directly, we sell on the power exchange.

*Only for 50Hertz

SYSTEM CONTROL

We maintain the balance

Operating the electricity system is an increasingly complex task due to the sharp rise in renewable generation sources, the continuous arrival of new players and technologies and the development of supranational coordination. To ensure a reliable supply and the efficient operational management of our grids, Elia Group monitors the electricity system in real time. This requires specialist knowledge as well as sophisticated tools and processes.

In the interest of society

Based on mutual respect and empathy, we realise the grid of the future through proactive dialogue with a variety of stakeholders to enable us to achieve the best societal and environmental solutions. By building interconnectors and integrating renewable energy generation, Elia Group promotes both the integration of the European energy market and the decarbonisation of our society. In Germany, we are already integrating more than 60% of renewable energy safely into the grid. We also ensure that we deliver investments on time and within budget, while having a maximum focus on safety. We proactively involve stakeholders very early on in the development process. We also believe that our technical knowledge and analyses support policymaking and contribute to the public debate on the future of the European energy system.

Innovation & collaboration

We keep the lights on and make the energy transition happen in a responsible, highly efficient and non-discriminatory way, while protecting the safety of our personnel and subcontractors. We integrate new technologies and keep up with the latest developments in the energy sector. We encourage our employees to be frontrunners in the energy transition, both with ideas and practical applications. We count on our own expertise but are also keen to learn from outside the Group through collaboration and open innovation. Furthermore, we continue to contribute our knowledge and expertise publicly by providing independent, objective and factual analysis to key actors in the energy landscape.

Watch
http://bit.ly/AboutEliaGroup
and get to know more about our Why, What and How.

INTERVIEW WITH STEFAN KAPFERER, CEO 50HERTZ

A stable and secure grid around the clock

GRI 201-2

As transmission system operators, we are just as committed to the goals of the Paris Agreement as other players in politics and business. We see ourselves as a service provider to ensure a stable and secure electrical system around the clock while the share of renewable energies in the energy supply increases steadily. This is a responsible task. Public authorities and society in general count on our expertise. They see us as their trusted advisor.

€4.2 billion

50HERTZ HAS LAUNCHED AN INVESTMENT PROGRAMME OF €4.2 BILLION FOR THE NEXT FIVE YEARS

Stefan Kapferer (54) has been 50Hertz CEO since December 2019. Prior to this, he was Chief Executive Officer of the Federal Association of the Energy and Water Industries (BDEW), Deputy Secretary-General of the Organisation for Economic Cooperation and Development (OECD) in Paris (2014 to 2016) and from 2011 to 2014 he was State Secretary in the Federal Ministry of Economics and Energy. Stefan Kapferer was born in Karlsruhe and studied administrative sciences in Constance.

How can 50Hertz support the ambitions of the European Green Deal?

Stefan: "The strength of Elia Group lies in the variety of different market designs we have to deal with, different perspectives we can share and of course, the different cultures which we can learn from. The mere fact that our headquarters are located in Berlin and Brussels speaks for itself. No other TSO in Europe has this presence in two capitals. As far as 50Hertz operational contribution is concerned: no other TSO has such a large share of fluctuating electricity volumes from wind and solar power in its grid. In 2019, we had around 60% of our electricity consumption coming from renewables, which is one of the world's highest shares. In our grid area, we expect to achieve the German federal government's 2030 target of 65% renewables within two years."

Major challenges of the energy transition according to Stefan Kapferer

- To secure and technically implement grid optimisation, grid reinforcement and grid expansion with the required capital.
- To ensure system stability in an increasingly decentralised digital energy world.
- To work cost-efficiently and transparently so that the financial burden on end consumers is kept within reasonable limits.
- To invite the people that live close to infrastructure projects to engage in dialogue to generate understanding. Without civil society, the energy transition will not work the way politicians and the industry wants it to.

"The mere fact that our headquarters are located in Berlin and Brussels speaks for itself. No other TSO in Europe has this presence in two capitals.

Stefan Kapferer

What are currently the biggest challenges?

Stefan: "The German government has now decided on a clear timetable to phase out coal-fired power generation by 2038 at the latest and then to secure the electricity supply mainly through renewable energies and flexible gas power plants. This is an enormous task. So far no one can reliably say where all the electricity needed for private households, for industry and increasingly also for heating and transport sectors will come from. For us as a transmission system operator, this poses several major challenges.

"In our grid area, we expect to achieve the German federal government's 2030 target of 65% renewables within two years.

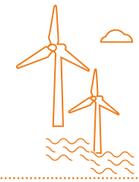
Stefan Kapferer

Why is there a need for grid in times were generation becomes more decentralised?

Stefan: "The energy transition will only be succesful if we all collaborate and use all the available potential. And we as TSOs and DSOs have a key role to play: it won't work without us. Incidentally, a scientific association recently recorded this with a clarity I wouldn't have expected. 'Without the grid expansion, the energy transition will fail,' says the German scientific elite in a recently published paper. And that's why we deliver. 50Hertz has launched an investment programme of €4.2 billion for the next five years. It includes onshore projects such as the SuedOstLink and the Berlin cable diagonal, as well as the important offshore grid connections Ostwind 2 & 3 and the HansaPower Bridge interconnector to Sweden. Offshore will become increasingly important because wind turbines at sea have higher full-load hours and are perceived by the public as less disruptive. This investment programme naturally also requires an adequate and responsible regulatory framework."

What else is needed to make this huge task a success?

Stefan: "Grid expansion alone is not enough. We urgently need innovations in hardware - from cables to substations - and also in software, in other words in the markets. Before we build a new line, we need to better utilise and optimise the existing grid. We are doing this using the latest technology, but there is still a lot of research and field testing to be done. And in times of nuclear and coal phase-out, we need new equipment such as phase shifters, reactive power compensation systems and intelligent data management. The topic of 'energy storage' will also gain momentum, both in the smart home context and at the Power-to-X level - I am convinced of that. Intensive, trusting cooperation between grid operators at various levels and large industrial electricity consumers is essential."



Sustainable actions in the interest of society

GRI 102-15, GRI 201-2, GRI 103-1, GRI 103-2, GRI 103-3

Our planet and all mankind face the serious challenge of finding answers to the problems of climate change. Industry plays an important role in this and is called upon worldwide to follow the guiding principles of the United Nations. The Sustainable Development Goals, to which the Elia Group is also committed, represent a globally crosslinked strategy to meet these challenges on an economic, social and ecological level.

A carbon-neutral economy is an essential part of this global strategy. The Elia Group makes a significant contribution to this by enabling the integration of renewable energies and thus the energy transition. To this purpose, we develop the transmission grid to meet demand and enable transparent and non-discriminatory market integration for all parties. In addition, we have set ourselves specific targets and measures to make our core business even more sustainable. The Elia Group is committed to reduce its direct CO_2 emissions, to increase biodiversity around its assets and its lines, and to continuously improve its occupational safety and diversity objectives. In the future, we will increasingly work on concepts for the circularity of our materials used and the eco-design of our assets.

“Our vision already states: we as a transmission system operator are committed to sustainable development in the interest of society. It is therefore natural for us to focus on our contribution to the global development goals of the United Nations. This results in opportunities for us and for society, which we want to actively manage. And of course we always keep an eye on the risks.

Marco Nix,
Chief Financial Officer 50Hertz

Please visit
www.eliagroup.eu/en/publications
to consult the full 2019 Elia Group Sustainaility Report.

“One of the greatest challenges for society is climate change. Since we are enabling and facilitating the energy transition through grid development, providing the appropriate market design, supporting electrification of mobility, etc. sustainability is already at the core of our strategy. At the same time, we are setting up objectives and concrete actions to make our own business sustainable: limitation of direct CO_2 emissions, introducing concepts of circularity and eco-design in our assets, enhancing biodiversity surrounding our installations, introducing concrete safety targets, a safety culture and working on diversity targets.

Ilse Tant,
Chief Community Relations Officer Elia

In 2018, the Elia Group had decided to widen its view on sustainable business management and to integrate the Sustainable Development Goals (SDG) into a sustainability framework. In a first step, 11 of the 17 internationally valid sustainability goals were identified and clustered from top and high to medium priority.

In order to better understand the risks and opportunities that SDGs present for their own business activities, 50Hertz and Elia launched a quantitative assessment along the value chain in the 2019 reporting year. This allowed the 2018 perspective, which only took into account their own operations, to be fundamentally expanded. The science-based approach of the S&P Global consulting subsidiary Trucost was assigned for the analysis. The internal prioritisation was completely confirmed by the analysis (for the highest priority) and also largely confirmed for the high priority.

Sustainable development goals
In 2015, the international community of states represented by the United Nations has agreed 17 goals for sustainable development. Within the context of Agenda 2030, these global goals, which apply equally to all states, are intended to reduce inequalities, promote equal opportunities and stimulate sustainable economic growth. All - governments and companies alike - are called upon to meet this challenge, but also to focus on opportunities and risks and tap the potential of sustainability.

Opportunities:

Risks:

The Elia Group has a strong, positive influence on SDG 7 "Affordable and Clean Energy" with its business model of increasingly integrating sustainable energies into the grids. At the same time, this also creates positive influences that lead to sustainable cities and communities (SDG 11). The Group contributes to a good employment situation and stable growth in the various regions of its grid areas, thus strengthening SDG 8 "Decent Work and Economic Growth". Overall, Elia Group's business activities and revenues contribute 100% positively to SDGs.

This positive influence is offset by both opportunities and risks, the alignment of which with the corporate strategy is carefully examined. These include, for example, more intensive investigation of the effects of climate change and other related risks on the Group's own business activities and those of the supply chain.

2019 in numbers

GRI 102-44

Operational

30 mio
END USERS
(ELIA GROUP)

19,271 km
OF HIGH VOLTAGE LINES AND CABLES (ELIA GROUP)

99.99%
RELIABILITY OF THE GRID (ELIA)

Environmental

2,584
INSPECTIONS WERE CARRIED OUT ON CONSTRUCTION SITES (ELIA GROUP)

60%
PERCENTAGE OF RENEWABLE ENERGY INTEGRATION (50HERTZ)

337.59 km
OF BIRDMARKERS INSTALLED UNTIL 31/12/2019 (ELIA GROUP)

Financial

GRI 201-1

€ 9.1 billion
REGULATORY ASSET BASE
(ELIA GROUP)

€ 306.2 mio
ADJUSTED NET PROFIT
(ELIA GROUP)

€ 1.69
GROSS DIVIDEND PER SHARE
(ELIA GROUP)

Social

267
NEW HIRES
(ELIA GROUP)

2,544
EMPLOYEES
(ELIA GROUP)

24
NATIONALITIES
(ELIA GROUP)

Elia Group in 2019

Nemo Link launched successfully

Capacity on the subsea interconnector between Great Britain and Belgium has been available for purchase by implicit day-ahead auction since 30 January 2019. We traded about 18,559 MWh of power on the first day of operations. Nemo Link is a joint venture between Elia and British system operator National Grid. The cable has a capacity of 1,000 MW and is Elia's first subsea interconnector in Belgium. It is also the country's first high-voltage direct-current (HVDC) project.

Elia named a Top Employer for the second consecutive year

For the second year in succession, Elia can count itself among the best Belgian employers. The Top Employer certification is awarded in more than 115 countries to companies that are providing an excellent working environment and consider this a top priority. Over the past year, Elia has invested heavily in internationalisation and training. The award is an important accolade and an additional advantage when it comes to attracting new talent in an increasingly competitive labour market.

Stefan Kapferer becomes the new CEO of 50Hertz

Stefan Kapferer has taken up his role as CEO of Elia Group's German subsidiary 50Hertz. Kapferer brings a wealth of experience and expertise to the job. Prior to this, he headed up the German Association of the Energy and Water Industries (BDEW), and also has international experience and a strong network thanks to previous positions as Deputy Secretary-General of the OECD in Paris and State Secretary at the German Federal Minis-try of Economics and Energy.

Chancellor Merkel inaugurates Arkona wind farm

The new Arkona offshore wind farm was officially inaugurated on Tuesday 16 April in a ceremony attended by the German Chancellor Angela Merkel. The 50Hertz grid connection project Ostwind 1 connects the Arkona and Wikinger wind farms to the onshore transmission grid. Renewable energy from two off-shore wind farms is now flowing via three 90 kilometres long submarine cables to the Lubmin substation and from there to the consumer. 50Hertz is using a 220-kV three-phase cable for the first time. The work in the German Baltic Sea took three years and was delivered ten percent below the €1.5 billion investment budget.

King Philippe inaugurates Elia's first plug-at-sea

His Majesty the King visited the Modular Offshore Grid (MOG), Elia's first power hub in the North Sea, upon its inauguration on Tuesday 10 September. The inauguration of the MOG is a true milestone in the development of wind power of Belgium's North Sea coast. By the end of 2020, it will combine electricity generated by four offshore wind farms for onward transmission to the mainland.

Successful capital increase of €434.8 million

The new shares created by Elia's recent capital increase were first listed on Euronext on 18 June 2019. To mark the occasion, the day's trading began with a bell ceremony. By the close of the subscription period for shareholders with preferential rights, no less than 92.17% of the new shares had been taken up. Any preferential rights that had not been exercised were offered to Belgian and international institutional investors. This second offering was fully completed in one hour. Demand outstripped supply by five to one.

‘Good Practice of the Year’ award for Combined Grid Solution

The joint project Combined Grid Solution between 50Hertz and the Danish Energinet won the 'Good Practice of the Year' award. The Combined Grid Solution is the first grid connection that links offshore wind farms of two European countries. Free capacity of the interconnector can be used for electricity trading between the two countries. This maximum use of offshore infrastructure was particularly highlighted by the Renewables Grid Initiative during the award ceremony.

Catherine Vandenborre wins Trends-Tendances ‘CFO of the Year 2019’ award

Trends-Tendances named Elia's Chief Financial Officer Catherine Vandenborre 'CFO of the Year 2019'. Catherine and her team received this recognition for the key role they played in the transaction that gave Elia full control over the German company 50Hertz. The deal was all the more remarkable as Elia partly financed the acquisition with hybrid debt instruments, thus leaving Elia's creditworthiness intact.

Sustainalytics classifies Elia Transmission Belgium and 50Hertz as an “outperformer”

Elia Transmission Belgium, Eurogrid and its subsidiary 50Hertz have once again improved their sustainability rating. In the latest edition of the Sustainalytics Environment, Social and Governance report, they scored respectively 74 points (Elia) and 79 points (50Hertz) out of 100 earning them 'outperformer' status.

Elia and 50Hertz sign Marine Grid Declaration

On Tuesday 19 March, Ilse Tant and Olivier Feix attended the signing ceremony of the Renewables Grid Initiative's Marine Grid Declaration. The declaration contains specific recommendations for the establishment of offshore grids. Special attention is given to promoting communication with stakeholders from the start of the project. The protection of the marine environment is also a key focus. Additionally, the declaration commits the signatories to exchanging more best practices with each other.

Elia Group's new corporate structure implemented

The internal reorganisation was completed on 31 December 2019, meaning that the Elia Group is now a holding company and Elia's regulated activities in Belgium have been separated and ring-fenced from its non-regulated and regulated activities outside Belgium. This change to the Elia Group's corporate structure will also mean that its existing and future Belgian and European activities can be developed in line with the envisaged growth strategy.

INTERVIEW WITH DIDIER WIOT, CEO OF ELIA GRID INTERNATIONAL

Fifth anniversary for Elia Grid International

GRI 201-2

Elia Grid International (EGI) offers consultancy and engineering services on the international energy market and develops power system projects for third parties. As a wholly owned subsidiary (50/50) of Elia and 50Hertz, EGI combines the quality and expertise of two large European system operators, each with a solid track record and many decades of experience.

How do you look back at the first 5 years?

Didier: "We have managed to develop a new international activity from scratch and successfully delivered projects in four continents. We are focusing our activities in three key target markets: Europe, the Middle East and South East Asia. Over the years we also delivered projects in Africa, Central Asia and even Australia. Drawing on our first years of existence, we are now ready to move things up a gear and further develop our activities. Our business plan has been reviewed in 2019 and is aiming towards ambitious growth targets with a doubling of the company size. Today, we have around 50 people on board from 22 nationalities. It reflects our international spirit. We have headquarters in Brussels and Berlin and local representatives in Dubai, Doha and Singapore. In 2020, we will also have an entity opening in Saudi Arabia."

> **"We are talking to the TSO's and to the ministries as peer companies. While sharing experiences, we also learn from them.**
>
> **Didier Wiot**

On 19 September 2019, EGI's Board of Directors appointed Didier Wiot as the company's new CEO with immediate effect. He was previously the COO of EGI and had been its acting CEO since June 2018. In this role, he demonstrated his ability to manage EGI's activities effectively.

EGI supports Ukrenergo with RES integration

Elia Grid International is helping the Ukrainian Transmission System Operator (TSO) Ukrenergo to identify the gaps in the Ukrainian power sector to enable it to carry out the necessary system transformation for the effective integration of variable renewable energy sources (vRES). Experts from Elia Group shared best practices and key lessons learnt from the Elia and 50Hertz experience regarding RES integration.

EGI launches new practice on "Market and Regulation"

Elia Grid International assists clients in making a real difference by leveraging the experiences developed by Elia Group over the last 20 years. Practices include market products development, studies and implementation processes related to market set-up, data management, regional market coupling, interconnectors and advice in balancing market design and implementation.

For which types of customers does EGI usually work?

Didier: "Our clients are mainly Transmission System Operators, but we are also supporting regulators, single buyers, ministries, public authorities and private developers. We are looking more and more into the global ecosystem of the energy landscape. The key challenges we are working on are mainly renewable integration, market development and the implementation of new interconnectors. The regions where EGI is active are willing to play a strategic role in the energy landscape of the future. Major transformations are happening at an unprecedented pace and operators are seeking for excellence. This is where the support of EGI can make a difference."

Europe has its Green Deal. But there is clearly something moving on a global scale?

Didier: "Most of our clients are targeting big CO_2-reduction ambitions to fulfill their commitment to the Paris Agreement. Vietnam is a great example. In a few years' time, they managed to create the conditions to develop and connect large scale solar plants throughout the country. Starting from nothing, the installed capacity at the end of 2019 has reached 5 GW while the initial plan only targeted 800 MW. At first, they thought RES integration would be technically impossible. EGI helped to convince decision makers that the system would remain stable and Vietnam is now moving forward with larger ambitions. EGI is also supporting other system operators on many other challenges: connecting Ukraine to the European system, developing capabilities in Georgia, advising Malaysia in their unbundling journey."

EGI is backed by two TSOs. Does that help in setting up your business?

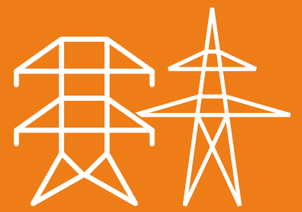
Didier: "Being backed by two TSOs is a major unique selling proposition! This is what makes us different from classical consulting companies. We are talking to system operators and their stakeholders as peer companies. While sharing experiences, we also learn from them. This creates a unique relationship that few competitors can achieve. Our ambition is to make a real difference. When we finish a project, our client should be in a better position than before it started. You can only do that if you enter the strategic level of the organization and this is what we do with the support of the mother companies. However being active on a competitive market also means that we have to battle against a large number of players. The competition can be fierce but EGI has developed a strong brand recognition and winning tenders against big names is starting to become "normal". At the same time, it is important for us to stay connected with our mother companies Elia and 50hertz. EGI also delivers owners' engineering activities in Germany for the construction of 400kV substations as well as other services in various domains like Grid Planning or system operation."

At this very moment, do you have any idea in which country your employees are?

Didier: "Yes, we have a tool for that. Just over the last two weeks we had many colleagues delivering projects in Saudi Arabia, but we also had people in Georgia, Ukraine, Poland, Vietnam, Malaysia and Singapore... a classical week somehow."

Visit **https://www.eliagrid-int.com/** to learn more about EGI's projects.

Our strategy



From a traditional to a digital TSO and capturing new growth opportunities

Elia Group is actively enabling a carbon-free society by building the grid, systems and markets. This is our highest priority. However, the fast-changing energy landscape is bringing new and bigger challenges that we have to prepare for as well.

The energy transition is making our traditional tasks more complex due to the intermittency and increasing decentralisation of the production. In addition, society expects us to deliver reliable services at affordable costs and at accelerating speed.

One of the solutions to support our traditional business and at the same time cope with the increasing complexity is the transformation from a traditional into a digital TSO. At the same time, we should not be blind to potential disrupting evolutions that could hamper our relevance and further growth. Therefore, in 2019 we added two additional dimensions to our strategy. These new strategic guidelines allow us to investigate opportunities and the value they might bring to the Group.

Our three strategic pillars

We increase group relevance while delivering societal value

In the context of further European consolidation, we actively shape growth opportunities that will leverage on our expertise built in the energy transition or develop new, key competences required for a successful energy transition.

We empower the customer through digitalisation of the electricity sector

We provide the digital tools to the European market to accelerate innovation in the energy sector, to create energy services and to initiate sector convergence by lowering the barriers of our sector.

NEW OPPORTUNITIES

CORE BUSINESS

We provide the needed infrastructure in an efficient way

We build the infrastructure of the future in Belgium and Germany and transform our core business to become a digital transmission system operator. This enables the energy transition in our home markets.

This strategic pillar represents our core business and is structured along six building blocks.

1. We ensure a secure, reliable and efficient grid
2. We deliver the transmission infrastructure of the future
3. We develop the electricity system and the markets
4. We cooperate to create value for society
5. We align culture with strategy
6. We have our eyes wide open for innovation

INTERVIEW WITH ALEXANDRE TORREELE, ELIA GROUP HEAD OF STRATEGY

Meeting expectations by responding to new trends and evolutions

Watch the video
http://bit.ly/Digital_TSO
to discover the technologies that make up Elia Group's digital backbone.

Elia Group is evolving from a traditional TSO into a digital TSO. What's driving this transformation?

Alexandre: " In 2016, we developed the six building blocks of our strategy. They are still relevant today. The energy transition demands lots of new infrastructure. It will remain the case for the next 10 to 15 years. However, the fast-changing energy landscape makes our daily work more complex and consumers expect us to deliver reliable services at affordable costs and at accelerating speed. Our digital transformation will enable us to better respond to new trends and evolutions and better meet expectations. It is the biggest transformation our organisation has ever faced. We are currently putting the required cultural and organisational transformation processes in place. "

Can you give some examples where digitalisation is beneficial?

Alexandre: " There are benefits in various areas. By using smart sensors and automation, the lifespan of our existing assets for instance will extend and it will make the power system more resilient. Additionally, digital tools will help us to manage a more complex system closer to real-time. As a digital TSO, we can also provide the interfaces needed to implement a true digital architecture where market parties and consumers can participate and contribute to the balancing of the system. "

> **Our digital transformation is the biggest transformation our organisation has ever faced.**
>
> **Alexandre Torreele**

> **Digitalisation will make it easier for new entrants to get on-board. It will help us to keep the system in balance and the customer can make money out of it, which contributes to affordability.**
>
> **Alexandre Torreele**

The second strategic pillar is about increasing the relevance of the Group. Is its relevance in danger?

Alexandre: " The Group's organic growth is promising. It remains our first priority. Yet, we cannot ignore the potential societal, technological and regulatory evolutions that could reverse our organic growth. In the last years, we have been looking at new growth opportunities that are relevant for our business. Taking our specific know-how and experiences as well as our identity as a system operator as a starting point, can the developments at the edge of our grid represent an opportunity? As a central player in Europe with a unique set of skills, Elia Group is in a good position to turn some ongoing developments into new growth opportunities. In particular, I am thinking about the offshore grid and interconnectors that will need to be built and operated to increase the renewable penetration in Europe. "

What value do the inorganic ambitions bring to society?

Alexandre: " A regulated company that performs well will generate positive returns for the society it serves, for industry as well as for private individuals. I think of strong ratings, better tariffs thanks to a favourable financial framework characterised by lower interest rates, diverse talent management, opportunities for local suppliers, etc. "

The third strategic pillar is about the digitalisation of the energy sector itself and empowering the customer. How do you see this in practical terms?

Alexandre: " The energy sector is extremely complex. Our biggest risk as a system operator is that we have to keep the balance without having access to flexible sources. Compare it to a firefighter who has to work without water in his tank. We want to make sure there is a level playing field where every actor is equal. By empowering all kinds of customers, no one can keep the flexibility for themselves. That's why Elia Group is setting up ‚re.alto'. With this digital European energy market place of Application Programming Interfaces (API), we want to facilitate the exchange and valorisation of data and digital services. This will bring value to the European energy ecosystem. "

In what sense?

Alexandre: " Digitalisation will make it easier for new entrants to get on-board. Our European market platform will lower the barriers by facilitating the exchange between all market parties in Europe and provide simplification; including actors from other sectors such as mobility. New business models will emerge more easily and freely. As observed in other sectors (banking, travelling, mobility, etc.), many of the new business ideas will become concrete through digital solutions: new platform, new mobile applications, etc. It will help us to keep the system in balance and the customer can make money out of it, which contributes to affordability. "

> **Digitalisation enables us at Elia Group not only to handle the ever increasing complexity and meet quick reaction demands of our daily business, it also opens up new opportunities and helps us to further accelerate.**
>
> **Nadja Ballauf,**
> **Head of Corporate Development 50Hertz**

We ensure a secure, reliable and efficient grid

#1

GRI 203-1, GRI 203-2

99.99 %

RELIABILITY LEVEL
OF THE GRID (ELIA)

AMBITION

As a system operator, we aim to maximise the availability of our electricity system and keep the lights on at all times to support the welfare of society.

CHALLENGE

As we integrate more and more renewable energy into the grid, we operate closer to its limits more often. Maintaining the balance and ensuring a highly reliable electricity grid becomes a particularly challenging task.

APPROACH

Our investment projects anticipate the further integration of renewable energy in an efficient and secure way as well as the emergence of innovative technologies. We constantly optimise our critical and strategic processes in order to minimise costs and operational risks.

System security

INTERVIEW WITH FILIP CARTON (HEAD OF ELIA'S NATIONAL CONTROL CENTER) AND ANDREAS JOHN (HEAD OF SYSTEM OPERATIONS 50HERTZ)

We maintain the balance

GRI 203-1, G4 - EUS – DMA DEMAND-SIDE MANAGEMENT PROGRAMMES

Elia Group ensures system stability and provides a safe and reliable power supply. Thanks to new technologies and methods monitoring large volumes of data, we are able to balance generation and consumption the whole year round.

What are the biggest challenges in maintaining the balance today?

Filip: " Compared to 10 years ago, the grid is being operated closer to its limits more often. Our challenge is mainly the predictability. If you know of a problem well in advance you can prepare for it and coordinate with neighbouring grid operators. Volatility is increasing due to more and more renewable energy sources and international flows. These make accurate prediction difficult. "

Andreas: " We therefore have to operate our grid today in a completely different way than in the past. We have to intervene more often in system operations in an active and forward-looking manner by implementing redispatching measures. In Germany - at a time when we are phasing out both nuclear and coal-fired power, the question of the future provision of system services is also a major issue. In particular, measures to maintain voltage stability are needed to ensure system security in the event of higher grid load caused by missing or outdated infrastructure. "

Predictability being of the utmost importance, what are the consequences if you get it wrong?

Filip: " Looking at the way we calculate capacity today, we have to make a choice two days in advance assessing where the market is going. Then we optimise the grid accordingly. If our prediction is wrong, we may allocate too much capacity to market coupling, which finally cannot be ensured in real time. Or, we may allocate too little capacity to the market, which may cause a problem with security of supply. "

Andreas: " Redispatch measures cost money and are passed on to customers. That is why it is very important to us to keep the volume of redispatching as low as possible and to make the management of all available measures as efficient as possible. "

And what about the problem of loop flows?

Filip: " Loop flows are nothing new. According to the laws of physics, energy takes the shortest path. Unfortunately, energy flows from Northern Germany via Belgium to Southern Germany. The quantities can be considerable. Sometimes averaging 1,500 or 2,000 megawatt, which is quite significant compared with our grid. "

Andreas: " We must use more active network components in order to avoid loop flows and to meet the demands of society, new generation patterns and energy markets. "

Is there a way to solve these issues for both Belgium and Germany other than expanding the grid?

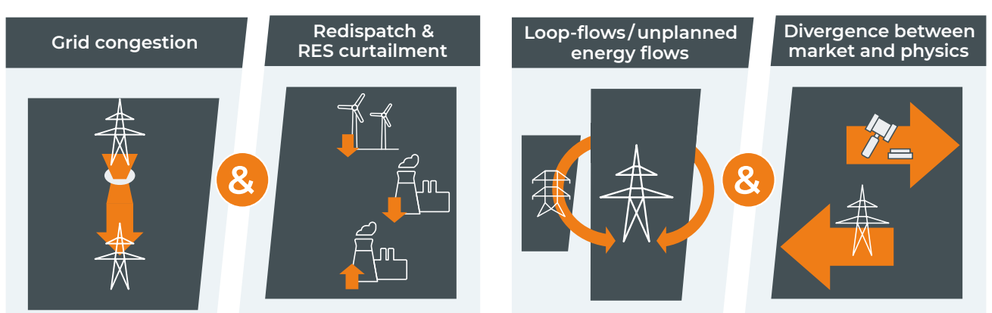
Filip: " One of the solutions offered by our joint study (Future-Proofing the EU Energy System towards 2030) is to ensure that grid operators don't have to make a choice in advance about the direction we think the market may head in. We can give the market coupling the freedom to do that. We call them Flexibility Hubs. It may sound complicated but it means that the freedom we have as grid operator to optimise the grid in a particular way, can be passed on to the market players so they decide the direction to go in during the market coupling itself and the market can then go where it wants to go. "

Andreas: " It is important to ensure that a precondition is met: we must expand the grid according to demand. Only with a minimum grid infrastructure in place, we can tackle optimisation but not vice versa. "

> **"Only with a minimum grid infrastructure in place, we can tackle optimisation but not vice versa.**
>
> **Andreas John**

> **"Compared to 10 years ago, the grid is being operated closer to its limits more often. Our challenge is mainly the predictability.**
>
> **Filip Carton**

Effects observed in the interconnected European electricity system



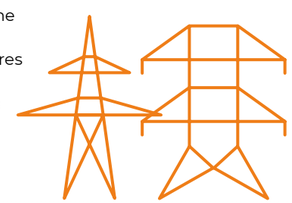
To keep physical electricity flows within operational boundaries, system operators regularly have to perform redispatching measures to adjust the pattern of generation and demand in the grid to avoid or resolve grid congestions. In some cases they even have to curtail renewable production. These measures are expensive for consumers. The Bundesnetzagentur (German regulatory office for electricity) reported an amount of € 1.4 billion for Germany in 2018.

Grid congestions
are a result of the discrepancy between the development and construction times of renewable generation compared to the longer lead-times for building grid infrastructure. In Germany in particular, getting the large-scale wind energy production efficiently from the north to the consumption centres in the south, is a considerable challenge.

Redispatch
refers to a costly measure by which the TSO alters the power generation and/or load pattern in order to change the physical power flows in the grid to relieve a physical congestion. Redispatch usually consists of two or more actions (upward or downward change of power generation or load) at the opposite sides of a congestion. In the simulations performed in this study, redispatch is applied after the market to secure the grid.

Loop flows
are cross-border power flows that originate from an exchange of energy between generation and consumption within a bidding zone. Loop flows are inherent to a zonal market design. Their size should however be kept under control, as they can limit the cross-zonal capacities available to the market for neighbouring bidding zones (potentially negatively affecting market welfare and security of supply).

RES curtailment
is the reduction of renewable generation, when the grid is at risk of overload. It is usually a last resort option for the TSO, when other redispatch measures are not sufficient. The market itself can also curtail renewables, e.g. when market participants face negative prices and therefore choose not to produce.



Future-proofing the system

In November 2019, Elia Group published a study about Future-Proofing the EU Energy System towards 2030. We see increasing challenges on both the hardware (grid infrastructure) and the software (market design) of the European, interconnected electricity system. We want to raise awareness on the need for improvements to pave the way for the increasing integration of variable, renewable energy on the path to 2030 and beyond.

Watch our video
http://bit.ly/Future-proofing
and learn more about our analysis on how to bring the European energy system closer together.

AI forecast model reduces compensation cost for grid losses

When operating Alternative Current (AC) grids, grid losses are inevitable. The longer the distance the electricity is transported, the higher the grid losses. System operators balance those losses as they buy and feed-in additional electricity.

To predict those losses more precisely and to procure the electric energy for the compensation more cheaply on the electricity market, 50Hertz developed an artificial intelligence (AI) model. This has been operational since the end of 2019. The digital calculation is based on data about wind and photovoltaic supply as well as on wind rise, solar radiation and temperature at 70 locations. The model compares its forecasts with the actual grid losses and adjusts its algorithms automatically based on the differences.

50Hertz developed the grid loss model in cooperation with the Fraunhofer Institute for Optronics, System Technology and Image Evaluation (IOSB) in Karlsruhe, Germany.

2019 in numbers

38%

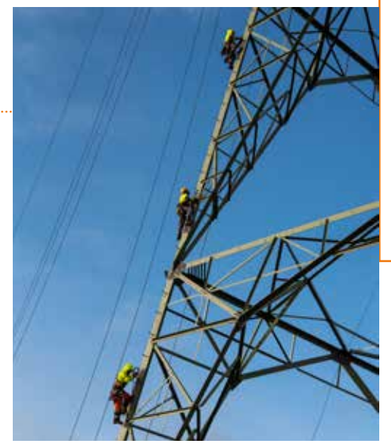
Renewable energy production (offshore/onshore wind and solar only) increased by 38% in absolute terms compared to 2018 (5.46 TWh in 2019 compared to 3.95 TWh in 2018). Relatively high solar generation in the summer months and higher wind generation in the winter months constitute the main part of renewable generation.

17%

Renewable generation (offshore/onshore wind and solar power only) increased by 17% in absolute terms compared to 2018 (11.52 TWh in 2019 as against 9.82 TWh in 2018).

60%

50Hertz is a frontrunner in the integration of renewable energies into the entire electrical system: In 2019, around 60% of gross electricity consumption in the 50Hertz balancing zone was derived from wind or photovoltaic power as well as biomass, hydropower and other renewable energies.



Over 16,000 megawatts

Over 16,000 megawatts of wind power safely integrated into 50Hertz' grid area. Cyclone Florenz brought 50Hertz a new wind power feed-in record. On January 13, 2020, at 8.45 pm, the system control centre of the transmission system operator for north-eastern Germany registered over 16,000 megawatts for the first time ever. The annual peak load in the 50 Hertz grid area is also around 16,000 megawatts. During this time, the grid area of 50Hertz could have been completely supplied with wind power and would have even exported energy.

€ 723.5 mio

Elia continued to step up its investment programme, reaching a record € 723.5 million in Belgium mainly intended to incorporate renewable energy in the grid and facilitate the further integration of the European energy market through interconnections.

€488.6 mio

To meet grid users' requirements, 50Hertz Transmission invested €488.6 million in 2019, maintaining its high investment level from the previous year (€491.5 million).

38,794 GWh

38,794 gigawatt-hours (GWh) of wind power were generated in Germany in 2019 versus 32,870 GWh in 2018. The generation of solar power amounted to 11,177 GWh in 2019, versus 10,796 GWh in 2018.

1.8 TWh

Belgium exported more electricity in 2019 than it imported. This is a turnaround compared to 2018, when the country imported significant quantities of electricity. This reversal turned Belgium from an overall net importer in 2018 (17.5 TWh imported/20% of the energy mix) into an overall net exporter in 2019 (1.8 TWh exported/2.1% of the energy mix). Belgium had not been a net exporter of electricity for almost 10 years, the last time being in 2009 and 2010, when total net exports represented 2.8% and 0.2% respectively of Belgium's energy mix.

€33 mio

The BOOST project was launched in 2014 with the aim o f optimising cost management. It was rolled out in three successive waves: underground engineering, IT activities, and overhead lines and substations. Thanks to this initiative, Elia saved more than €33 million over the first three years of the 2016-2019 tariff period.

Asset Management

AN INTERVIEW WITH FRÉDÉRIC DUNON, CHIEF ASSETS OFFICER ELIA

From time-based to condition-based maintenance

We continue to invest in the development and use of new technologies that help us optimise the maintenance and replacement of our assets. We highly value our maintenance activities seeing that they contribute significantly to our common goal of continuously delivering an outstanding service to all our customers. Elia Group uses a range of methods to digitalise work in the field, including connected equipment (PCs, smartphones and smart devices), new mobile applications and the overhaul of current processes.

What is the biggest shift that digitalisation will bring in asset management?

Frédéric: " When it comes to asset management and maintenance, digitalisation helps us to take better-informed decisions. We gather data from internet of Things (IoT) devices, from feedback after incidents and from the mobile devices that our technicians use in the field. This enables us to move from time-based maintenance to condition-based maintenance. In the future, we will even shift to predictive and risk-based management. "

> **"Condition-based maintenance facilitates a reduction in the maintenance costs of our assets over their entire lifetime.**
>
> **Frédéric Dunon**

What are the advantages of condition-based maintenance?

Frédéric: " It improves the efficiency of our maintenance programmes. It facilitates reduction in the maintenance costs of our assets over their entire lifetime and increases the availability of our network. With the information we get from our data sources, we can determine whether a particular asset needs maintenance or replacement. We base our maintenance programmes on the real wear and tear of our assets and no longer on the theoretical time intervals that we have used in the past. Predictive maintenance even goes a step further, as it estimates when service malfunctions or failures may occur in advance. Risk-based maintenance, on the other hand, closely links the maintenance of assets with the need of the network. The criticality of an asset differs depending on location and impact. "

What are the challenges you face to makes these shifts happen?

Frédéric: " The changes we have in mind will affect our teams; there is no doubt about that. In my opinion, it is not only a question of feasibility regarding technologies and tools. It is mainly a question of human transformation. This is not only about hiring new people with the required skills, it is about transforming the way our current employees are working and thinking as well. It is about co-developing the future with all our employees, whether they are existing staff or new employees joining us in the years to come. "

Asset management project

A special protection system for Stevin

Most of the existing safeguard systems traditionally protect a specific asset like a transformer or a cable. A Special Protection System (SPS) protects the grid against instability on a large scale like a blackout in the whole of Belgian or a brownout on a European scale. There are currently very few protections of this type in the world. Elia is therefore one of the pioneers in this field at European and even global level.

The specifics

The SPS installed on Stevin's 380 kV connection consists of 11 cabinets. These will collect data from the various posts along the connection and take the necessary decisions to ensure the stability of the grid depending on events such as the failure of a primary installation, a lightning strike on the lines, a fallen mast, etc. The SPS continuously processes approximately 15,000 data, of which 3,000 are exchanged with the other stations, dis-patching, switch fields, distributed control system and the fault recorders of the substations. Some data are recorded on highly secure servers and can be consulted remotely. This also allows us to refine our understanding of the Stevin connection. These decisions are then sent to all the high-volt-age substations concerned. Everything happens at lightning speed: in 20 ms, data is collected, decisions are made and orders sent. This is as fast as the fastest local safety devices currently installed on the Belgian grid.

INTERVIEW WITH DR DIRK KUNZE, ELIA GROUP ASSET MANAGEMENT OFFICER

Fitness tracker for our assets

Traditional maintenance at time-dependent intervals will soon be history. Elia Group has been breaking new ground in asset maintenance since 2016. In the Asset Management Excellence Program (AMEX), the aim is to optimise the maintenance of transformers, overhead lines, etc. according to their state of health (Health Index) and importance for the gird. Elia has finished the AMEX program in 2019. At 50Hertz the implementation started in 2018.

Have you equipped all our transformers with fitness trackers within the AMEX 2019 program?

Dirk: " No, our 'sportsmen' made of steel and copper have been technically checked for their fitness on a regular basis for a long time, but the results of AMEX will enable us to better evaluate the information and thus make better diagnoses. The data comes for example from our mobile maintenance software. It is like your doctor knowing before autumn when you will get a cold. Our aim is to ensure that the individual asset is treated in a targeted manner and thus, preferably, does not get a 'cold' at all. "

How does this work?

Dirk: " We look at each individual asset group and define criteria for the Health Index and in the future also how important the respective assets are in the overall context of the grid (Criticality Index). In other words: a scratch on the knee is okay, but the asset won't work with a broken leg. In addition we weigh up whether a device in Hamburg, Berlin or at any other site must be exchanged first. We want to take future decisions based on condition and risk. Elia has finished the AMEX project in 2019 and started the transition to regular asset management operations. At 50Hertz we can use Elia's experience and now benefit from it. Our focus in 2019 was on overhead lines, transformers and chokes. Further asset groups will be added next year. "

> **In the coming years, we expect our asset fleet to grow in terms of both the number of assets and a variety of new technologies.**
>
> **Dirk Kunze**

> **Safety always comes first – of our people and, of course, of our grid.**
>
> **Dirk Kunze**

Up to now, we have maintained our assets on a time-based basis, i.e. with a yearly check-up. That's a thing of the past?

Dirk: " Not in general. For some asset groups this may still be the model of choice. In the coming years, we expect our asset fleet to grow in terms of both the number of assets and a variety of new technologies. If we wanted to maintain these on a time-dependent basis, this would not be possible with our existing organisation. Here, an improved database is needed to make the right condition and risk-based decisions for maintenance or asset replacement. "

So, a permanent fitness-check for maintenance only when necessary? How does this work in practice?

Dirk: " The best planning doesn't help if there are no work shutdowns. Safety always comes first – of our people and, of course, of our grid. Furthermore, AMEX also means changes in our organisation. After all, the activities should be sustainable. As a result, our employees got to know their Belgian and German colleagues better and thus could broaden their horizons. This is particularly important to me. "

AMeX ASSET MANAGEMENT EXCELLENCE

We deliver the transmission system of the future

#2

GRI 201-2

€ 1.1 billion

ELIA GROUP WILL BE INVESTING A STAGGERING € 1.1 BILLION PER ANNUM FOR THE NEXT TWO YEARS

AMBITION

Elia Group is committed to realise the next phase of the energy transition in a timely, secure and efficient way with maximum welfare for society. We do to the utmost to accelerate the delivery of critical grid infrastructure and to migitate any risk of delays in close collaboration with the competent authorities.

CHALLENGE

We want to close the gap between the fast development of renewable generation compared to the longer lead-times for building grid infrastructure. In addition, Elia Group is investing strongly in the optimisation of existing assets by integrating new technologies and more advanced system operation concepts.

APPROACH

For the next two years, Elia and 50Hertz will be investing a staggering € 1.1 billion per annum in the integration of renewable energy, development of an offshore high-voltage grid and in the construction of interconnectors to facilitate the integration of the European energy market.

Facilitating Offshore Energy

INTERVIEW WITH HENRICH QUICK (HEAD OF PROJECTS OFFSHORE 50HERTZ) AND TOM PIETERCIL (PROJECT MANAGER MOG AND HEAD OF INFRASTRUCTURE EXPERTISE)

A Sea of opportunities

2019 was a successful year in terms of offshore goals for both Belgium and Germany. In Belgium, the Modular Offshore Grid (MOG) was commissioned and Nemo Link became operational. In Germany, 50Hertz celebrated the inauguration of the Arkona wind farm in the Baltic Sea, which marked th the completion of the Ostwind 1 project.

Chancellor Angela Merkel attended the inauguration of the new Arkona offshore wind farm on Tuesday 16 April 2019.

Why is offshore wind becoming increasingly important in realising the energy transition?

Henrich: " Offshore development is becoming an important building block of reliable supply in a new energy world. It is competitive in terms of market prices, reliable in terms of the technology and in terms of grid development. We are getting used to integrating more and more renewables into our system operations. Wind Europe published a report stating that 450 GW is the offshore potential within Europe by 2050, of which 212 GW can be found in the North Sea and 83 GW in the Baltic Sea. "

Tom: " Without offshore energy, Europe will not be able to reach its ambitious climate targets. According to the International Energy Agency (IEA), offshore energy is the next hot item in the energy sector. Offshore wind will be the technology that grows like mushrooms over the next 10 to 15 years. It is cheap, reliable and it provides highly efficient energy. It will become an important part of Elia Group's business. "

Offshore is at the forefront of international cooperation, do you have many exchanges with other European TSOs?

Henrich: " Because the offshore business is so complex, there is a lot of solidarity among the TSOs as we all face the same challenges. There is a group of large offshore project managers from Norway, the UK, Denmark, Germany, Belgium, France, Italy and Spain. We all work closely together and have organised internships between countries to share best practices. That spirit goes to both of our teams. They often call each other for advice. This is something we really encourage. "

In what sense are offshore grid projects more challenging than onshore projects?

Tom: " The foremost reason is that it is highly if not entirely dependent on the weather. The sea is a very dangerous environment to work in. When something goes wrong, it has a huge impact on safety and costs. That's why a good planning and a smooth organisation are so vital. In order to ensure this, we need our people to be in the field 24/7. This means working in shifts to make sure the right expertise is available at all times. "

> **"Offshore development is becoming an important building block of reliable supply in a new energy world.**
>
> **Henrich Quick**

> **"Offshore wind is cheap, reliable and it provides highly efficient energy. It will become an important part of Elia Group's business.**
>
> **Tom Pietercil**

> **Purchasing jointly helps us to leverage our market power and to ensure we use the same quality materials within the Group.**
>
> **Tom Pietercil**

Henrich: " The sea is an expensive working environment. If you are chartering a vessel, it can go over a € 100,000 per day. If you happen to suffer from bad weather, you run the risk of having it stuck in the harbour for three weeks. The stakes are very high when making the wrong decision. So planning puts extremely high pressure on us and on our suppliers. "

Do you already experience the advantages of collaboration between Elia and 50Hertz?

Henrich: " Sharing experiences helps to calculate the risks better and saves millions in costs. By organising workshops and standardising procedures, we align our way of working which makes it easier for Elia and 50Hertz to work with partners in Belgium and Germany. For the next offshore wave, for example, 50Hertz will collaborate with the Belgian company Parkwind, and easily apply the best practices from the MOG project. "

Tom: " Besides sharing best practices, we are looking into collaborating on purchasing orders for materials and services we both will use for our projects. Purchasing jointly helps us to leverage our market power and to ensure we use the same quality materials within the Group. This also brings together the know-how on how to operate the installations, which is a huge advantage as well. "

Henrich: " Working together on purchasing orders would be especially interesting for cable manufacturing. In this market, price is not the only driver. It is also availability of the supplier. Joining forces mean we are able to win more offers. Of course, we have to take into consideration the different regulations per country and the small technical adjustments to match the requirements for the North Sea and the Baltic Sea. "

How do you see offshore wind further evolve?

Henrich: " Further offshore development is needed to generate more megawatts if we want to achieve our European 2050 goals. This also means growth opportunities for Elia Group. What is to be seen is whether we continue to grow in our domestic markets or whether the Baltic Sea and North Sea will be exhausted by projects in the coming years. If that is the case, we might look to export our experience in the field to other countries that might jump on the offshore train at a later time. "

> **Sharing experiences helps to calculate the risks better and saves millions in costs.**
>
> **Henrich Quick**

Tom: " In Belgium, we currently exploit 0.5% of the North Sea. There might be room for additional projects in the future. However, developing a higher percentage, means moving further away from the coastline, deeper into the sea. This makes matters more complicated and risky, as we will need longer cables to bring the energy ashore. In the long run, TSOs will have to look further than their current borders and work intensively together to enable the development of the offshore renewable energy of tomorrow. In the end, it comes down to finding the most efficient solutions that yield the most benefit for all parties. "

450 GW

IS THE OFFSHORE POTENTIAL WITHIN EUROPE

Combined Grid Solution

WINNER OF GOOD PRACTICE OF THE YEAR AWARD

With the Combined Grid Solution (CGS) project, 50Hertz and the Danish grid operator Energinet are realising a worlds' first, connecting the electricity grids of two countries via offshore wind farms. In 2019, submarine cables were installed between the offshore substation of the German wind farm Baltic 2 and the Danish wind farm Kriegers Flak. The installations will soon be ready for operation.

The renewable energy generated by the wind turbines will always have priority and will flow to Germany and Denmark as required. Free capacity from the connecting line can be used for electricity trading between the two countries.

Watch the video **http://bit.ly/CGSolution** to learn more about the project.

On 23 May 2019, the interconnector received the 'Good Practice of the Year Award' from the Renewable Grid Initiative (RGI). RGI is a platform for dialogue between non-governmental organisations and transmission system operators in Europe. The approach of connecting the electricity grids of two countries via offshore wind farms and using this connection as efficiently as possible was particularly appreciated.

Back-To-Back converter

To build the CGS interconnector, the planners at 50Hertz and Energinet had to master a challenge: the German and Danish alternating current grids are not synchronous and therefore cannot be connected directly with each other. Although the grid frequency of both countries is identical, it has a slightly shifted cycle (phase). The engineers and technicians solved this problem with a so-called double converter on the German side in Bentwisch near Rostock. This facility converts alternating current into direct current following the Nordic phase and then directly into alternating current following the Continental European phase. The entire system will be controlled by a newly developed, innovative Master Controller for Interconnector Operation (MIO) using the latest digital technologies.

INTERVIEW WITH DR FRANK GOLLETZ, 50HERTZ CHIEF TECHNICAL OFFICER

Optimal use of interconnection capacities

What is so special about the Combined Grid Solution?

Frank: " With the Combined Grid Solution, we are interconnecting two wind farms from different countries. One wind farm in Denmark and one wind farm in Germany. We utilise the capacities of the cable connections very efficiently. If the transmission capacity of the wind farm connection is not fully utilised, we can use the interconnector for electricity trading. So we combine assets with the market. The project has been a joint project of 50Hertz and Energinet in Denmark from the beginning, where we both learn how such a combination can work. The Combined Grid Solution is advancing the energy transition in Europe by better integrating renewable energies and increasing the safety of the electrical system in Germany and Denmark. "

Now that Ostwind 1 has been finalised and Combined Grid Solution is almost completed, what are the further plans for offshore development?

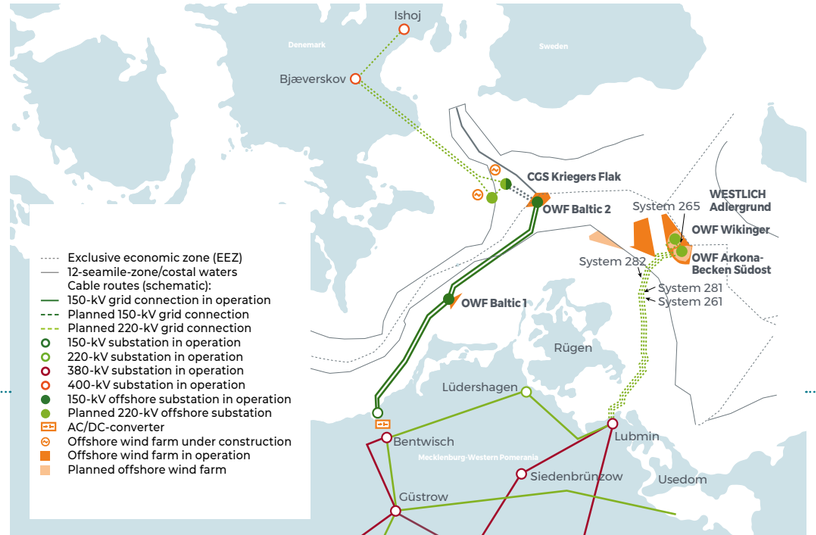
Frank: " First of all, there is one project that is practically a mirror image: our grid connection project Ostwind 2. Here we are once again connecting two wind farms with each other. Baltic Eagle by Iberdrola and Arcadis Ost by Parkwind. There are also plans for a Modular Offshore Grid 2 (MOG 2) in Belgium and for a DC link between Germany and Sweden, the Hansa Power Bridge. Offshore will continue to be one of the biggest growth drivers for Elia Group in the coming years. "

> **The Combined Grid Solution is advancing the energy transition in Europe.**
>
> **Dr Frank Golletz**

Ostwind 1: Arkona comissioned

Since April 2019, the Arkona offshore wind farm, off the island of Rügen in Germany in the Baltic Sea, has been feeding into the grid. 50Hertz connected the wind farm to its transmission grid on time for commissioning on 16 April 2019 and even at a lower cost for consumers than originally calculated. After a construction period of three years and a total investment of around €1.3 billion, wind energy is flowing via three 90 kilometre submarine cables to the Lubmin substation and from there to the consumers.

For the first time in the Baltic Sea, a grid connection was constructed using 220 kV AC technology which enables a higher power transmission. Previous connections of offshore wind farms in the German Baltic Sea were using 150 kV AC cable systems. In the Lubmin substation 50Hertz switches the electricity to 380 kV and feeds it into its transmission grid.



Ostwind 2: On schedule

The Ostwind 2 offshore grid connection project is progressing according to schedule. The corridor for the submarine cables has been explored and the clean-up of contaminated sites has been completed.

50Hertz and Parkwind, the Belgian offshore wind farm operator of the Arcadis Ost, reached the next stage of their cooperation in October 2019 with the signing of a Memorandum of Understanding (MoU). Key aspects of the MoU include specific arrangements for the development, procurement, construction and operation of the joint offshore platform, including basic technical details and the principles for sharing construction costs. This platform will be used by the wind farm operator and the transmission system operator.

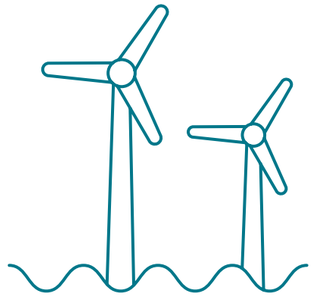
In addition to the Arcadis Ost 1 wind farm, the Ostwind 2 grid connection project will connect the Baltic Eagle offshore wind farm to the 50Hertz grid. Baltic Eagle, a project of the Spanish energy group Iberdrola, is located in the Arkona Sea cluster in the Baltic Sea. Both areas are located between 20 and 30 kilometres northeast of the island of Rügen. Together, the two wind farms will have a capacity of about 725 MW. 50Hertz is building three 220-kV submarine cable systems from the wind parks to the grid connection point at the substation in Lubmin.

±725 MW

THE CAPACITY OF THE TWO WIND FARMS

€1.3 billion

OSTWIND 1 TOTAL INVESTMENT AFTER A CONSTRUCTION PERIOD OF THREE YEARS



Modular Offshore Grid

The commissioning of the Modular Offshore Grid (MOG) is a true milestone in the development of North Sea wind power off the Belgian coast. The switching platform is 40 km off the coast and combines the electricity generated by four offshore wind farms (Rentel, Seastar, Mermaid and Northwester 2) for onward transmission to the mainland, making it possible to efficiently integrate renewable power into the Belgian electricity grid. It is connected by 130 km of 220-kV cables to Elia's high-voltage substation in Zeebrugge (Stevin substation), from where the power is transmitted to consumers via the transmission and distribution system. The MOG is a switching platform only, not a transformer platform, making it unique in Europe.

The first wind farm was connected to the Modular Offshore Grid in September 2019 and the MOG has been operational since then. The MOG has been successfully completed thanks to the many Belgian and international stakeholders involved. The platform was built in the Netherlands while the cable was produced in Greece. The cable-laying work was done by Belgian marine engineering group DEME. His Majesty the King visited Elia's first power hub in the North Sea, upon its inauguration on Tuesday 10 September.

Watch the video
http://bit.ly/Inauguration_MOG
for an overview of the ceremony.

The MOG's core team on the platform at sea upon its inauguration on Tuesday 10 September.

130
Km

OF 220-KV CABLES CONNECT THE MOG TO ELIA'S HIGH-VOLTAGE SUBSTATION IN ZEEBRUGGE

INTERVIEW WITH MARKUS BERGER, CHIEF INFRASTRUCTURE OFFICER ELIA

Expanding from land to sea, a new adventure

How did you start working on a project of this scale and complexity?

Markus: " We built the MOG in stages, as you have to prepare it from a technical, legal and regulatory point of view. All that takes time and the schedule in which it needs to be done is very demanding. You don't just snap your fingers and you are suddenly offshore. It has been a long road, building up the know-how, starting from nothing to then achieve a fantastic result in a very short time. In March 2016, we reached an agreement in principle with the various authorities and wind farms. The investment decision was made in April 2017. We installed the offshore jacket in August 2018, and the topside was laid on it in April 2019. Shortly after that, the subsea cables were installed and connected. "

What was the key to success?

Markus: " This ambitious project was completed on time and within budget, primarily due to the efforts of the project team: a group of driven, highly skilled employees. Elia looked beyond Belgium's borders to find the right people for the project, adding a number of enthusiastic Elia employees to complete the team. The combination of internal employees and external experience was a real success story for the project. Gradually a team spirit develops, which enables you to move mountains, as they say, because everyone believed in this project. "

> **"It has been a long road, building up the know-how, starting from nothing to then achieve a fantastic result in a very short time.**
>
> **Markus Berger**

THE MOG IN NUMBERS

- The topside rises 41 m above sea level and weighs 2,000 tonnes.
- The foundation is anchored to the seabed by four piles at a depth of 60 m.
- 220-kV subsea cables connect the platform to the Stevin high-voltage substation in Zeebrugge.
- At 28 cm in diameter, the MOG cables are the thickest cables ever installed in the North Sea.
- For safety reasons, all of the subsea cables are buried at a depth of 1 to 3 m.
- At the peak of the project, Elia's core team had 50 staff.
- More than 40 different vessels were deployed during the MOG installation process.
- Developing the MOG required over 1 million man-hours.

Towards a more interconnected European grid

Besides preparing their grid for the energy transition, Elia and 50Hertz are also committed to developing an integrated, European-wide electricity market. To ensure that this is as efficient as possible, the company believes that interconnectivity should be further increased between the different markets. That is why 50Hertz is investing in major projects such as Combined Grid Solution and Hansa PowerBridge. Elia is using the benefits of its geographical location at the centre of the European energy system to bolster security of supply and to strengthen the development of interconnections with neighbouring countries such as Nemo Link (UK) and ALEGrO (Germany).

Nemo Link: operational

Stretching 140 km from Bruges coast to Richborough, Nemo Link is a joint venture between National Grid and the Belgian transmission system operators, Elia. The link started operations on January 31, 2019, offering a range of products that enable energy traders to move electricity back and forth between the two countries.

In its first operational year, the subsea cable has been available to import or export power more than 96% of the time, making it one of the highest performing assets of its kind in the world. Electricity flows have been primarily in the direction of the UK: 5889.4 GWh were imported by the UK, while 175.9GWh was imported by Belgium.

Nemo Link's commercial exploitation started on 30 January 2019. With a capacity of 1,000 megawatts, Nemo Link was the first subsea HVDC project in the world to use cross linked polyethylene (XLPE) technology to increase the strength and conductivity of the cable.

The interconnector facilitates the transition to a sustainable and affordable electrical system and improves the guarantees for security of supply. It offers additional possibilities for Belgium and positions it even more like a real Europe-an electrical hub

NEMO LINK IS THE FIRST CHANNEL INTERCONNECTOR TO OFFER HOURLY NOMINATION GATES

“Since 14 November 2019 it is also possible to trade electricity between Belgium and the UK within the day. Intraday market trading is a very important option for electricity market participants. With rapidly growing intermittent renewable production, it is becoming an increasing challenge for market participants to remain in balance after the closing of the day-ahead market.The capability to balance the grid closer to real time operations is beneficial for market participants as it allows them to take unexpected changes in consumption and production into account. The new explicit intraday capacity product on Nemo Link, with its hourly nomination gates, brings additional options and provides a level of flexibility welcomed by market players that trade both renewable and conventional energy.

Bert Maes, Business Director Nemo Link

Visit
https://www.nemolink.co.uk/
to consult the auction calendar

ALEGrO: progressing according to schedule

Good progress is being made on the first electricity interconnector between Belgium and Germany. The ALEGrO HVDC interconnector is a joint venture between Elia and Amprion, on of the four German system operators.

The underground connection runs over a distance of 90 km (49 km in Belgium) between the converter stations in Lixhe (Belgium) and Oberzier (Germany) and comprises two cables. Both cables, which measure 12 cm in diameter, will be buried along the entire route. The connection’s transmission capacity will be 1,000 MW, equivalent to a tenth of Belgium’s average power consumption.

In 2019, the main work on the Belgian side was completed. The DC cable link was fully installed and successfully tested over its length (49 km), including the tunnel underneath the Albert Canal and the River Meuse. Also the AC cables between the existing Lixhe substation and the newly built Alegro converter station were pulled, successfully tested and energised. Finally, the converter station was built and all technical equipment was installed and tested.

On the German side, further progress was made on the cable, with work expected to be completed by the third quarter of 2020. Elia expects ALEGrO to go into operation by end 2020.

18,559
MWh

EXCHANGED ON THE FIRST DAY OF NEMO LINK’S COMMERCIAL EXPLOITATION

Hansa PowerBridge: in progress

The planning and investigations for the 300-kilometre-long HVDC connection between Germany and Sweden could be further advanced. The application for planning permits for both the land and sea routes of the Hansa PowerBridge are to be submitted to the responsible authorities in Mecklenburg-Western Pomerania in 2020.

In September, planners visited five stations along the 70-kilometre-long corridor of the Hansa PowerBridge with the 50Hertz DialogMobil, 50Hertz’s mobile information office. The 50Hertz colleagues informed residents and owners about the route. Many technical topics were discussed.

The Hansa PowerBridge will have an output of around 700 MW and is due to start operations in 2025 and 2026 respectively. The investment costs amount to € 600 million. Half of this sum will be borne by each of the two partners. Svenska kraftnät is also working on the approval documents for the project.

€600
mio

INVESTMENT COSTS HANSA POWERBRIDGE

Shaping the onshore grid

GRI 201-2

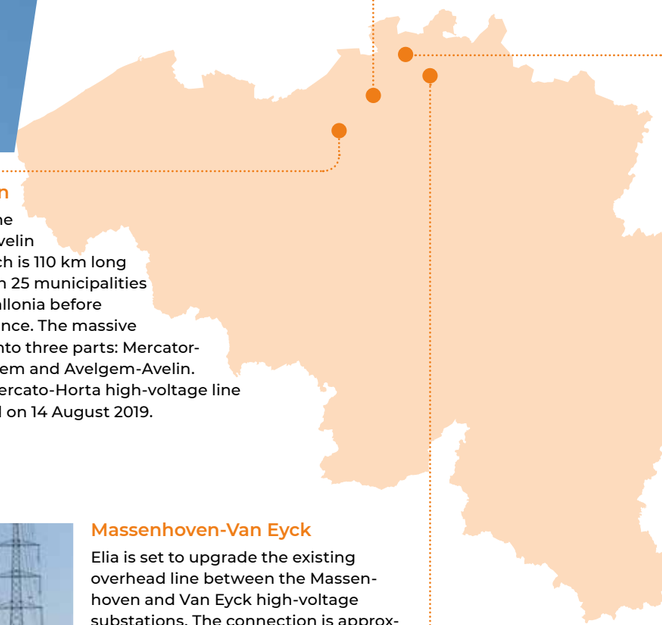
In addition to the substantial work on the offshore grid and interconnectors, Elia and 50Hertz are also further expanding and optimising the onshore grid. Many projects are currently underway to respond to demand and accommodate local renewable energy generation.

Brabo II

With the Brabo project, Elia aims to strengthen the high-voltage grid and consolidate security of supply in and around the Port of Antwerp. The project is being rolled out in three phases between 2016 and 2023.

Petrol-Zurenborg

Elia is laying a double underground cable connection between Antwerp's Petrol and Zurenborg high-voltage substations. By replacing and doubling the capacity of the current cable, Elia reduces the risk of grid disruptions, improving the reliability of the power grid in and around Antwerp. Work on this project is scheduled to end in February 2020.



Mercator – Avelin

Elia is upgrading the 380 kV Mercator-Avelin overhead line, which is 110 km long and passes through 25 municipalities in Flanders and Wallonia before continuing into France. The massive project is divided into three parts: Mercator-Horta, Horta-Avelgem and Avelgem-Avelin. The new 380-kV Mercato-Horta high-voltage line was commissioned on 14 August 2019.

Massenhoven-Van Eyck

Elia is set to upgrade the existing overhead line between the Massenhoven and Van Eyck high-voltage substations. The connection is approximately 92 kilometres long and spans 15 municipalities in the provinces of Antwerp and Limburg. The project is playing a vital role in enabling more renewable energy to be transmitted via the Belgian grid and to facilitate the exchange of electricity between Belgium and the Netherlands. Works are planned to start in 2021.

Boucle de l'Est II

Elia started Stage 2 of the East Loop project that involves replacing and upgrading the overhead line connecting the Bévercé (Malmedy), Bronrome, Trois-Ponts and Brume sites. The work is scheduled to run until 2022.

Visit
http://bit.ly/EliaProjects
for an overview of our infrastructure projects in Belgium.

The works on the SuedOstLink are progressing

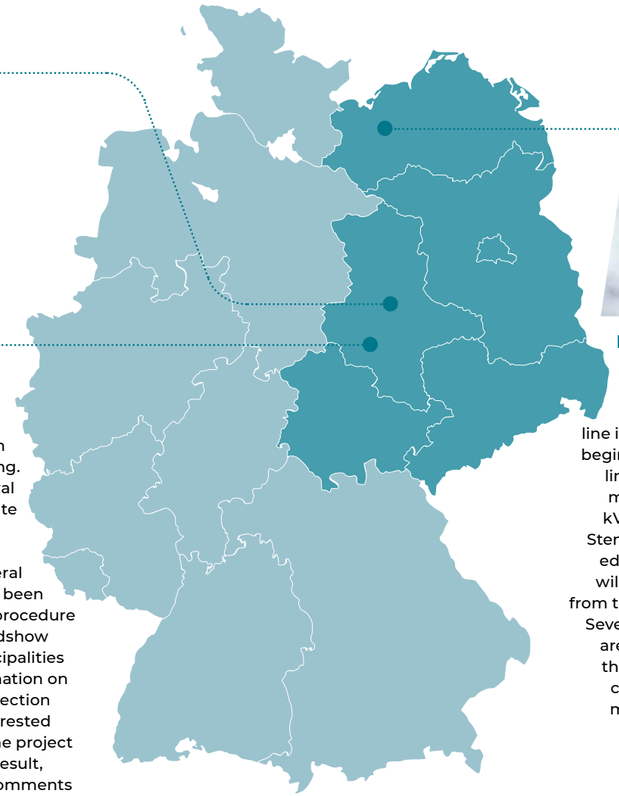
The planned - mainly underground – HVDC connection will transport renewable energy electricity from Saxony Anhalt to Bavaria. The SuedOstLink will connect Wolmirstedt near Magdeburg with the Isar power plant site near Landshut. 50Hertz is responsible for the northern part of the project, while TenneT is responsible for the southern, Bavarian part.

Underground cables for the SuedOstLink will be laid on the vast majority of the route using the open-cut method. For this purpose, trenches will be dug. District, highways or federal roads and railway lines, certain waters and particularly sensitive areas will be crossed using the closed method.

In October 2019, 50Hertz received the first partial permit for section B, a 100 km long and one km wide corridor, which mainly covers Thuringia and Saxony. This route is the core of the planning approval procedure that has now begun. The plan is to commission the line in the year 2025. 50Hertz is now determining the possible course of the underground cable route. To provide further detail for the plans, 50Hertz is exploring the underground in the corridors. Exploration boreholes are planned at those points where roads, railway lines or watercourses are to be undercrossed in closed condition and where challenging soil conditions are expected. Initially, around 20 crossing points will be drilled in Thuringia and Saxony.

Pulgar - Vieselbach

The planning for the first construction project that follows the Grid Expansion Acceleration Act (NABEG) is progressing. In July, the Bundesnetzagentur (Federal Grid Agency 'BNetZA') defined the route corridor for the middle section of the 105-kilometre line from Pulgar to Vieselbach. At the same time, the federal technical planning for this section has been completed. The planning permission procedure is now being carried out. During a roadshow across neighbouring towns and municipalities in November, 50Hertz provided information on the design of the route in the middle section between Geußnitz and Bad Sulza. Interested citizens informed themselves about the project and the current planning status. As a result, 50Hertz collected the feedback and comments about the plans. The objective of grid reinforcement is to increase the transmission capacity of the 380 kV overhead line by 40%. Once the new overhead line has been commissioned, the existing line will be dismantled.



Perleberg - Wolmirstedt

The first section of the 380 kV from Perleberg to Wolmirstedt overhead line is under construction. At the beginning of May 2019, overhead line fitters began the replacement construction of the 380 kV overhead line between the Stendal West and the Wolmirstedt substations. The 86 pylons will initially be erected starting from the Stendal West substation. Several construction companies are working along the route at the same time to ensure rapid construction progress and to minimise the impact on local residents and nature.

Visit
http://bit.ly/50HertzProjects
for an overview of our infrastructure projects in Germany.

Grid development plan Germany

One of the biggest challenges 50Hertz faces in Germany is the implementation of the grid development plan and the acceptance of the grid infrastructure. Together with the Ministry of Economy, the other three German TSOs and the federal and regional approval authorities, 50Hertz has developed a milestone plan that includes dates for permit approvals, start of construction and commissioning of the individual projects. Authorities and TSOs have committed themselves to execute this plan accordingly. The first permit for the SuedOstLink was planned for October 2019 and has been received on time.

“For 50Hertz, the next years will be dedicated to the approval and above all the implementation of projects to increase the capacity of the grid. Our focus in this context will be, among other things, on eliminating grid bottlenecks caused by the increasing integration of renewables in the north and electricity transport in direction south. In addition to the replacement of 220kV lines with 380kV lines in the same track as on the Wolmirstedt - Güstrow line, we are looking for the optimal technical and economic solution for each line, which also minimises the impact on nature and the environment. Sometimes these are even smaller solutions, such as the installation of measurement technology to enable temporarily higher current load capacity of the lines.

Elke Kwapis, Head of Projects Overhead Lines & Cables

Visit 50Hertz’s **http://bit.ly/Grid_Development** webpage to learn more about Germany’s Network Development Plan.

The DialogMobil, 50Hertz’s mobile information office to inform stakeholders.

Grid development plan Belgium

To keep the authorities and the electricity market players abreast of developments, every four years, Elia submits development plans identifying the investments needed to meet the requirements of the Belgian electricity system for the next 10 years.

In 2019, Federal Energy Minister Marie Christine Marghem approved Elia’s Federal Development Plan, giving the green light to proceed with concrete investments for enabling the energy transition to a sustainable electricity system in the short and medium term. Among other things, the plan provides for the construction of two new electricity corridors (Ventilus and Boucle du Hainaut) and improves the integration of offshore wind power, the capacity of which will expand to 4 GW (MOG II) by 2030.

Consult Elia’s Federal Development Plan via **https://bit.ly/Elia_FedDevPlan**

When it comes to developing the power grid of the future, Elia group is committed to three principles:

01 Minimising the construction of new infrastructure by giving priority to optimising and improving existing infrastructure.

02 Open dialogue with all the stakeholders during the entire development process from a very early stage.

03 Respect for people and the environment when building and operating our infrastructure.

#3 We develop the electricity system and the markets

G4 - EUS – DMA DEMAND-SIDE MANAGEMENT PROGRAMMES

30 mio

END USERS (ELIA GROUP)

AMBITION

We facilitate and redesign the energy market to encompass all kind of technologies and to empower all kind of customers. We lower the barriers by providing the digital tools to accelerate innovation in the European energy sector.

CHALLENGE

The growing intermittency of renewables drives the need for more short term trading and balancing to maintain a constant balance between supply and demand. In the years to come, new market players will appear to develop business opportunities linked to decentralisation and electrification of the energy system.

APPROACH

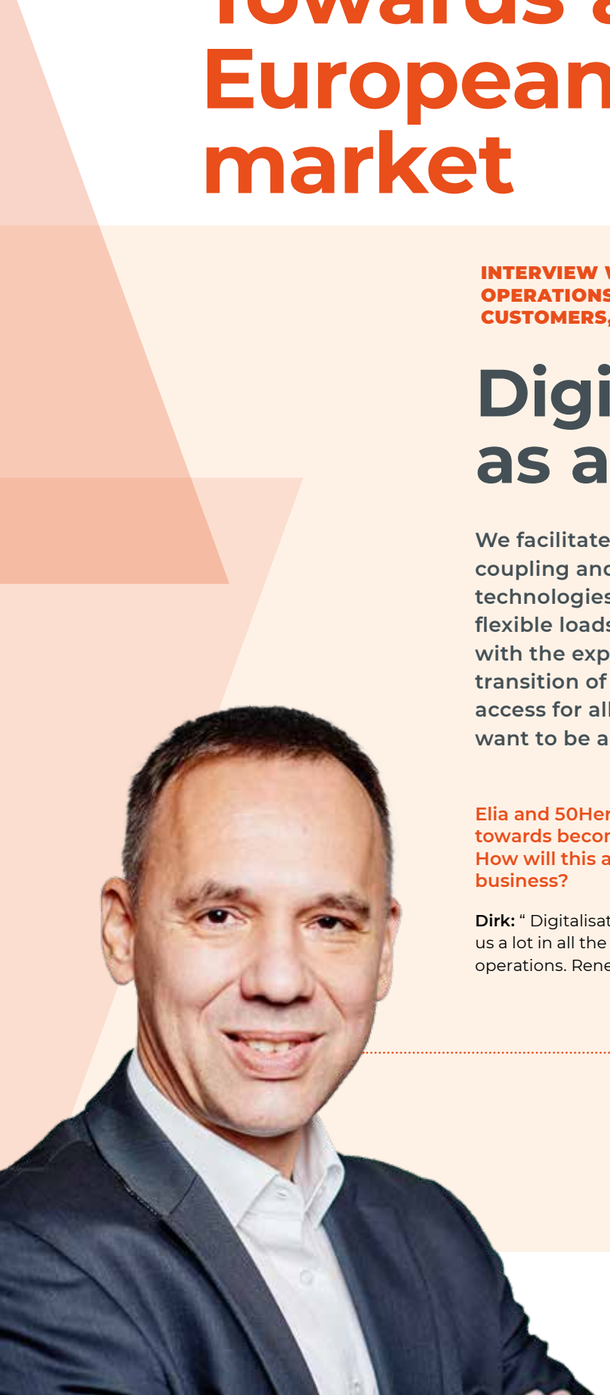
By opening up our system to new players and technologies, Elia Group wants to create a more competitive energy market while maintaining security of supply at all times. To achieve this, Elia Group ensures that every market player has transparent, non-discriminatory access to the grid.

Towards a single European energy market

INTERVIEW WITH DIRK BIERMANN (CHIEF MARKETS & SYSTEM OPERATIONS OFFICER 50HERTZ) AND PATRICK DE LEENER (CHIEF CUSTOMERS, MARKET & SYSTEM OPERATIONS OFFICER ELIA)

Digital metering as a game-changer

We facilitate the markets by going ever further in market coupling and develop new products fit for emerging technologies. We innovate to realise the needed shift towards flexible loads following the ever more intermittent production, with the explicit aim to achieve a reliable, efficient and smooth transition of the power system. We provide non-discriminatory access for all market parties, strive for a level playing field and want to be a valuable contributor to the energy debate.



Elia and 50Hertz are evolving towards becoming digital TSOs. How will this affect our daily business?

Dirk: " Digitalisation will definitely help us a lot in all the domains of our system operations. Renewable generation is geographically very dispersed and highly dependent on the availability of wind and sun. At the same time, we expand the operational limits of our grids as our complex infrastructure projects are lagging behind the fast development of renewables. Therefore, we have an urgent need for new and better tools, based on big data. It starts with getting a full picture of the system in real time, supported with diagnostics, analytics, forecasting, etc. We also need tools for recommendations in decision-making. Once actions are taken, automation kicks in. "

> **"The growing intermittency of renewables has been driving the need for more short term trading and balancing. We have reached great achievements with shortened lead times and 15 minutes product granularity.**
>
> **Dirk Biermann**

> **"By setting up a real-time market design, we are currently preparing to meet the needs of e-mobility. Together with digitalisation, the growth of e-mobility will increase even more the need to report flows closer to real-time.**
>
> **Patrick De Leener**

One of Elia Group's strategic pillars is to empower the customer. What does it mean?

Patrick: " Digital metering up to household level will bring us in a new customer-centric world. One will have a close-to real-time view on consumption and production of all relevant appliances. Customers will get access to multiple services, meeting their needs and also enabling them to align their consumption to the needs of the system. Prices will reflect the situation of the moment and households can adapt the consumption of freezers, heath pumps or electrical vehicles. Imagine that this becomes a reality on a huge scale. Clearly, this would be a big game-changer. However, we cannot set this up by ourselves. Therefore, we initiated IO.Energy (Internet of Energy), an ecosystem that is currently testing several case studies brought up by interested participants. The more we can make the market to take on this evolution, the better. "

Dirk: " There is a strong link between market design and system operation, which is the core business of a TSO. This was illustrated during summer time in Germany, when we had big imbalances in the system. This was not caused by technical issues, but by a market design issue. The balancing energy prices did not provide the right incentives for market players to avoid imbalances with very serious impact on system security. It shows how important it is to consider the link between market and system. Our guiding principle is to leave as much to the market as possible, to get it right on the market side. The TSO should only intervene on the system side when this is not possible. "

> **The continuous trading of electricity expanded to 21 countries, marking another important step towards expanding the single integrated European intraday market.**
>
> **Patrick De Leener**

Meeting of the members of the Board of Directors of the Elia Group - Berlin (2019).

In November 2019, Elia and 50Hertz published a joint study on future-proofing the EU energy system towards 2030. One of the key messages was indeed the need for an improved market mechanism.

Patrick: " Just letting things run their course is not an option. If we want to realise the next phase of the energy transition in a successful way, we need to finetune both the hardware (infrastructure) and the software (market design) of the European interconnected energy system. We notice for instance an inconsistency between the physical flows in the grid and the markets. We need to improve the software in such a way that there is more convergence between real-time flows and market transactions. On another level, we need to optimise our software to prevent or solve certain existing issues such as loop flows. Software optimisation requires effort, but it is easier and less costly than updating our hardware infrastructure. Constant optimisation of our software is the key to keeping up with evolutions. "

Dirk: " But that does not mean that we stop investing in grid infrastructure. On the contrary. Our study showed that the first and most important lever for a successful energy transition towards 2030 is the timely completion of the planned new grid infrastructure. Our simulations show serious welfare losses if we don't. In addition, this missing infrastructure also causes higher volumes of RES curtailment. We are therefore committed to doing the utmost to accelerate delivery of the planned new infrastructure in close collaboration with the competent authorities. At the same time, we upgrade existing assets and we optimise the operation of our assets. "

Elia Group is trying to operate closer to real-time in all aspects of its business. What are the main achievements in 2019 in that regard?

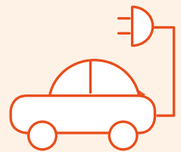
Dirk: " On a European level, we are currently implementing cross-border intraday market integration. The western European countries are already integrating renewables on a large scale to make the energy transition happen. The growing intermittency of renewables has been driving the need for more short term trading and balancing. We have reached great achievements with shortened lead times and 15 minutes product granularity. However, I believe that there is potential for further coordination to efficiently deal with the intermittencies and cross-border exchanges. It is the right way forward to create an integrated European market. "

Patrick: " Before, the day-ahead market was the trend. Today, the importance of having a near to real-time intraday market increases. This is indeed mainly due to the increase of renewables that are unpredictable and intermittent. In November 2019, we launched the second wave of the European single Intraday coupling; formerly known as the XBID project. The continuous trading of electricity expanded to 21 countries, marking another important step towards expanding the single integrated European intraday market. We expect a third wave by the end of 2020. "

What is the focus point in 2020?

Patrick: " Another big trend that influences the market is e-mobility. I think that in a few years only electric vehicles will benefit from the fiscal support for company cars. This will have huge system implications mainly due to charging. When everyone charges their electric vehicle at the same time, at the office or at home, we will see huge peaks in consumption that we have to predict and adjust. By setting up a real-time market design, we are currently preparing to meet the needs of e-mobility. Together with digitalisation, the growth of e-mobility will increase the need to report flows closer to real-time even more. "

Dirk: " E-mobility is indeed a focal point in 2020. In the short term, I expect that we will manage to find concrete use cases where we work on what software and what mechanisms should be developed to integrate e-mobility. Today, market processes are not designed for electric vehicles, which leaves room for significant improvements. Take for instance electric charging at home that is linked with rooftop solar production and a smart domestic energy management system. And by nature, Elia Group running business cross-border should thoroughly look into development of cross-border process for charging and settlement. Let us make e-mobility a problem solver instead of being an additional uncertainty. "



Our expertise at society's service

INTERVIEW WITH JAN VOET, HEAD OF SYSTEM OF THE FUTURE

Future-proofing the EU energy system towards 2030

In our role as transmission system operators, Elia Group publishes forward-looking studies to keep our finger on the pulse in the market. In 2019, Elia and 50Hertz published a joint study on future-proofing the EU energy system towards 2030. On the way to 2030, renewables will further increase, some conventional generation will disappear and there will be more cross-border exchanges as Europe has set ambitious targets regarding the further development of the internal energy market. From the perspective of two system operators, Elia Group wants to raise awareness about the increasing challenges on both the grid infrastructure (hardware) and the market design (software) of the European interconnected electricity system.

What challenges are we talking about?

Jan: " The discrepancy between the development and construction times of renewable generation compared to the longer lead-times for realising grid infrastructure creates congestions on the grid. System operators regularly have to perform redispatch to keep the flows within operational boundaries. These congestions also create secondary effects, such as loop flows. On the software side, we see an increasing divergence between the electricity flows optimised by the market mechanism and the physical flows in real-time. "

> **"We are also committed to upgrading and optimising existing assets.**
>
> **Jan Voet**

Levers to realise the next phase of the energy transition with maximum welfare for society

Timely completion of critical infrastructure

Our simulations show that not having the German north to south HVDC lines in place entails a yearly welfare loss of around € 1 billion to € 1.5 billion by 2030. In addition, this missing infrastructure also causes higher volumes of RES curtailment (ca. +40%). These numbers will further increase beyond 2030, as more renewables are due to be integrated into the grid on the road to full decarbonisation.

Flex-In-Market design

Our simulations show welfare gains of € 300 to € 400 million per year in 2030 for the Flex-In-Market design compared to the current market design and a decrease of curtailed volumes of RES by 10% to 15%. The proposed market design improvements could also significantly reduce the redispatch costs in parallel to the grid expansion coming up to speed over the next couple of years. Simulations show a potential reduction of German redispatch costs of more than 50% in anticipation of the HVDC lines, along with a 20% to 30% reduction of curtailed volumes of RES.

Presentation of the Elia Group study during Elia's annual Stakeholders' Day.

What needs to be done?

Jan: " In our joint study, we propose two levers. The first and most important lever is the timely completion of the planned new grid infrastructure. Elia Group is therefore committed to doing its utmost to accelerate delivery of the planned new infrastructure and to mitigate any risk of delays, working in close collaboration with the competent authorities. We are also committed to upgrading and optimising existing assets. "

And on the software side?

Jan: " As a second lever, we propose the Flex-In-Market design. This improved market design gives the market access to a toolbox of controllable devices to better manage the flows in line with physical constraints. This enables a more efficient use of the grid and reduces the gap between markets and physics. "

What are the next steps?

Jan: " Elia Group suggests that a broader coalition should be set up to start discussions with representatives of system operators, market parties, regulators and European authorities. We believe that our proposals could be stepping- stones that bring currently opposing views closer together. "

Consult Elia Group's study online via
http://bit.ly/EliaGroup_publications

Adequacy and flexibility study for Belgium 2020-2030

In line with the Belgian Electricity Act, Elia conducted an additional analysis of the adequacy and flexibility requirements for 2020-2030. These are both crucial pillars for a smoothly operating electricity system. The new report confirms and reinforces the conclusions of previous Elia studies from 2016 and 2017.

Elia notes that the need for replacement capacity to cope with the nuclear exit laid down by law is now becoming even greater than before. Because neighbouring countries bring forward their coal exit, it is set to make it harder for Belgium to import electricity when it experiences shortages.

In specific terms, the replacement capacity Belgium requires to cope with the nuclear exit in 2025 is now up from 3.6 GW (figure given in the Elia study in late 2017) to around 3.9 GW.

This accelerated coal exit also means that additional capacity perhaps even exceeding 1 GW will be needed for 2022-2025, requiring further measures to be taken.

Elia is calling on the federal government to continue working on its development of the planned capacity remuneration mechanism (CRM) so that Belgium has a robust safety net in place to maintain its security of supply.

“The coal phase out in neighbouring countries is making the Belgian capacity need even more pressing. As a result, between 2022 and 2025 additional capacity of more than 1 GW will be needed, requiring further measures to be taken.

Chris Peeters

Consult Elia’s Adequacy and Felxibility Study via
http://bit.ly/Elia_Studies

Collaboration & co-creation to manage increasing flexibility

With the increasing decarbonisation, power generation is shifting from conventional power plants towards renewables. Germany, for example, has defined its 65% renewables goal for 2030. Battery storage, Power-to-X technology as well as different renewable energy technologies will play an important role in the coming years and decades. Additionally, “demand response” like detachable loads and new flexibilities from small-scale devices will be needed for a secure and efficient system operation.

IO.Energy: putting consumers at the centre of the energy system

Second major meeting of the IO.Energy project where nearly 150 people came to close the ideation phase, in Flagey, on June 24, 2019.

Digitalisation and the rise of more flexible assets in the system like electrical vehicles and heath pumps bring opportunities to get society more involved. We see opportunities for consumers to benefit from better services and to optimise their energy bill by sharing their flexibility and data. In Belgium, the system operators join forces to co-create the energy services of tomorrow within the context of the IO.Energy initiative.

Visit
https://www.ioenergy.eu/
to learn more about the ecosystem.

In February 2019, the Belgian System operators (Elia, Fluvius, ORES, Sibelga and Resa) launched IO.Energy (Internet of Energy), a unique and innovative ecosystem to give consumers access to new services as a result of data exchange. IO.Energy is being undertaken in collaboration with business, research institutes and public services. By collaborating and introducing new digital tools, new rules and automation, combined with real time communication capabilities, we can provide Energy-as-a-Service (EaaS).

A win-win for both consumers and the system

This would enable consumers to optimise their bills, increase their comfort and benefit from their technological investments. Market parties, in turn, will be able to innovate and develop new energy products and services tailored to consumers‘ needs.

Meanwhile, system operators will have new possibilities enabling them to better operate the Belgian grid at its various voltage levels, making our energy system more efficient and sustainable.

The IO.Energy Ecosystem

The journey towards a consumer-centric energy system has delivered its first results: eight consumer-centric use cases from eight consortia are currently in the sandboxing phase. This will continue until April 2020. The outcome of this first sandboxing phase will lay a strong foundation for consumer centricity. Firstly, by paving the way for the demonstration of the current use cases under more realistic conditions, in preparation for industrialisation. Secondly, by accelerating the set-up and delivery of a second round of ideation and sandboxing with a view to addressing other consumer needs via innovative power and digital technologies.

Reallabore Power To Gas

50Hertz participates in hydrogen projects

50Hertz contributes its know-how to research projects in Saxony-Anhalt, Saxony and Brandenburg for the development of promising energy technologies. These are so-called 'real laboratories' on an industrial scale, funded by the Federal Ministry of Economics and Energy, which are intended to advance sector coupling and hydrogen technology.

The material use of hydrogen plays a decisive role in the project 'GreenHydroChem Central German Chemical Triangle'. For that, a 50 MW electrolyser at the Leuna site will divide water into hydrogen and oxygen using regenerative electricity. The hydrogen will then be converted into basic materials such as methanol in local chemical plants.

The real-world laboratory concept 'Reference Power Plant Lausitz' goes one step further: hydrogen will firstly be produced with green electricity in an electrolyser, secondly be made available for transport and industry and thirdly, if required, will be reconverted into electricity using the generated heat. A hydrogen storage tank as well as a battery and a supercapacitor for storing electricity will supplement the plant.

Both projects are designed to contribute to system and supply security in the power grid. 50Hertz expects the projects to make progress in the development of Power-to-X technologies, which will play an important role in the energy transition.

Project REEAL

50Hertz prepares for redispatch with renewable energy plants

50Hertz is preparing intensively for the so-called redispatch with renewable energy plants. Redispatch means that in the event of congestion in the electricity grid, generation will be reduced on one side of the congestion while being increased on the other. The objective is to bring the traded electricity to the consumers even if the transmission capacity of the grid is not (yet) sufficient. So far, such interventions have been limited to conventional power plants with a capacity of more than 10 MW. From October 2021, a new regulation (NABEG 2.0) will apply, which will also allow grid operators in Germany to implement redispatch measures with renewable plants and smaller conventional power plants.

With the new regulation, the number of relevant assets for redispatch measures in Germany will increase tremendously. In the 50Hertz grid area alone, the number of power plants will rise from several hundred to several tens of thousands. Because a large number of these plants are connected to the distribution grids, transmission and distribution system operators have to align and collaborate even more closely.

50Hertz already launched this extensive project in 2018 to implement the new legal obligations. REEAL - standing for Redispatch with Renewable Energy Plants - involves employees from numerous areas of the company. The project coordinates the internal adaptation of processes and systems, as well as 50Hertz's participation in energy sector-wide initiatives. 50Hertz closely coordinates with other German transmission system operators, distribution system operators, direct marketers and the Federal Network Agency.

We cooperate to create value for society #4

GRI 102-29, GRI 413-1

549 hectares

ELIA GROUP TAKES CARE OF NEARLY 549 HECTARES IN ECOLOGICAL AISLE MANAGEMENT.

AMBITION

We stimulate participation from our various stakeholders. We are a transparent and trusted advisor to create value for society.

CHALLENGE

Elia Group's activities have an economic, social and environmental impact in both Belgium and Germany. It is challenging to balance the different viewpoints when building the grid infrastructure of the future.

APPROACH

Building the infrastructure of the future involves all stakeholders at a very early stage of our projects to incorporate their input in the various planning stages. This results in the best societal and environmental solutions.

INTERVIEW WITH ILSE TANT (CHIEF COMMUNITY RELATIONS OFFICER ELIA) AND OLIVIER FEIX (HEAD OF PERMITS 50HERTZ)

Collaborating for a successful grid development

GRI 102-43, GRI 102-44,
G4 - EUS – DMA - STAKEHOLDER PARTICIPATION

Information market on the SuedOstLink project in Greiz on November 26, 2019.

The energy transition is a real societal challenge for all of us. Decarbonisation is a European story which only works with a well-developed high-voltage grid. It is about connecting the wind and solar potentials in the North of Europe with those in the South to create the best possible mix. Elia Group is convinced that early involvement and dialogue with all stakeholders is vital for the success of the energy transition.

Why is timing so important when building the grid?

Ilse: " When grid development is lagging behind, it can generate substantial costs for society because of bottlenecks in the grid and related redispatching costs. In Germany, very concrete figures are given for the consequences of a delay. Also in Belgium we observe an increasing saturation of our network. Moreover, the timely construction of the grid not only avoids bottlenecks and related costs but also enables the integration of renewable energies with the related CO_2 reduction and a positive impact on the market price. "

Olivier: " Since the commissioning of the Southwest Coupling Line in Germany, we have already saved more than €650 million in congestion management costs in four years. And we have calculated that we will save 50% of redisptach cost annually through the projected German DC links by 2030. This economic benefit boosts welfare for society. Secondly, there is also an ecological price. Renewable energies that cannot be integrated into the electricity system are replaced by production that emits CO_2 into the atmosphere. And thirdly, we should consider the social cost as lots of decentralised potential and initiatives cannot be unlocked in a system that cannot cope with such an amount of new renewables. Even if many local citizens, associations and prosumers wish to contribute to investments linked to this great societal project called, energy transition, this still makes it difficult to implement their ideas. "

"It is important that authorities at different levels also take responsibility for the realisation of the projects through positive communication on the importance and need and making available resources to move the process forward while guaranteeing to citizens that their input is taken seriously.

Ilse Tant

How can we contribute to the timely construction?

Olivier: " The great advantage of being a group of TSOs is that we share knowledge, experience and good practices to learn from each other. We identify measures to de-risk permission procedures or construction works that are performed in Belgium that are helpful in Germany and vice versa. This helps us to speed up the delivery of critical infrastructure projects such as SuedOstLink in Germany or Ventilus in Belgium. And we apply the same standards in managing these complex projects to ensure the timely delivery on budget and quality. "

Ilse: " Having the competence in-house is key. Alongside our engineering competence, we need project-management capabilities in national and international environments. Furthermore, stakeholder management and communication competencies are essential for the success of our projects. Working hand in hand with our stakeholders - authorities as well as civil society and citizens – is crucial to obtain permits on time. We are inspiring allies who want to speed up the transition together with us. If you look at a project team today, it is a mixture of technical, legal, communication, environmental and many more experts. "

Olivier: " Stakeholders have become more demanding and want to actively participate in the decision making process. This is of course challenging and can add complexity to our permission processes. On the other hand, this can be a source of knowledge that can be incorporated in our planning processes to deliver a better outcome. We see a lot of debate on democracy in Europe and have to find our way regarding the new emerging approaches of engaging people. "

650
mio €

SAVED IN CONGESTION MANAGEMENT COSTS IN FOUR YEARS WITH THE SOUTHWEST-COUPLING-LINE

"We see a lot of debate on democracy in Europe and have to find our way regarding the new emerging approaches of engaging people.

Olivier Feix

50Hertz organised an information market for the SuedOstLink project in Bernburg (Saxony-Anhalt) on 13 May 2019.

“ We have completely reviewed our planning and permission process towards an integrated approach systematically including external stakeholder input.

Olivier Feix

Stakeholders visit the Brabo site in Antwerp on 19 May 2019 during Open Site Day.

On November 22, Elia held its annual Stakeholders' Day. More than 150 guests from the Belgian energy sector attended.

So, are we thinking of new ways of stakeholder involvement?

Olivier: “ We have also learnt that critical stakeholders are often ready to make useful suggestions or to add new facts to identify and evaluate routing alternatives, technical options or ecological compensation measures. To get there, we have to interact early, in a focused and respectful manner. People are eager to be part of the story. That’s the positive thing. However, that also means that we have to consider many ideas coming from mature and active citizens in our core processes. It’s not only early information for the sake of transparency. It’s a two-way interaction over the entire project development cycle and that interaction is driven by purpose. It has to lead to a positive result in the interest of society. This is why we have completely reviewed our planning and permission process towards an integrated approach systematically including external stakeholder input. We are in the process of learning to use these new dynamics positively. ”

Ilse: “ As Elia Group we invest much more in stakeholder engagement and communication than three to four years ago. We do not only build relations with governments and local authorities but also test innovative concepts involving representatives of civil society and citizens. This leads to concrete and long term collaboration with farmers, environmental and economic associations in order to balance interests and impact and to find common solutions. For citizens stakeholder groups are set up to come to a common understanding of problems and solutions for several topics. The development of long term relations with different stakeholders leading to a better reciprocal understanding and collaboration is essential for all our activities. ”

Elia's key political stakeholders visit the MOG upon its inauguration on September 10, 2019.

What do you expect from governments and authorities?

Olivier: “ We firstly expect a cooperative approach and active involvement with a common project mentality. What does that mean? The permission phase is still too long, complex and uncertain. We can benefit a lot from working together. Very concretely, who has which role at which stage of the permission process and what do the parties expect from each other? If this is clear and applied, interactions and processes become efficient. Secondly, political decision makers have to link the social debate on climate change with the energy transition. Elia Group as a European Group of TSOs plays an important role in making the energy transition a success. In Germany we are getting on the right track. ”

Ilse: “ In Belgium the situation is complex taking into account the dispersed responsibilities on need for grid and permitting. We are often in the role of a facilitator to enable all the parties to pull in one direction. It is important that authorities at those different levels also take responsibility for the realisation of the projets through positive communication on the importance and the need and making available resources to move the process forward while guaranteeing to citizens that their input is taken seriously. ”

“ The early dialogue with the public has been made part of our daily routine at 50Hertz. Particularly with our direct current project, which is planned as an earth cable, the dialogue with the property owners plays an important role. Because topics such as soil investigations and soil protection concepts are important from the very beginning. This is where 50Hertz relies on the owners' knowledge in order to be able to further improve the planning and subsequently also the construction of the cable.

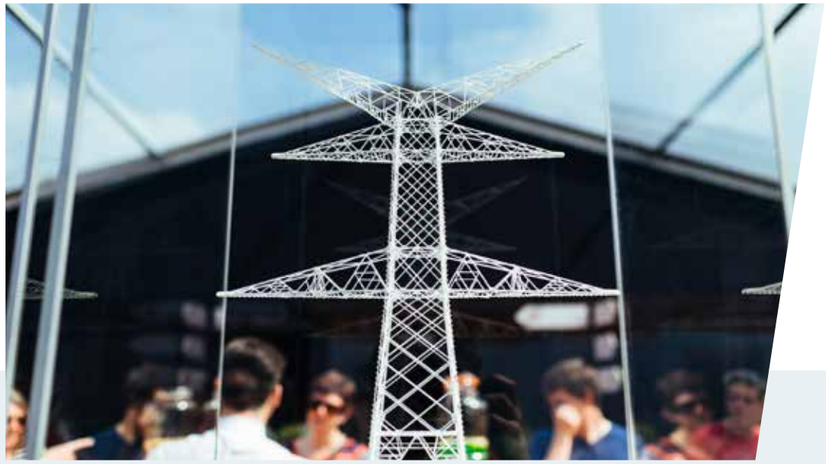
Danuta Kneipp,
Head of Public Participation Combined Grid Solution 50Hertz

AN INTERVIEW WITH PASCALE FONCK (CHIEF EXTERNAL RELATIONS OFFICER ELIA), KERSTIN MARIA RIPPEL (HEAD OF PUBLIC AFFAIRS AND COMMUNICATIONS 50HERTZ) AND EMELINE SPIRE (HEAD OF ELIA GROUP EU AFFAIRS)

Stakeholder Engagement

GRI 102-21, G4 - EUS – DMA - STAKEHOLDER PARTICIPATION

Elia Group is an advisor to public authorities at national and European level and aims to involve its stakeholders and regulators at an early stage of all developments. How do political decisions impact our activities? And why do new ways of proactive stakeholder management gain more and more importance?



Can you explain the intense relationship between our activities and the public authorities?

Pascale: " The different governments at federal and regional level give us our licence to operate. With this regulated monopoly, we have a duty to accomplish our tasks in the interest of society complying with all regulations pertaining to the operation of the transmission system. Secondly, thanks to our wide portfolio of activities, we are the only player at national level with a global view on the electricity system. This puts us in a unique position to provide analysis, advice and recommendations to public authorities, so that informed decisions can be taken. "

> **"The Green Deal confirms the need to make the energy transition a reality, and we are willing to take our role in making this possible.**
>
> **Pascale Fonck**

Why do we have this mandate?

Kerstin: " The operation of critical infrastructure is of general interest to society as we ensure system security and thereby support the security of the electricity supply to consumers. This is of particular interest to public authorities. They are intrinsically motivated and highly interested in how we optimise and build the grid to integrate renewables on time and in budget and how we operate the system. We do it with a high technical and economical expertise and we do it in a transparent manner, with a keen focus on encouraging open dialogue. Being efficient and innovative, we constantly improve the services we deliver to society. This will be even more relevant in the future while moving towards a successful energy transition and the recently announced EU 'New Green Deal'. Infrastructure is key to decarbonise the energy sector. Our political stakeholders and the public authorities know that. "

> **"Infrastructure is key to decarbonise the energy sector and our political stakeholders and the public authorities know that.**
>
> **Kerstin Maria Rippel**

How are our activities steered by political frameworks and how do we see our stakeholder engagement?

Kerstin: " In Germany we have a new legislation on renewable energies literally every year. The grid development plan has – due to legal provisions - to be updated every two years. These cases show how political decisions have a direct impact on our activities. Consequently, it is of great importance to be in regular contact and trustful dialogue with public authorities and decisionmakers to provide holistic advice on future developments of the system facilitating the energy transition. Our first principle within that process: stakeholder management is always based on trust. We establish solid and reliable relationships, and regularly invite stakeholders for dialogue and open, transparent discussions. We always put ourselves in the shoes of our partners and stakeholders, combining their needs with our ideas and positions. "

How does European legislation impact your activities? How do you manage both levels?

Pascale: " Belgium is a highly interconnected country and therefore it is extremely important to us. We know that more and more decisions tend to be shifted to the European level and will consequently impact the national legislation. We strongly believe in the interconnected character of the European energy system and are willing to optimise the use of interconnectors and to build new ones. We can see huge evolutions in the past five years looking at the network codes and the clean energy package. Now, we are talking about a new Green Deal. It confirms the need to make the energy transition a reality, and we are willing to take our role in making this possible. "

Kerstin: " It is the same in Germany. Finally, the European level is one of the most decisive ones. Therefore, we established a dedicated Elia Group EU Affairs function in February 2019, which acts as an interface between Elia and 50Hertz. We now collaborate, exchange and thus consolidate constantly our national views with a European one. This is a major achievement of Elia Group's efforts in 2019. "

On 13 and 14 February, Elia took part in the Salon des Mandataires in Marche-en-Famenne. This event, which attracts nearly 15,000 visitors every year, brings together all the stakeholders in Wallonia: public administrations, local and regional political authorities.

50Hertz expert panel during the 10th edition of the Renewable Energy Conference in Berlin on 30 October 2019.

Emeline: " Looking at the impact of EU legislation in the longer-term, electricity systems play a major role in delivering the `Green Deal' climate neutrality objective by 2050. Renewable electricity becomes the new primary energy, and the most efficient way of using renewable electricity is to transport it and use it as electricity. The Commission scenarios foresee up to 53% electrification - twice as much as today. This gives us a special responsibility. Whenever we manage to integrate more renewables in the power system, whenever we make the power system smarter to accommodate electric mobility, etc., society can decarbonise faster and more efficiently. Hence our ambition is to accelerate both the delivery of the future infrastructure as well as the digitalisation of our activities and the power system. "

How do you see the stakeholder management with authorities at European level?

Emeline: " Our role is to support European policy makers in delivering the European Union´s climate and energy ambitions. We are in the business of making it happen. We also support European authorities by anticipating implications of political objectives. We raise issues that need to be addressed if we want to succeed. We propose solutions based on our complementary expertise in Germany and Belgium. We have a concrete and recent example: our study "Future-Proofing the European Energy Transition towards 2030". Steering these topics at Group level allows us to showcase a new degree of compromise building and to speak with a stronger voice. This is very helpful and once again the unique selling point of being a Group of two national TSOs. "

> **"Steering European topics at Group level allows us to showcase a new degree of compromise building and to speak with a stronger voice.**
>
> **Emeline Spire**

Stakeholders' Day 2019

Elia held its annual Stakeholders' Day on 22 November. Over 250 guests from the Belgian energy sector were treated to a varied programme centred around the theme 'Accelerating the Energy Transition'. Particular highlights were the inspiring speeches on climate change and CO_2 reduction delivered by Belgian climate expert Jean-Pascal van Ypersele (from the Université Catholique de Louvain (UCLouvain)) and US environmental activist Paul Hawken respectively. Many topics relating to both the Belgian and European electricity systems were also discussed.

Watch Kadri Simson's (EU Commissioner for Energy) message as shown during the event via

http://bit.ly/VideoSpeech

Elia Group organises European evening in Brussels

More than 120 guests from the European energy sector met on 12 December at the first joint stakeholder event between Elia and 50Hertz. Amidst current themes such as the Green Deal and the COP25 in Madrid, Elia Group presented its new study 'Future-proofing the EU Energy System towards 2030'. There were several guest speakers and video statements. German Energy Minister Peter Altmaier praised the Belgo-German cooperation within Elia Group. Kadri Simson, the new European Commissioner for Energy, pointed out the measures needed to realise the ambitions of the Green Deal: accelerating decarbonisation, improving energy efficiency and integrating more renewable energy.

50Hertz engagement with public authorities

50Hertz organised numerous networking events with various interest groups in 2019. In the political arena, these are regular, diverse dialogue formats in which stakeholders from public authorities, parliaments, NGOs, associations and industry meet to discuss current energy policy issues. In February e.g., representatives of all democratic parties attended a Parliamentary Breakfast at the 50Hertz headquarters in Berlin to discuss the effects of the Network Expansion Acceleration Act (NABEG). In January and September, energy policy network evenings took place, during which the participants exchanged views with 50Hertz experts on the necessity of higher utilisation of the grid and the challenges of offshore grid expansion. In May 50Hertz hosted the annual public and regulatory affairs day. Distribution system operators, large consumers, renewables producers, conventional power plant operators - all situated in our grid area - discussed with 50Hertz-representatives the decisions of the so-called "Coal Commission", upcoming developments in incentive regulation and the development of electricity prices. This exchange is characterised by tough discussions and mutual respect for the different points of view.

In August 50Hertz hosted the now 11th System Security Conference on the topic of higher grid utilisation, followed by the annual EEG conference on redispatch with renewable energy plants.

In addition, around 100 meetings are held annually with international, national and local political players, business representatives* and NGOs to provide transparent information on selected energy industry or energy policy issues. One highlight in 2019 was the commissioning of the Arkona wind farm and the 50Hertz grid connection Ostwind 1, which was attended by German Chancellor Angela Merkel. In her speech she emphasised the importance of the Baltic Sea in terms of offshore wind.

100

50HERTZ HOLDS ABOUT 100 MEETINGS PER YEAR WITH STAKEHOLDERS

Environmental Actions

GRI 304-1, GRI 304-2, GRI 304-3, G4-EN12

Elia Group is committed to creating a sustainable future for all of its internal and external stakeholders. This means that the company takes its corporate social responsibility very seriously, which includes an active commitment to environmental and climate protection. Elia Group respects flora, fauna and biodiversity, uses natural resources conservatively and keeps the energy consumption and emissions of its activities as low as possible.

Biodiversity and rehabilitation of natural habitats

To ensure our security of supply, safety distances around the electrical conductors of our high-voltage lines must be respected. Instead of cutting down trees and shredding vegetation, Elia set up the LIFE project in 2011 in collaboration with RTE, and funded by the European Commission and the Walloon Region. With LIFE we aimed to find solutions that ensure safety distances, whilst preserving biodiversity. Since this seven-year project was concluded, Ecofirst carried out biological inventories during the summers of 2018 and 2019. These inventories aim to characterise the evolution of habitats and populations of animal and plant species in order to highlight the effects of developments and changes in management practices resulting from LIFE.

The success of the seven different actions carried out during the LIFE project (i.e. borders - orchards - restoration of natural habitats - excavation of ponds - control of invasive species - installation of mowing or grazing - installation of flowering meadows) was evaluated. As it was not possible to carry out complete inventories on 429 ha with the existing means, Ecofirst focused on a selection of 52 sites considered representative of the diversity of the actions carried out during the LIFE project. In total, approximately 130 ha were evaluated.

Setting an example for Europe

One of the aims of the LIFE project is to set an example for all other European transmission system operators (TSOs) and establish the first ecological network of its kind along the EU's 300,000 km of power lines. Contact was made with the TSOs in 14 EU Member States that have shown the greatest interest in the project and its implementation in their own country. A 'guide to best practices' describes various ways of managing the aforementioned green corridors and highlights their financial benefits drawn up as part of the project. This is used within Elia and distributed to the other European TSOs, among other ways via international associations like the European Network of Transmission System Operators for Electricity (ENTSO-E) and the International Council on Large Electronic Systems (CIGRE).

IMPACT LIFE PROJECT

- Only 2% (1 out of 52) of the evaluated sites didn't have any results
- 71% (37 out of 52) of the evaluated sites reached the intended goal
- 19% (10 out of 52) of the evaluated sites surpassed the intended goal
- 8% (4 out of 52) of the evaluated sites showed positive progress in terms of biodiversity without interference from the LIFE project

Together with these expected, and meanwhile proven, positive results, Elia decided to launch a five-year follow-up project, LIFE 2, but this time without any external funding.

Visit
http://www.life-elia.eu/en/
to learn more about this sustainable initiative.

Ecopooling

According to the law, there is an obligation to avoid or minimise any preventable negative impact on nature and landscape. Where interventions are unavoidable, 50Hertz takes compensatory measures. These are, for example, planting, forestry, hydraulic engineering measures, species protection, restoration and other actions. However, it is becoming increasingly difficult to find suitable areas for such compensation measures at the time of the intervention. Eco-accounting aims to counter this problem. Eco-accounting means that compensation measures are carried out ahead of time and without specific impact and that they are recognised and booked into an eco-account.

In 2019, the Stiftung Kulturlandschaft Sachsen-Anhalt and 50Hertz established the basis for a sustainable biotope ecosystem in the Sülze valley southwest of Magdeburg. Its aim is to create a comprehensive ecosystem by upgrading and preserving biologically valuable areas. The Stiftung Kulturlandschaft Sachsen-Anhalt has set up an eco-account for this purpose.

The aim of the biotope system is to create species-rich and flowering habitats for animals and plants in areas that have become rare today. The Foundation contracts local farmers for the management of the biotope network, thus offering smaller farms in particular an additional source of revenue.

This cooperation shows that economy and environment are not contradictory. With smart planning, it is possible to implement nature-conserving activities in connection with infrastructure projects that would otherwise be difficult or even impossible to realise.

50Hertz has already been paying into the project-related eco-account since 2017 and receives eco-points in return. These can be used for future necessary compensation measures, for example for the nature conservation related compensation of SuedOstLink.

"Of course, we also actively protect and strengthen biodiversity. We pay attention to birds, amphibians and natural habitats and develop substantial ecological projects with external partners to enrich biodiversity. The way we operate our system and our grids is also sustainable. We also run our public participation dialogues in a socially sustainable manner. Our professional handling of negative and positive opinions and the resulting better understanding and social consensus that grids need to be reinforced to integrate rapidly growing amounts of variable renewables also contributes to a better and more sustainable societal interaction.

Olivier Feix,
Head of permits 50Hertz

For an overview of all compensation measures taken by Elia and 50Hertz please consult the Elia Group Sustainability Report 2019 via
http://bit.ly/EliaGroup_publications
Or visit our
https://www.elia.be/ and **https://www.50hertz.com/**
for more information on mitigating environmental impact & promoting ecological diversity.

We align culture with strategy

#5

2,544

TOTAL NUMBER OF EMPLOYEES (ELIA GROUP)

AMBITION

We want to implement an Elia Group culture that puts safety and the interest of society at the centre of our activities while respecting local identities.

CHALLENGE

We operate in a fast changing and international sector. This means that our employees need to cope with intercultural differences, working in distributed teams, using new digital tools and adapting to new processes.

APPROACH

Three guiding principles and six behaviors build the foundation of evolving our Group culture. Based on that, we improve collaboration between our employees in Germany and Belgium and empower people to take initiative and Make A Difference (MAD) in every action they take.

INTERVIEW WITH PETER MICHIELS (CHIEF ALIGNMENT OFFICER ELIA GROUP) AND SYLVIA BORCHERDING (CHIEF HUMAN RESOURCES OFFICER 50HERTZ)

Creating a strong Group culture

Elia Group is operating in a fast changing environment and constantly seeking to improve its services to society. With its two strong national TSOs 50Hertz and Elia and their exceptional knowledge and experience, Elia Group managed to implement its vision of installing two headquarters, with central offices perfectly located in Brussels and Berlin. To realise the ambition of taking a leading role in the energy transition in Europe, we established group functions in those areas where we can create an added value for society.

What were the major achievements that helped Elia become a stronger Group in 2019?

Peter: " Since we established 15 Elia Group functions beginning of 2019, we progressed a lot. Elia and 50Hertz published a joint study on the horizontal vision showing two main levers for successfully implementing the next phase of the European energy transition. We organised our first Elia Group European Stakeholder's Day and published a joint annual report.

We further aligned and developed the Elia Group strategy and derived the national business plans from it. We created common standards for CAPEX Management of critical infrastructure projects and jointly commissioned and inaugurated the grid connection of the Arkona wind park in the Baltic Sea and the Modular Offshore Grid in Belgium. We also leveraged synergies in purchasing through common technical specifications for capacitor banks and steel in certain projects, giving us stronger negotiation power. "

> **"Having shared values, beliefs and behaviours will be an important factor in forming and driving the Elia Group.**
>
> **Peter Michiels**

> **"The long-term success of the Elia Group clearly depends on our way of collaboration. We are working on a common Group culture by implementing these six behaviours in both countries.**
>
> **Sylvia Borcherding**

Sylvia: " For the first time we organised a joint Elia Group Innovation Week, which showcased the progress in digital activities and implementing new technologies into our core business. Our new common Elia Group safety guidelines leaflet reinforces safety being our top priority across the Group. We also joined forces in talent management and developed an approach to implement skill-based workforce management. As a Group, we are also creating a stronger image in the recruiting market. We managed to find two important profiles under difficult circumstances -a strong German CEO for 50Hertz and a Chief Digital Officer for Elia Group, who will lead the digital transformation of our companies. Looking at collaboration, I more and more feel the Group coming alive with the presence of Elia colleagues in Berlin, 50Hertz colleagues in Brussels, as well as the increasing participation at each other's yearly employee parties. We also have our first Belgian Group Head working as an expat out of Berlin. And finally, I am very happy to see a change in mindset – people start proactively thinking about the best possible outcome for the Group. "

The Supervisory Board of 50Hertz appointed Sylvia Borcherding as Chief Human Resources Officer in January 2019. The female quota of the 50Hertz Executive Board now counts 20%. Sylvia Borcherding previously held leading positions in the Metro Group, at healthcare provider IAS and at outsourcing specialist Capita. She was also active as a organisational consultant.

“ It is not only a matter of becoming more agile and innovative, we also encounter challenges when dealing with intercultural differences.

Sylvia Borcherding

Which key challenges do you face?

Peter: “ The digital transformation constantly increases in speed and requires the overhaul of proven business models with digital strategies. To secure our long-term future, we need to be innovative, flexible and efficient. The major challenge now is to effectively seize the opportunities of the digital transformation for the Group and enable our people and organisation to actively contribute to it. To achieve this, we need highly motivated and agile employees. Teams will increasingly work together horizontally across functions and independent from hierarchies. This requires a massive change in mindset and culture. ”

Sylvia: “ It is not only a matter of becoming more agile and innovative, we also encounter challenges when dealing with intercultural differences, working across different locations or adopting new structures, responsibilities and processes. It is undeniable that people associate themselves very strongly with the national company whether it is Elia or 50Hertz, but being a strong Group also requires one common culture. This does not mean ignoring the differences between Elia and 50Hertz or Belgians and Germans, but to speak one language with respect to the culture we want to have and to adopt common behaviors. A common culture will help us to strengthen the foundation and realise our ambitious strategy. ”

What kind of culture is required to achieve Elia Group`s ambitions?

Peter: “ Having shared values, beliefs and behaviours will be an important factor in forming and driving the Elia Group. To succeed in the future, we launched the cultural programme 'Make A Difference'. It promotes six behaviours, which further build on our strengths, but also foster an agile mindset and an efficient way of working needed to adapt to the rapidly changing world around us. These six behaviours enable us to speak with one voice, to simplify and reduce complexity, to give and ask for feedback, to have an impact with every action we take, to make choices in the interest of the entire Group and to actively co-create the future. ”

Sylvia: “ The long-term success of the Elia Group clearly depends on our way of collaboration. We are working on a common group culture by implementing these six behaviours in both countries. To me the two behaviours 'feedback' and 'simplification' are particularly important. A good feedback culture is crucial. It is important to manage expectations for continuous improvement, but also to show personal appreciation more regularly. After all, a good mood and high motivation help achieve success. With regards to simplification, we have a lot of seemingly small things to change. For example, by reducing the high number of signatures in many approval processes we could decrease complexity and thus, significantly increase efficiency in our daily work. ”

Senior managers of Elia and 50Hertz during the Elia Group Management Days in Ghent on September 30, 2019.

How do you plan to implement these behaviours withing Elia Group?

Peter: “ In Belgium, we started working on the two behaviours ‘feedback' and 'one voice' across all levels and teams. Next on the agenda are 'simplification' and 'impact'. In Germany, we are defining our priorities now. Although important, it is clear that it will be more than just communication campaigns, training courses and workshops to explain to our employees what the six behaviours mean. Our leaders and managers have to be role models and show the way. People should feel able to test and try new things, without being afraid of making mistakes. Additionally, we will have to audit our business processes, detect where we see barriers for these six behaviours and eliminate them. ”

20%

FEMALE QUOTA 50HERTZ EXECUTIVE COMMITTEE

Cultural guiding principles and behaviours

GRI 404-1

Elia Group has started a joint project to intensify the collaboration between Elia and 50Hertz. The company is developing a common, integrated way of working that will transform us into one, multinational Group with more than 2,500 employees. To successfully realise our strategy and accomplish our mission in this dynamic context, a strong Group culture is needed. Therefore, we defined cultural guiding principles and six cultural behaviours. These are the basis for the Elia Group culture and the starting point for all our (business) activities. These guiding principles and behaviours should be reflected in the priorities and the decisions made by all Elia Group employees.

2,544
employees

WORK FOR ELIA GROUP

Six Behaviours

ONE VOICE:
we have an open and constructive debate before making a decision. Once the decision is taken, everyone supports this and carries the same message.

IMPACT:
we perform our tasks in the best possible way by focusing on the actions that make a difference and that have an impact (on safety, the system, society, the environment, our performance...).

ONE COMPANY:
our responsibility goes beyond our own job or department. We look at results transversely and support the choices we make as a company.

“We will continuously work on integrating and reinforcing these behaviors in our daily way of working. Together with the management teams, we will set direction, define priorities and actions to ensure a sustainable implementation in the organisation.

Julia Persitzky,
Head of Learning & Development 50Hertz

Our aspirational values

GRI 102-16

WE ARE ENTREPRENEURIAL: Our staff work proactively and take initiatives with a view to improving how they work and they are encouraged to explore new ways of doing things.

WE COLLABORATE: Elia Group values collaboration, both within the company and with external partners. Our staff share their expertise and their information and question each other, thus enabling their ideas to mature. They seek fruitful collaborations and win-win partnerships.

WE ARE ACCOUNTABLE: All of our staff take full responsibility for their projects and tasks. They achieve their motivating, ambitious targets and work hard on their projects until they are completed.

WE ARE AGILE: In a world of constant change, our staff embrace new developments, are proactive and persevere.

SIMPLIFICATION:
we look at what could be simplified in our challenging environment and avoid unnecessary complexity.

CO-CREATING THE FUTURE:
we are not only aware of the radical changes in our sector, such as digitalisation and decentralisation, but we shape them.

FEEDBACK:
we give and ask for feedback and this is in multiple directions. Thus, we show appreciation and we strive for continuous improvement.

“The six behaviours are our common standard. Of course, there may be local differences, as well as other priorities or concerns. The German colleagues are currently working out an approach for implementation. I'm sharing our best practices and making sure there's coherence. Just as we did for Elia, we start with the management and then roll it out further throughout the organisation.

Barbara Verhaegen,
Head of Internal Communication & Culture Elia

Growing our talents

The partnership between Elia in Belgium and 50Hertz in Germany is stronger than ever. Together, we are reaping the benefits that neither company could realise on its own, such as the creation of future development options or investments in activities delivering future synergies. The combination of forces will help ensure a secure, reliable and efficient system, deliver the grid infrastructure of the future, evolve the market, align culture with strategy and adopt promising innovation and growth opportunities.

Group functions

We are convinced that a stronger cooperation between our two TSOs creates additional value and secures our longterm future. To realise our common ambition we established Group functions where we can create added value by intensified collaboration.

The Elia Group organisation is steered by the Elia Group Committee (EGC) the official gremium of the newly created Elia Group Holding structure.

Group functions have been created in several domains:

ASSET MANAGEMENT

“Teaming up and managing our assets at Group level will lead to better decisions about our assets with significant benefits for both TSOs.

Dirk Kunze (Elia Group Officer Asset Management)

STRATEGY

“Together we can ensure that the TSOs stay highly relevant in a fast changing environment. Making the digital transformation happen is key for our company.

Alexandre Torreele (Elia Group Head Strategy)

CAPEX MANAGEMENT

“Group-wide steering of the high priority projects and programmes will improve the transparency and reduce the risk exposure with regards to time, cost, scope and quality. The experiences and practices in both TSOs provide a good basis for a strong evolution.

Olivier Feix (Elia Group Officer Capex Management)

SYSTEM OF THE FUTURE

“The ambition of the System of the Future Department is to answer the major questions on the future electricity system beyond 2030 via in-depth qualitative and quantitative studies, in close cooperation with internal and external stakeholders.

Jan Voet (Elia Group Head System of the Future)

EU AFFAIRS

“As a trusted advisor, Elia Group will be acting in the interest of European society. We will ensure that the Group speaks with one strong voice and follows a coordinated approach with all the important stakeholders.

Emeline Spire (Elia Group Head EU Affairs)

FINANCE : GROUP CONTROLLING, AUDIT AND RISK MANAGEMENT

“Fostering a common understanding of the value drivers of each TSO in its individual context on the one hand and identifying the value drivers of the joint business on the other hand are the most important tasks for the new Group Controlling. Based on this, the function can develop a framework for reporting and for support of decision-making that is action-oriented on mitigating key risks and seizing value-creating opportunities.

Daniel Baumgartner (Elia Group Head Controlling)

“As part of our ambition to reinforce the finance function, we want to achieve strong and consistent risk management for the entire Group with harmonised processes to provide a relevant discussion about risk on the EGC.

Gwendolyne Verstraelen (Elia Group Officer Risk Management)

CORPORATE COMMUNICATION AND REPUTATION

“Elia Group Communication and Reputation defines and steers the Group’s communication strategy to speak with one strong and coherent voice to increase awareness, impact and our overall reputation as a leading group of TSOs in the European energy transition.

Marleen Vanhecke (Elia Group Head Communication & Reputation)

IT

Group-wide applications will enable the delivery of common solutions for both TSOs, increasing our global efficiency and achieving the strategic goals of the business.

Marc Gilliard (Head of Elia Group IT Application Development and Maintenance (ADM))

The Group IT Infrastructure, Datacom and Security synergies will lead to an increased resource mass permitting the move from generalist to specialist guaranteeing a better service delivery.

Pierre Loverius (Head of Elia Group IT Infrastructure, Datacom and Security (IDS))

The CDO Office is supporting and steering a tremendous transformation that is currently affecting the whole Elia Group: The Group IT integration between Elia and 50Hertz will harmonize and slim down our processes and create synergies for both business and IT. At the same time we are making sure that priorities and capacities are well set for our Group vision of becoming a Digital TSO.

Antje Schlegel (Head of Elia Group CDO Office)

INTERNAL AUDIT

Elia Group Internal Audit maximizes the added value in providing assurance at local and at Group level. It's our ambition to increase positive impact on the effectiveness and the efficiency of the different business activities and to boost the transition process.

Erik De Schrijver, Head of Elia Group Internal Audit

PROCUREMENT

We have established Group functions servicing both TSOs for those goods and services where we can generate the biggest benefits thanks to the group volume effect and where we can leverage our best practices.

Harald Van Outryve D'Ydewalle (Elia Group Head Procurement)

TALENT MANAGEMENT

Elia Group Talent Management will provide guidance by translating the Group strategy into a common long-term Talent & Competency roadmap. The identification of critical skills and roles is crucial for our business continuity.

Sylvia Borcherding (Elia Group Officer Talent Management)

INNOVATION

In our fast-paced changing energy system, Group Innovation is aiming to test and validate potential of new technologies to maximise efficiency, quality and safety in our business while embedding innovative mindset in the group. We then leverage on both companies challenges and test-bed to maximise the learnings and create valuable support to the long-term strategy of Elia Group.

Loïc Tilman (Elia Group Head Innovation)

The official launch of the new Elia Group organisation on 14 February in Brussels.

Elia Group's Change Agent Programme

The intensified collaboration between Elia and 50Hertz has a lot of benefits but also brings challenges for our employees. To support the teams in their daily operations, 50 change agents have been nominated across Elia and 50Hertz. Change agents are leaders and employees from Group functions as well as from local functions, where the Eia Group activites have a change impact. They will take on different roles to support their colleagues in dealing with intercultural differences, working in distributed teams, transparency and communication, interfaces or clarification of roles and responsibilities.

I have always enjoyed working in an international environment, because it gives me the opportunity to express my way of thinking and to develop myself personally. Collaborating within an international group sometimes seems quite a challenge, but in the long run I only see the many advantages such as an international network, high-quality knowledge exchange or faster results that such collaboration brings. As a change agent, I think I can play an important role in making our people and colleagues aware of our differences and similarities, both culturally and in the way we work.

Evelyne Driane, Head of Talent Management Elia

Safety always comes first

GRI 403-1

Safety is a critical part of our corporate culture. Elia Group applies the highest safety standards for its own employees, our contractors and everyone coming into contact with its infrastructure. We are committed to continously invest in the intrinsic safety of our installations, working methods and safety culture. Likewise, we expect all our employees to always work safely and securely, promote a safety-oriented attitude and responsible behaviour, and never compromise on safety.

We are all safety leaders

Elia Group believes that the safety culture is not about more procedures, but about aligning peoples' behaviour. Everyone needs to be a 'safety leader'. Right from day one, our employees are given thorough safety training to ensure that they respect their own safety and that of their fellow workers and the environment at all times. That is why in 2019, we introduced a third pillar to our safety programmes 'We are all safety leaders', next to 'We go for Zero accidents' and 'We build a safety culture'.

A safety leader is someone who truly understands the risks and respects the rules, is open and collaborative in his or her interaction – regardless of their position in the organisation – and inspires others to act safely. At Elia Group, we believe everyone can be and should be a safety leader. That is why we developed a toolkit for our employees to help them to further develop their safety leadership skills and attitude. It creates a common understanding and framework for safe behaviour to ensure that we achieve our safety ambitions.

WE BUILD OUR SAFETY CULTURE

Reaching our goals requires more than procedures and guidelines. We actively work towards a safety culture. Everyone is personally involved in ensuring their own safety and that of their colleagues.

WE GO FOR ZERO ACCIDENTS

Elia Group is committed to making sure that everyone returns home safely every day. This includes our employees, contractors and also those working on or in the vicinity of our installations.

WE ARE ALL SAFETY LEADERS

The safety culture transformation requires visible safety leadership at all levels of the Group. Safety leaders show exemplary safety behaviour and inspire others to do the same. Elia Group wants to actively develop safety leadership in all employees.

"Safety has always been a top priority at 50Hertz and Elia. It is important for me to know that we also share the same safety values and objectives across the entire Group. With the Elia Group Safety Toolkit, all employees in Germany and Belgium now hold this strong message in their hands. The leaflet provides standardised tools and rules for everyone to contribute to safe working in the same manner across the Group.

Claudia Lüer, Occupational Safety Specialist 50Hertz

Employee initiatives

2019 was a very important and busy year for Elia Group. Together, we realised huge milestones in order to make the energy transition in Belgium, Germany and Europe happen. These team efforts need to be celebrated and rewarded, which is why we organised several events in 2019 to thank our employees for their contribution, trust and teamspirit.

ELIA'S GOT TALENT

Elia's annual New Year event was all about talent this year. We literally gave our employees the stage to share their talents with us outside of their expertise at work. Our colleagues treated us to an amazing show with dance, singing and instrumental performances. Thank you to the whole Elia Group team of 2019!

MARATHON OF VALENCIA

On December 1, twenty Elia colleagues successfully took part in the Valencia marathon. It was a spontaneous initiative, and for many employees the first marathon in which they participated. The colleagues helped and stimulated each other to train. After the successful participation, the team of runners are now looking forward to go to the Athens marathon in 2020 and the Berlin marathon in 2021.

ELIA TROPHY 2019

The Elia Trophy is an intense three-day teambuilding event for all Elia Group employees. Forty teams of four colleagues, took part in this adventurous, sporty and relaxing weekend near La Roche-en-Ardenne. The teams took on different challenges ranging from rock climbing, to running over mud pools to kayaking. In large organisations such as ours, the event offers a relaxed way to get to know colleagues from other departments in both Belgium and Germany and to strengthen our team spirit.

FAMILYDAY AT THE BRABO PROJECT

Once again Elia took part in the Open Site Day, with the Brabo project in the port of Antwerp. During a full weekend, we invited the public to come and discover the project. Nearly 1,500 people enjoyed this enriching and pleasant event. Saturday 18 May was dedicated to the Elia staff and their families: they could visit the Brabo site and take part in leisure activities for young and old.

50HERTZ EMPLOYEE EVENT

Meeting new and familiar colleagues in a relaxed atmosphere - this is what the annual 50Hertz employee party in Berlin is about! In June 2019, many Elia Group colleagues from Belgium came to Berlin for the first time to celebrate together with their German colleagues - a great enrichment for both sides. In the middle of Berlin, at the former Tempelhof Airport, people discussed, laughed, danced, brought faces and projects together and made friends in four different languages. The motto "Together. Safe. Strong" - fostered the common culture that Elia Group continues to develop. For 2020, it is planned to further expand the exchange between colleagues from Elia and 50Hertz.

We keep our eyes wide open for innovation and growth opportunities #6

83

83 START-UPS FROM ALL OVER THE WORLD APPLIED FOR ELIA GROUP'S 3RD EDITION OF THE OPEN INNOVATION CHALLENGE

AMBITION

We want to create a culture of innovation and entrepreneurship to accelerate the energy transition and build an ecosystem to develop the tools and methods that will enable a more digital, decentralised and sustainable energy system.

CHALLENGE

The rapidly evolving energy landscape brings about an accelerated need for innovation and new technologies to better understand, anticipate and promptly adopt the changes required to make the energy transtion happen.

APPROACH

Besides continuing to integrate innovative technologies, we stay abreast of the latest developments in the energy sector. Elia Group has a range of initiatives that foster and reward innovative thinking, to ensure that our employees remain at the forefront of new developments.

We innovate to co-create the future

INTERVIEW WITH LOÏC TILMAN (ELIA GROUP HEAD OF INNOVATION) AND MICHAEL VON ROEDER (ELIA GROUP CHIEF DIGITAL OFFICER)

The energy sector is transitioning towards a more complex paradigm. More renewable energy leads to more intermittency and uncertainty. At the same time, the role of centralised power plants is decreasing, and a much wider range of decentralised actors such as households and electric vehicles have to be integrated in the system. We are moving away from a system we have known for a long time. This brings new challenges in operating the system.

How does innovation help Elia Group to reach its strategic targets?

Loic: " The paradigm shift imposes many new challenges on us. Luckily, the energy transition is backed by another evolution: the digitalisation of our sector. We need to leverage new innovative technologies such as artificial intelligence and blockchain to better integrate the decentralised players and to get closer to real time. As an example, fast and regular updated forecasts are needed to achieve a higher responsiveness in operating the system. On the asset side, we also need to rethink the way we develop the grid – not only on the wired side, but also on the non-wired side –looking notably at the flexibility coming from decentralised assets (electric vehicles, households and batteries) as an integral part of the system development. Finally, artificial intelligence, sensors and drones will also bring more efficiency to our asset management business. "

> **"Digitalisation is not only decreasing the entry barriers but also making them much blurrier between the sectors.**
>
> **Loïc Tilman**

Michael von Roeder is the Chief Digital Officer (CDO) of the Elia Group. The former Vattenfall and Vodafone manager has been directing the Group's digital transformation since the beginning of November 2019 and is a member of the Elia Group Committee (EGC). He reports to Elia Group CEO Chris Peeters and manages the three Elia Group IT functions as well as the digital projects. Von Roeder holds a Master of Business and Engineering degree from the University of Stuttgart and an MBA from the IMD Business School Lausanne. He founded several companies in recent years and was also employed as an interim manager.

Many innovations are digital and Elia Group will transform into a digital TSO. What does this mean?

Michael: " Most people would say it's all about technology. I agree there is definitely a technical side to it, but for me the main transformation is taking place in human aspects. So, it's not only technology, it's psychology. It is about how to take all employees along on this ride to deal with fundamental and exponential changes. However, our transformation is enabled by digital technologies. Firstly, this can be internal enablers like tools. Secondly, there are digital tools to transform the business itself, such as Internet of Things, sensors, etc. Thirdly, it is about transforming our business models, and that's the most difficult one to get our head around. It means we must open up our organisation. "

> **"Innovation is not only about technology, it is also about psychology. It is about how to take all employees along on this ride to deal with fundamental and exponential changes.**
>
> **Michael von Roeder**

How do you create such an ecosystem?

Michael: " Right now, our organisation is a nice castle with a castle gate. But the organisation will have to become the company and its surroundings, be it the society, suppliers or partners networking and co-creating in an ecosystem together with us instead of developing everything on one's own. It is exponential, this is what we must understand and work on. In one project, a specific company could be our supplier, in the next project it might be our competitor. Let's look at the German automotive companies. They have always been the fiercest competitors, now they suddenly joined engineering forces to co-create autonomous driving. One alone would have had no chance to succeed. They also recognised they will be quicker using third-party solutions. "

What does digitalisation bring beyond our core business?

Loic: " Further electrification and digitalisation lead to new ways of doing business – also in the energy sector. Digitalisation is not only decreasing the entry barriers but also making them much blurrier between the sectors. Coupled with the electrification of transport or heating for example, many new players will start new business in the energy space from car manufacturers to tech companies. Collaboration between all members of this new ecosystem from the energy value chain and beyond is indispensable to succeed. In this regard, it is important for Elia Group to be in touch with these new stakeholders and develop a network in both the corporates and start-up sectors that will enable the digital energy transition of the system. "

How do you facilitate innovation and digitalisation within the Elia Group?

Loic: " With a dedicated Innovation Team, we provide the framework for ideation and lower the hurdles to try out new things. We create examples to demonstrate the benefits of innovation as eye openers for the organisation. We support the business in long-term strategic innovation and in the ideation process for short-term innovations. We organise networking with start-ups and the outside ecosystem and thus demonstrate the way to collaborate with external parties and this in turn encourages outside-the-box-thinking. And of course, we also provide the tools. But innovation is not a team; it is a mindset and a culture, that needs to be established as innovation is happening in the whole organisation. "

What kind of mindset and culture is that?

Michael: " Everybody in the organisation needs to accept the fundamental and exponential changes in the world around us. This is a challenge and an opportunity at the same time. Often new developments or technologies are not obvious or broadly known for a long time and then suddenly they are everywhere. Examples are WhatsApp or digital photography. We must work more horizontally across functions and provide the right tools for open communication and have a free information flow in all directions. I also believe we can free-up some space and leave it to our people to take part in projects or initiatives of their choice. And we need to be more flexible in starting and stopping activities and significantly reduce the time we spend on planning. "

Elia employees at Hack Belgium, the Belgian festival of open innovation, in Brussels on 2 December 2019.

From a traditional to a digital TSO

Elia and 50Hertz colleagues attend the Innovation Fair at the Elia Monnoyer site in Brussels on 2 December 2019.

Elia Group´s biggest transformation ever

To tackle the innovative challenges of the next decade, Elia Group aims to become a truly digital TSO, where digitalisation will be embedded in all our core activities. Our responsibility as a leading energy provider is to deliver an energy future for everyone, using the very latest developments like AI, drones, and blockchain to prepare for the energy transition. As a Digital TSO, we will provide the interfaces needed to implement a true digital architecture where market parties and consumers can participate and contribute to the balancing of the system. We will also increase the value of existing assets by helping to extend their lifespan. The use of smart sensors and automation will help us to manage the system close to real-time.

"The digital transformation is in full swing. Start-ups often play a pioneering role with their agile culture. I have learned that corporate culture and start-ups do not exclude one another, but often can be mutually beneficial. It is crucial to take all employees along with the necessary and meaningful changes and implement them in a human way. It is very important to me to make this successful!

Michael von Roeder, Elia Group Chief Digital Officer

IO.Energy

INTERVIEW WITH DAVID ZENNER AND FLORIAN REINKE, LEADING THE IO.E INITIATIVES IN BELGIUM AND GERMANY

Energy services for consumers

Elia Group believes we are on the verge of a new era where energy as a service will breakthrough dramaticly. With more and more flexible assets in the system (heat pumps, electric vehicles, etc.) and meters that measure consumption every quarter of an hour, the hardware will be in place soon. The challenge is to manage a more fragemented system while incentivising consumers to help us keep the lights on by getting access to market-based price signals. That is why we joined forces to invite companies and insitutions to co-create step by step, the energy services of tomorrow within the context of the IO.Energy initiative.

Why do we want to put the consumer more upfront?

David: " The starting point was our vision paper in 2018 on the so-called vertical system: "Towards a Consumer Centric System". In the future, consumers will have a central role in the energy system. This development is already being driven by the increase in decentralised photovoltaic generation, private storage, the envisioned rise of electric vehicles and the ongoing digitalisation. But more importantly, consumers seek to contribute to the energy transition, improve their standards of living and have access to diverse and customized services. "

Florian: " The European Commission has also strengthened consumers' rights and opportunities for participation in the energy market. The Clean Energy Package was launched end of 2019 with new regulations supporting this point. Throughout Europe, more and more consumers are becoming "prosumers" with the ability to purchase, generate and store electricity. "

What is the concept?

Florian: " To fully enable their participation, every consumer and prosumer needs a smart meter gateway on top of the smart meter. The gateway is a kind of radio box that allows secure communication between the consumer's meter and the system operator or electricity supplier. Electricity suppliers can thereby offer new types of contracts to their customers - such as variable tariffs or the possibility to react to signals from the system by adapting their feed-in or consumption. "

David Zenner

IO.Energy in Belgium

On the initiative of Elia, the Belgian system operators joined forces in February 2019 and invited market parties to sign up and to participate in joint developments. More than 60 companies from different sectors (including energy, banking, IT and buildings) responded positively.

The journey has delivered its first results. Eight consumer-centric use cases from eight consortia are currently in the sandboxing phase. The sandboxing phase will continue until mid 2020. The outcome of this first sandboxing phase will lay a strong foundation for consumer centricity. Firstly, by paving the way for the demonstration of the current use cases under more realistic conditions, in preparation for industrialisation. Secondly, by accelerating the set-up and delivery of a second round of ideation and sandboxing with a view to addressing other consumer needs via innovative power and digital technologies.

David: " Beyond the necessary communication infrastructure, consumer value will come from the services developed by market players. If the consumer behaviour is in line with the needs of the power system, the notion of energy service can take another dimension.There will be value-add for all parties - and ultimately for the society. Such novel services do not exist yet. That is why we are extensively testing interaction possibilities between customers, suppliers and system operators in concrete use cases. By performing use cases, we gain insights that contribute to the further development of the communication infrastructure as well as TSO and DSO services to be used by market players. "

IO.Energy in Germany

The 50Hertz project team is currently working on three smart meter data use cases. The extensive tests of the planned infrastructure aim to demonstrate:

1. Automated billing of remuneration and payments under the Combined Heat and Power Generation Act (KWKG) and the Renewable Energy Sources Act (EEG)
2. Control of delivery or acceptance of positive or negative balancing power
3. The use of decentralised, interruptible consumption equipment such as electric cars or heat pumps for congestion management, coordinated with the distribution system operators

50Hertz is collaborating with a variety of players operating or using such infrastructure in future. These include distribution system operators, municipal utilities, gateway administrators and start-ups. Also electric car manufacturers and heat pump suppliers are highly interested to find out how they can contribute to a better use of the electricity grid.

Florian Reinke

Further key innovation projects and initiatives

To successfully transition to a Digital TSO, we are working together with many partners across the energy sector and beyond seeking innovative solutions to drive the energy transition forward. Our Elia Group Innovation team highlights some of the key projects and initiatives of the past year.

OKTO Acoustics

Kai Schmid: "OKTO Acoustics develops sensors, which use artificial intelligence to identify and assess a whole range of sounds an noises. The sensors are being tested at the Nemo Link converter station in Bruges. With the help of the sensors, the monitoring of our assets can be improved. In this special case, Elia Group is trying to understand the condition of the bearings in the cooling pumps. The acoustic sensors can provide additional health indicators to complement the existing monitoring and alert system."

Tangant Work Machine Learning

Thijs Vral: "Digitalisation is always about the intelligent connection and analysis of data. Elia Groups Innovation team is working together with the and dispatching teams and external partners on an intelligent layer that will support the system operators in decision making. One first step is to set up a proper prediction of the system imbalance for the next 15 to 45 minutes to better react to increasing variability of the system. The dispatching task is becoming ever more complex. The objective is to develop a 'machine' that is able to provide valuable information, advantages and disadvantages of different options supporting the dispatcher."

IO.Energy Ecosystem

Johan Maricq: "The idea of the Sensa project is to develop a version 2.0 of day and night energy prices. These were introduced at a time it was needed to incentivise consumption at night and during the weekends. Although well integrated in the consumption habits, it does not match with the integration of intermittent renewable energy sources anymore. With Sensa, we want to switch to real-time consumption, incentivising consumers to support the system needs. Prices are designed to target the desired reaction level, depending on the needs, using AI/machine learning algorithms."

IO. Energy Flexity Use Case

Pieter Vanbaelen (Market Development): "This year we launched the 'Flexity' use case which aims to investigate the flexibility potential of households and test how consumers can actively contribute to the energy transition. For example, we are dealing with heat pumps, electric boilers and the smart charging of electric vehicles (EVs). We facilitate the operation of household appliances and EVs remotely and shift consumption to cheaper and greener moments of the day or night with no loss in comfort. End consumers that are interested to share the control of their appliances with energy service providers can contribute to a more sustainable world and save money on their electricity bill. Currently a field test with real households is being prepared. The successful laboratory test performed last autumn with respect to the remote control of household appliances and two Tesla cars has set the ground for a real-life test. We are already well on the way there."

Drones in Asset Management

Bastian Bohm: "Today, for the maintenance of our overhead lines, we carry out cost-intensive inspection flights with helicopters, which also cause extensive emissions. In addition, our employees climb masts to obtain detailed information on the exact condition and necessary maintenance measures. We are currently actively testing the use of drones to monitor the overhead lines at 50Hertz. On the one hand, we are thus pursuing the clear goal of increasing our occupational safety by avoiding climbing the masts. On the other hand, we hope to reduce maintenance costs and planning time for maintenance."

Elia Group Open Innovation Challenge

Jasmin Löffler (Elia Group Communication): "In June 2019, Elia Group organised the third edition of the Open Innovation Challenge - a competition for international start-ups to take part and win a proof-of-concept with Elia Group worth €20,000. This time, we invited start-ups to develop solutions for improving day-to-day activities in asset management and maintenance. Of the 83 ideas submitted, 20 were selected and supported by internal mentors for several weeks. The Danish start-up Okto Accoustics was finally selected among five finalists. Their software uses artificial intelligence to distinguish normal operating sounds from anomalies and also detects unauthorised access to assets. This helps us at Elia Group to further increase safety and reliability of our assets."

Elia Group Innovation Week

Aurélie Meurs (Internal Communication): "Elia and 50Hertz also look to internal partners for innovative ideas that will enable us to transform ourselves and encourage us to co-create the future together. In the first week of December, Elia Group organised its first joint Innovation Week. The idea is to inspire our colleagues and spark their innovative spirit by introducing them to the innovative projects underway within the Group and the opportunities offered by the digital transformation in the energy sector. The programme consisted of an interactive Innovation Fair that took place in both Brussels and Berlin."

50Hertz uses AI to estimate grid losses

To predict grid losses more accurately, 50Hertz has developed a new model based on artificial intelligence. This more accurate calculation means that 50Hertz can purchase the right amount of additional energy in advance to offset its grid losses. The further the electricity has to travel, the greater the grid losses. For 50Hertz, which transmits large quantities of renewable energy, this is a very important consideration as generation sites are located far from the consumption centres.

Visit

https://innovation.eliagroup.eu/

for more information on our use cases and projects.

Corporate Governance

CORPORATE BODIES 114

CORPORATE GOVERNANCE STATEMENT 116

REMUNERATION REPORT 127

RISK MANAGEMENT AND UNCERTAINTIES FACING THE COMPANY 132

FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEMS 141

Corporate bodies

GRI 102-18

Elia Group Committee (EGC)

The activities of Elia Group are coordinated by the Elia Group Committee (EGC) composed of:

Chris Peeters

Stefan Kapferer

Michael von Roeder

Peter Michiels

Catherine Vandenborre

Chris Peeters
Elia Group CEO

Stefan Kapferer
CEO 50Hertz

Michael von Roeder
Chief Digital Officer

Peter Michiels
Chief Alignment Officer

Catherine Vandenborre
Chief Financial Officer

50Hertz in Germany

Executive Committee

Stefan Kapferer

Dr. Frank Golletz

Dr. Dirk Biermann

Marco Nix

Sylvia Borcherding

Stefan Kapferer
CEO 50Hertz

Dr. Frank Golletz
Chief Technical Officer

Dr. Dirk Biermann
Chief Markets & System Operation Officer

Marco Nix
Chief Financial Officer

Sylvia Borcherding
Chief Human Resources Officer

Elia in Belgium

Executive Committee

Chris Peeters

Catherine Vandenborre

Marcus Berger

Patrick De Leener

Frédéric Dunon

Pascale Fonck

Peter Michiels

Ilse Tant

Chris Peeters
Chief Executive Officer and Chairman

Catherine Vandenborre
Chief Financial Officer

Marcus Berger
Chief Infrastructure Officer

Patrick De Leener
Chief Customers, Market and System Officer

Frédéric Dunon
Chief Asset Officer

Pascale Fonck
Chief External Relations Officer

Peter Michiels
Chief Human Resources and Internal Communication Officer

Ilse Tant
Chief Community Relations Officer

Corporate governance statement

Elia satisfies specific obligations in terms of transparency, neutrality and non-discrimination towards all stakeholders involved in its activities.

At Elia, corporate governance in 2019 was based on two pillars:
- **the 2009 Corporate Governance Code[1], which Elia has adopted as its benchmark code;**
- **the Act of 29 April 1999 on the organisation of the electricity market and the Royal Decree of 3 May 1999 on the management of the electricity transmission system.**

Board of Directors

GRI 102-22, GRI 102-23

Bernard Gustin

Claude Grégoire

Geert Versnick

Michel Allé

Luc De Temmerman

Frank Donck

Cécile Flandre

Philip Heylen

Luc Hujoel

Roberte Kesteman

Jane Murphy

Dominique Offergeld

Rudy Provoost

Saskia Van Uffelen

1 The Corporate Governance Code can be found on the website of the Corporate Governance Committee (www.corporategovernancecommittee.be).

Composition of the management bodies as at 31 December 2019

Board of Directors

CHAIRPERSON
- Bernard Gustin, independent director

VICE-CHAIRPERSONS
- Claude Grégoire, director appointed upon proposal of Publi-T
- Geert Versnick, director appointed upon proposal of Publi-T

DIRECTORS
- Michel Allé, independent director
- Luc De Temmerman, independent director
- Frank Donck, independent director
- Cécile Flandre, director appointed upon proposal of Publi-T
- Claude Grégoire, director appointed upon proposal of Publi-T
- Bernard Gustin, independent director
- Philip Heylen, director appointed upon proposal of Publi-T
- Luc Hujoel, director appointed upon proposal of Publi-T
- Roberte Kesteman, independent director
- Jane Murphy, independent director
- Dominique Offergeld, director appointed upon proposal of Publi-T
- Rudy Provoost, director appointed upon proposal of Publi-T
- Saskia Van Uffelen, independent director
- Geert Versnick, director appointed upon proposal of Publi-T

REPRESENTATIVE OF THE FEDERAL GOVERNMENT WITH AN ADVISORY ROLE
- Nele Roobrouck

Advisory Committees to the Board of Directors

CORPORATE GOVERNANCE COMMITTEE
- Luc Hujoel, Chairman
- Luc De Temmerman
- Frank Donck
- Philip Heylen
- Jane Murphy

AUDIT COMMITTEE
- Michel Allé, Chairman
- Frank Donck
- Roberte Kesteman
- Dominique Offergeld
- Rudy Provoost

REMUNERATION COMMITTEE
- Luc De Temmerman, Chairman
- Philip Heylen
- Roberte Kesteman
- Dominique Offergeld
- Saskia Van Uffelen

STRATEGY COMMITTEE
- Rudy Provoost, Chairman
- Claude Grégoire
- Bernard Gustin
- Luc Hujoel
- Geert Versnick
- Michel Allé, standing invitee

Auditors

- KPMG Réviseurs d'Entreprises SCRL, represented by Alexis Palm.
- Ernst & Young Réviseurs d'Entreprises SCRL, represented by Patrick Rottiers.

Management Committee

- Chris Peeters, Chairman and Chief Executive Officer
- Markus Berger, Chief Infrastructure Officer
- Patrick De Leener, Chief Customers, Market & System Officer
- Frédéric Dunon, Chief Assets Officer
- Pascale Fonck, Chief External Relations Officer
- Peter Michiels, Chief Human Resources & Internal Communication Officer
- Ilse Tant, Chief Community Relations Officer
- Catherine Vandenborre, Chief Financial Officer

Secretary-General

- Aude Gaudy

Board of Directors

The Boards of Directors of Elia System Operator and Elia Asset consist of 14 members, none of whom perform an executive role within either of those two companies.

The same directors sit on the Boards of both companies.

Half of the directors are independent directors, satisfying the conditions set out in Article 526ter of the Belgian Companies Code (at present Article 7:87 of the Belgian Code of Companies and Associations), Article 2(30) of the Act of 29 April 1999 on the organisation of the electricity market and in the articles of association, and having received a positive opinion ("avis conforme"/"eensluidend advies") by the CREG on their independence. The other half are non-independent directors appointed by the General Meeting on proposal of Publi-T, as per the current shareholder structure (see also the 'Shareholder structure' section on page 148 of this statement).

In accordance with provisions stipulated by legislation and the articles of association, these Boards of Directors are supported by four committees – the Corporate Governance Committee, the Audit Committee, the Remuneration Committee and the Strategic Committee – which are the same for Elia System Operator and Elia Asset. The Boards of Directors ensure that these committees operate in an efficient manner.

In accordance with the Act of 29 April 1999 on the organisation of the electricity market, the Belgian Companies Code, the Belgian Code of Companies and Associations and the articles of association of Elia System Operator and Elia Asset, at least one third (1/3) of the Board members must be of the opposite gender to the remaining two thirds. This one-third rule is applied proportionately to the independent and non-independent directors.

In addition, in accordance with the Belgian Companies Code, the Belgian Code of Companies and Associations, the Belgian Corporate Governance Code 2009 and the Internal Regulations of the Board of Directors, the composition of the Board of Directors is based on the complementarity of skills, experience and knowledge as well as on gender diversity and diversity in general.

When searching for and appointing new directors, special attention is paid to diversity parameters in terms of age, gender and complementarity.

DIVERSITY WITHIN THE BOARD OF DIRECTORS

Number of people on the Board of Directors of Elia System Operator and Elia Asset as at 31 December 2019	Unit	2019
Men	Aged 35 < 55	3
	Aged ≥ 55	6
Women	Aged 35 < 55	2
	Aged ≥ 55	3

CHANGES IN THE COMPOSITION OF THE BOARD OF DIRECTORS

The composition of the Board of Directors did not change in 2019.

TERM AND EXPIRY OF DIRECTORSHIPS AND APPOINTMENT PROCEDURE

The directors of Elia System Operator and Elia Asset are appointed or reappointed for a six-year term.

The directorships of all of the directors are due to expire after the 2023 Ordinary General Meeting of Elia System Operator and of Elia Asset for the financial year ending 31 December 2022, with the exception of the directors mentioned below, whose directorships expire on different dates.

Luc De Temmerman, Frank Donck, Luc Hujoel, Saskia Van Uffelen and Geert Versnick's directorships of Elia System Operator and Elia Asset will expire after the companies' 2020 Ordinary General Meeting for the financial year ending 31 December 2019.

Michel Allé's directorship of Elia System Operator and Elia Asset will expire after the companies' 2022 Ordinary General Meeting for the financial year ending 31 December 2021.

The six-year term of these directorships diverges from the term of four years recommended by the Belgian Corporate Governance Code 2009 and the Belgian Corporate Governance Code 2020. The six-year term was justified in light of the technical, financial and legal specificities and complexities that apply within Elia System Operator and Elia Asset.

It should be remembered that the appointment of independent and non-independent directors of the Elia System Operator and Elia Asset Boards of Directors, as well as the composition and operation of their committees, are subject to specific corporate governance rules. These provisions are laid down in the Act of 29 April 1999 on the organisation of the electricity market and in the companies' articles of association.

The Act of 29 April 1999 on the organisation of the electricity market gave the Corporate Governance Committee an important task of proposing candidates for the role of independent director to the General Meeting. The directors are appointed on the basis of a list of candidates drawn up by the Corporate Governance Committee. For each candidate, the Committee takes into account their up-to-date *curriculum vitae* and their sworn declaration concerning the independence criteria as stipulated by legislation applying to Elia and the company's articles of association. The General Meeting then appoints the independent directors. These appointments are submitted to the CREG for its opinion ("avis conforme"/"eensluidend advies") on the independence of each independent director. A similar procedure applies where an independent directorship becomes vacant during the relevant term of office and where the Board co-opts a candidate proposed by the Corporate Governance Committee.

The Corporate Governance Committee therefore acts as a nomination committee for independent directors. For the appointment of non-independent directors, there is no nomination committee to make recommendations to the Board. This situation therefore deviates from that prescribed by the Belgian Corporate Governance Code 2009 and the Belgian Corporate Governance Code 2020. This divergence can be explained by the application of the Act of 29 April 1999 on the organisation of the electricity market. However, although the Corporate Governance Committee does not make recommendations to the Board regarding the appointment of non-independent directors, it does review the compliance of a non-independent director's membership of the supervisory board, the board of directors, the supervisory board, administrative authorities or bodies legally representing an undertaking which exercises, directly or indirectly, control over a producer and/or electricity supplier.

BOARD OF DIRECTORS' ACTIVITY REPORT

GRI 102-19, GRI 102-26

The Board of Directors exercises at least the following powers (non-exhaustive list):

- It defines the general, financial and dividends policy of the company, as well as its values and strategy. In transposing the values and strategy into primary guidelines, the Board of Directors takes into account corporate social responsibility, gender diversity and diversity in general.
- It exercises the powers given to it by or pursuant to the Belgian Companies Code, by the Act of 29 April 1999 on the organisation of the electricity market and by the articles of association.
- It takes all action appropriate or necessary to carry out the corporate purpose, excluding powers reserved for the General Meeting by law or the articles of association.
- It ensures oversight. Within this context it provides, inter alia, general oversight of the (Daily) Management Committee in accordance with legal restrictions concerning access to commercial data and other confidential information relating to grid users and the processing of such data; as part of this oversight it also monitors the way in which the business of the company is carried out and developed in order to, among other things, assess whether the company is being properly managed. In addition, it monitors and evaluates the effectiveness of the advisory committees to the Board and the manner in which business is carried out.

In 2019, the Board of Directors of Elia System Operator met eleven times and the Board of Directors of Elia Asset met six times. The Board primarily focused on strategic issues (specifically the capital increase of Elia System Operator and the internal reorganisation of the Elia group), the financial and regulatory situation of the company and its subsidiaries, and progress on major investment projects.

Members who are unable to attend usually grant a proxy to another member. In accordance with Article 19.4 of the Elia System Operator articles of association (at present: Elia Group) and Article 18.4 of the Elia Asset articles of association, members who are absent or unable to attend may grant a written proxy to another member of the Board to represent them at a given meeting of the Board of Directors and vote on their behalf at that meeting. However, no board member can hold more than two proxies.

EVALUATION

The Board's evaluation procedure is conducted in accordance with principle 4 of the Belgian Corporate Governance Code 2009 and principle 9 of the Belgian Corporate Governance Code 2020, which the company has adopted as its benchmark code.

The evaluation at Elia System Operator is conducted by means of a transparent and regular procedure that sees directors complete an evaluation questionnaire, then undergo an individual interview with the Chairman of the Board of Directors and the Chairman of the Corporate Governance Committee. The results are discussed by the Board of Directors and, as the case may be, appropriate actions are taken. Elia organised an evaluation of the functioning of the Board of Directors at the end of 2018. The results of this evaluation have been discussed in depth in 2019.

Auditors

The Ordinary General Meeting of Elia System Operator and Elia Asset held on 16 May 2017 reappointed Ernst & Young Réviseurs d'Entreprises SCRL and KPMG Réviseurs d'Entreprises SCRL as auditors of these companies for a period of three years. Their term of office will come to an end after the 2020 Ordinary General Meeting of Elia System Operator and Elia Asset relating to the financial year ending 31 December 2019.

Ernst & Young Réviseurs d'Entreprises SCRL was represented by Patrick Rottiers for the exercise of this office.

KPMG Réviseurs d'Entreprises SCRL was represented by Alexis Palm for the exercise of this office.

Significant events in 2019

ESTABLISHMENT OF A WORKGROUP

The Board of Directors approved the establishment of a temporary Workgroup. The Workgroup was created to reflect on the reorganisation of the Group during the transitional period that the Group operates in accordance with good governance.

The members of the Workgroup are Bernard Gustin (Chairman), Michel Allé, Claude Grégoire, Luc Hujoel, Dominique Offergeld and Geert Versnick. The members of the Workgroup are not remunerated.

The Workgroup met thirteen times in 2019.

AMENDMENTS TO THE ARTICLES OF ASSOCIATION FOLLOWING IMPLEMENTATION OF THE CAPITAL INCREASE RESERVED FOR STAFF MEMBERS

The Extraordinary General Meeting of Elia System Operator of 15 May 2018 approved the proposed capital increase reserved for members of staff of the company and its Belgian subsidiaries.

This capital increase took place in two stages, in December 2018 and March 2019, for a maximum total of €6 million (maximum of €5,300,000 in 2018 and maximum of €700,000 in 2019) subject to the issuing of new Class B shares, with cancellation of the preferential subscription right of existing shareholders in favour of staff members of the company and its Belgian subsidiaries, if necessary below the accounting par value of the existing shares in the same class.

The Extraordinary General Meeting decided to set the issue price for the 2019 capital increase at a price equal to the average of the closing prices on the 30 calendar days prior to 31 January 2019, less 16.66%.

The total value of the 2019 capital increase (including share premium) was €494,274.56. 9,776 Class B shares in Elia System Operator were issued.

Accordingly, Articles 4.1 and 4.2 of the articles of association of Elia System Operator relating to the share capital and the number of shares were amended on 22 March 2019.

The latest version of Elia System Operator's articles of association is available in full on the company's website (www.elia.be, under 'Company', 'Corporate governance', 'Document library').

AMENDMENTS TO THE ARTICLES OF ASSOCIATION FOLLOWING IMPLEMENTATION OF THE CAPITAL INCREASE OF €434,8 MILLION

On 3 June 2019, the Board of Directors approved the launch of a public offering to existing shareholders and any holders of an extra-legal preferential right of €434,801,928 maximum, through the issuance of up to 7,628,104 new shares at a subscription price of €57 per share, on the basis of 1 new share for 8 preferential rights.

After the public offering of new shares to existing shareholders and any holders of an extra-legal right (rights subscription period was from 6 June 2019 at 9 a.m. CET up to and including 13 June 2019 at 3 p.m. CET), 7,030,981 new shares or 92.17% of the 7,628,104 new shares offered as part of the rights offering of maximum €434,801,928, were subscribed.

The 4,776,986 preferential rights which were not exercised at the end of the rights subscription period were converted into an equal number of scripts. Further to the completion of the private placement of scripts to institutional investors, an additional 7.83% of the new shares offered by Elia System Operator as part of its €434,801,928 rights issue were subscribed at €57 per share.

As a result, 100% of the rights offering has been subscribed.

Accordingly, Articles 4.1 and 4.2 of the articles of association of Elia System Operator relating to the share capital and the number of shares were amended on 18 June 2019.

COMPLETION OF A €500 MILLION BOND OFFERING

In January 2019, Elia System Operator successfully launched a €500 million Eurobond under its €5 billion EMTN (Euro Medium Term Note) programme.

The €500 million senior bond will mature in 2026 and has an annual coupon of 1.375%. The proceeds from the new bond issue were used to refinance an existing €500 million Eurobond that has matured in May 2019.

Through this transaction, Elia has taken advantage of supportive market conditions to proactively manage its liquidity position and reduce its average cost of debt to the benefit of consumers.

COMPLETION OF THE INTERNAL REORGANISATION OF THE ELIA GROUP

On 31 December 2019 just before midnight, Elia effectively implemented its internal reorganisation, the aim of which is to ring-fence its regulated activities in Belgium from its unregulated activities and its regulated activities carried out outside Belgium.

The internal reorganisation of the Elia group emanates from the new tariff methodology for 2020-2023 which provides, amongst other things, that the financing of unregulated activities of Elia System Operator is valued at conditions equivalent to financing that would be fully covered by equity capital. The reorganisation avoids the risk of cross-subsidy between Belgian regulated activities from the unregulated activities and regulated activities carried out abroad and, as a result, prevents any adverse financial impact of the new tariff methodology on investments in unregulated activities and regulated activities carried out abroad as of 2020.

The Board of Directors approved the new corporate structure of Elia Group on 2 October 2019.

The completion of the reorganisation as per 31 December 2019 just before midnight, followed the fulfilment of all conditions precedents, which included several regulatory approvals, confirmation of compliance with the unbundling and independence requirements set out in the Act of 29 April 1999 on the organisation of the electricity market and the approval by the extraordinary shareholders' meeting of Elia System Operator on 8 November 2019.

On 31 December 2019 just before midnight, Elia Transmission Belgium, which was created on 31 July 2019, took over the Belgian regulated activities of Elia System Operator, including the indebtedness related to these activities. At that time, not all designations of Elia Transmission Belgium as national and regional/local Transmission System Operator were already obtained. During an interim period (during which Elia Transmission Belgium had not yet obtained the designations), Elia System Operator subcontracted the operation of the transmission system to Elia Transmission Belgium in the framework of a silent partnership between Elia System Operator, Elia Transmission Belgium and Elia Asset, for as long as Elia Transmission Belgium was awaiting the necessary designations.

With effect as of 31 December 2019 just before midnight, Elia Transmission Belgium has been designated as the national and regional/local Transmission System Operator by decision of respectively the CREG on 13 January 2020, the VREG on 24 December 2019 and the Brussels Government for the Brussels Capital Region on 19 December 2019. In the Walloon Region, the designation as (local) TSO is automatically obtained following the designations as TSO at federal level, i.e. 13 January 2020. Consequently, the subcontracting by Elia System Operator to Elia Transmission Belgium of the operation of the transmission system has ended and "Elia System Operator" has been renamed "Elia Group" as of 31 December 2019 just before midnight. Elia Group remains the listed parent company, being a company that is no longer subject to the Act of 29 April 1999 on the organisation of the electricity market.

OTHER SIGNIFICANT EVENTS

For the other significant events in 2019, see the section 'Elia Group in 2019' and pages 20 to 23.

Remuneration Committee

In addition to its usual support role to the Board of Directors, the Remuneration Committee is responsible, pursuant to Article 526quater of the Belgian Companies Code (at present: Article 7:100 of the Code of Companies and Associations), the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, for making recommendations to the Board of Directors regarding remuneration policy and the individual remuneration of members of the (Daily) Management Committee and directors. The Remuneration Committee also draws up a remuneration report for presentation at the Ordinary General Meeting.

The Remuneration Committee of Elia System Operator met three times in 2019. The Remuneration Committee of Elia Asset met three times in 2019.

The company evaluates its management staff on a yearly basis in accordance with its performance management policy. This policy also applies to members of the (Daily) Management Committee. Accordingly, the Remuneration Committee evaluates the members of the (Daily) Management Committee on the basis of a series of collective and individual targets, of a quantitative and qualitative nature, also taking into account the feedback from internal and external stakeholders.

It should be noted that remuneration policy concerning the variable portion of the Management Committee's remuneration takes into account the implementation of multi-year tariffs. Consequently, the salary scheme for members of the (Daily) Management Committee has included, among other things, an annual variable remuneration

and long-term profit-sharing spread out over the multi-year regulation period. The annual variable remuneration, which is connected with Elia group's strategy, has two components: the attainment of collective quantitative targets and the individual performances, including progress on collective infrastructure projects, safety and AIT ('Average Interruption Time' – average time of interruption of electricity supply)[2]. In addition, the remuneration policy foresees also in the allocation of exceptional cash bonuses for specific projects in specific, non-recurring cases.

The Remuneration Committee also approved the proposed collective and individual targets for the Management Committee for 2019. In addition, the Remuneration Committee approved the remuneration report, which is part of the annual report for 2018

Audit Committee

In addition to its usual support role to the Board of Directors, the Audit Committee is, pursuant to Article 526bis of the Belgian Companies Code (at present: Article 7:99 of the Code of Companies and Associations), the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, responsible in particular for:

- examining accounts and controlling budgets;
- monitoring financial reporting procedures;
- monitoring risks;
- ensuring the effectiveness of the company's internal control and risk management systems;
- following up on internal audits and their effectiveness;
- following up on the statutory audit of annual accounts;
- evaluating and verifying the independence of auditors;
- making proposals to the Board of Directors on the appointment and re-election of auditors and on the terms of their appointment;
- investigating, where appropriate, any issues that resulted in the resignation of auditors and making proposals as to what actions, if any, should be taken in this respect;
- verifying the nature and extent of non-audit services provided by auditors;
- verifying the effectiveness of external audit procedures.

Pursuant to Article 96, §1, 9° of the Belgian Companies Code (at present: Article 3:6, §1, 9° of the Code of Companies and Associations) and the articles of association, this report must contain justification of the independence and accounting and auditing competence of at least one member of the Audit Committee. The internal rules of procedure of the Audit Committee require, in this respect, that all members of the Audit Committee have the sufficient experience and expertise required to exercise the role of the Audit Committee, particularly in terms of accounting, auditing and finance. On the basis of this rule, the professional experience of at least two members of the Audit Committee must be detailed in this report.

The experience of Michel Allé, Chairman of the Audit Committee, and Dominique Offergeld, member of the Audit Committee, is described in detail below.

Michel Allé (independent director of Elia System Operator and Elia Asset since 17 May 2016 and Chairman of the Audit Committee) has degrees in physics civil engineering and economics (both from the Université Libre de Bruxelles (ULB)). Alongside his academic career as a professor of economics and finance (Solvay Brussels School, ULB's École Polytechnique), he worked for many years as a Chief Financial Officer. In 1979, he began his career in the service of the Prime Minister, as an advisor in the Science Policy Department. He was appointed Director of the National Energy R&D Programme in 1982 and then Director in charge of Innovative Companies. In 1987, he joined the Cobepa group, where he held many positions including Vice President of Mosane from 1992 to 1995. From 1995 to 2000 he was a member of the Cobepa group's Executive Committee. He then served as Chief Financial Officer of BIAC between 2001 and 2005 and Chief Financial Officer of SNCB (Belgian Railways) between 2005 and 2015. He also has extensive experience as a director, including past and present roles at Telenet, Zetes, Eurvest, Mobistar and D'Ieteren. He has served on the Telenet Audit Committee and chaired the Zetes Audit Committee.

Dominique Offergeld (non-independent director of Elia System Operator and Elia Asset) has a degree in economics and social science (specialisation: public economics) from Université Notre Dame de la Paix in Namur. She has taken various extra-academic programmes, including the General Management Program at Cedep (INSEAD) in Fontainebleau (France). She started her career at Générale de Banque (now BNP Paribas Fortis) in the corporate finance department in 1988, and was subsequently appointed as specialist advisor to the vice-president and minister for economic affairs of the Walloon Region in 1999. In 2001 she became advisor to the Deputy Prime Minister and Minister for Foreign Affairs. Between 2004 and 2005, she was deputy director of the office of the minister for energy, subsequently becoming general advisor to the SNCB holding company in 2005. She was previously director of (among others) Publigas and government commissioner at Fluxys. She was also Chairwoman of the Board of Directors and the Audit Committee of SNCB. Between 2014 and 2016, she was Director of the Minister for Mobility's Strategy Unit, with responsibility for Belgocontrol and the SNCB. She has been CFO of ORES since August 2016, a position she also held between 2008 and 2014.

The Audit Committee may investigate any matter that falls within its remit. For this purpose, it is given the resources it needs to perform this task, has access to all information, with the exception of confidential commercial data concerning grid users, and can call on internal and external experts for advice.

The Audit Committee met eight times in 2019.

The Committee examined the annual accounts for 2018, under both Belgian GAAP and IFRS. It also examined the half-yearly results as at 30 June 2019 and the 2019 quarterly results, in accordance with Belgian GAAP and IFRS rules. Furthermore, the Committee was responsible for the selection procedure that has been organised with regard to the appointment of the new auditors as the term of office of the current auditors comes to an end after the 2020 Ordinary General Meeting of Elia Group and Elia Asset relating to the financial year ending on 31 December 2019.

The Committee took note of the internal audits carried out and the recommendations made.

The Committee follows an action plan for each audit carried out, in order to improve the efficiency, traceability and awareness of the areas audited and thereby reduce the associated risks and provide assurance that the control environment and risk management are appropriate. The Committee followed the various action plans from a number of perspectives (timetable, results, priorities) on the basis, among other things, of an activity report from the internal audit department. The Audit Committee noted the strategic risks and the ad-hoc risk analyses based on the environment in which the group operates. The Audit Committee regularly examined the compliance of the non-audit services with the legal requirements.

Corporate Governance Committee

In addition to its usual support role to the Board of Directors, the Corporate Governance Committee was, pursuant to the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, responsible for:

- proposing candidates to the General Meeting to be appointed as independent directors;
- giving prior approval for the appointment and/or removal (where applicable) of Management Committee members;
- examining, at the request of any independent director, the Chairman of the Management Committee or any competent federal and/or regional regulatory body or bodies for the electricity market, all cases of conflicts of interests between the system operator, on the one hand, and a dominant shareholder, municipal shareholder or company associated with or linked to a dominant shareholder, on the other hand, and to report to the Board of Directors on the matter. This responsibility aims to strengthen the directors' independence above and beyond the procedure detailed in Article 524 of the Belgian Companies Code, which the company also applies;
- deciding on cases of incompatibility on the part of members of the Management Committee and personnel;
- ensuring the application within the company of provisions laid down by law, regulations, decrees and other instruments relating to the operation of electricity systems, evaluating their effectiveness in view of the objectives for the independent and impartial operation of those systems, and ensuring compliance with Articles 4.4 and 13.1(2) and (3) of Elia System Operator's articles of association. A report on this subject is submitted every year to the Board of Directors and the federal and/or regional body or bodies responsible for regulating the electricity market;
- convening, at the request of at least one third of the members, meetings of the Board of Directors in accordance with the formalities for calling meetings as laid down in the articles of association;
- examining, after notification by a director, whether a director's membership of the supervisory board, the board of directors or bodies legally representing an undertaking which exercises control, directly or indirectly, over an electricity producer and/or supplier complies with Article 9.1b), c) and d) of Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in electricity, and reporting on this matter to the Board of Directors. As part of this examination, the Committee takes account of the role and influence that the director concerned has in the undertaking concerned and of the degree of control or influence that the undertaking concerned has over

2 Supply reliability indicator: number of minutes per consumer per year.

its subsidiary. The Committee also examines whether, in the exercising of the director's role within the company, there is the potential or motive for favouring certain generation or supply interests as regards access to and investment in the grid, to the detriment of other grid users;

- verifying, prior to any appointment of a director, whether that be the appointment of a new director or the re-election of an existing director, whether the candidate director takes account of the incompatibilities set forth in the company's articles of association. To this end, every candidate director is required to provide the Committee with an overview of (i) any offices he or she holds on the Board of Directors, supervisory board or any other body of other legal entities other than the company and (ii) any other functions or activities, paid or unpaid, which he or she carries out for an undertaking performing any of the following functions: the generation or supply of electricity.

The Corporate Governance Committee met six times in 2019.

In line with its competences under the law and the articles of association and in compliance with confidentiality rules, the Committee dealt in particular with the following matters: application of and compliance with the requirements of laws, regulations and the articles of association concerning the independence of the company's independent directors (article 13 of the Articles of Association of Elia System Operator), the analysis of compliance with requirements in the area of full ownership unbundling as provided for by law and the articles of association (article 14 of the Articles of Association of Elia System Operator) and preparation of the corporate governance statement. The Committee also handled the succession planning.

Strategic Committee

The articles of association stipulate that the role of the Strategic Committee is to issue recommendations to the Board of Directors on matters of strategy.

As such, the Committee is responsible for:

- identifying and examining market trends and contextual factors that could influence Elia Group's strategic direction and associated strategic choices and priorities in the medium and long term;
- preparing and maintaining a dialogue about the key issues and associated options and scenarios that are relevant for Elia Group's strategy in the medium and long term;
- developing and submitting proposals about the core strategic choices and priorities that will shape Elia Group's future in the medium and long term.

The Strategic Committee met two times in 2019. Its discussions focused on value creation through innovation ("digital") and (in)organic growth, working with various assumptions and scenarios.

Management Committee

Pursuant to Article 9(9) of the Act of 29 April 1999 on the organisation of the electricity market and the articles of association, the Management Committee was responsible in particular for:

- the operational management of the electricity grids, including commercial, technical, financial, regulatory and personnel issues related to such operational management;
- day-to-day management of the system operator;
- the exercise of powers given to it under the articles of association;
- the exercise of powers delegated to it by the Board of Directors, in accordance with the general policy rules and principles and the resolutions adopted by the Board of Directors.

The Management Committee has all powers necessary, including the power of representation, and sufficient margin for manoeuvre to exercise the powers that have been delegated to it and to propose and implement a corporate strategy, without prejudice to the powers of the Board of Directors and the obligation on the part of the Board of Directors to observe the legal restrictions in terms of access to commercial data and other confidential data relating to grid users and the processing of such data.

The Management Committee generally meets formally at least once a month. Its members also attend informal weekly meetings. Members who are unable to attend usually grant a proxy to a Management Committee member. A written proxy, conveyed by any means (of which the authenticity of its source can be reasonably determined), can be given to another member of the Management Committee, in accordance with the internal rules of procedure of the Management Committee. However, no member may hold more than two proxies.

In 2019, the Management Committee met on 21 occasions for Elia System Operator and on 21 occasions for Elia Asset.

Each quarter, the Management Committee reports to the Board of Directors on the company's financial situation (in particular on the balance between the budget and the results stated). It also reports on transmission system management at each meeting of the Board of Directors. As part of its reporting on management of the transmission system in 2019, the Management Committee kept the Board informed of strategic issues (particularly the internal reorganisation of the Elia group), developments in legislation applying to the company, the company's financial situation, the situation of its subsidiaries, the main decisions taken by regulators and administrations, as well as the monitoring and development of major investment projects.

GRI 102-20

Corporate social responsibility (CSR) at Elia System Operator and Elia Asset is the responsibility of the Chief Community Relations Officer.

CHANGES IN THE COMPOSITION OF THE MANAGEMENT COMMITTEE

The composition of the Management Committee did not change in 2019.

DIVERSITY WITHIN THE MANAGEMENT COMMITTEE

Number of people on the Board of Directors of Elia System Operator and Elia Asset as at 31 December 2019	Unit	2019
Men	Aged 35 < 55	4
	Aged ≥ 55	1
Women	Aged 35 < 55	3
	Aged ≥ 55	0

In addition, in accordance with the Belgian Companies Code, the Belgian Code of Companies and Associations,, the composition of the Management Committee is based on gender diversity and diversity in general, as well as on the complementarity of skills, experience and knowledge.

When searching for and appointing new members of the Management Committee, special attention is paid to diversity parameters in terms of age, gender and complementarity.

CODE OF CONDUCT

Following the entry into force of European Regulation (EU) No. 596/2014 on market abuse, Elia amended its Code of Conduct that aims to prevent staff and those with leadership responsibilities in the Elia Group from potentially breaking any laws on the use of privileged information and market manipulation. The Code of Conduct lays down a series of regulations and communication obligations for transactions by those individuals in relation to their Elia System Operator (at present: Elia Group) securities, in accordance with the provisions of the Market Abuse Regulation and the Act of 2 August 2002 on monitoring of the financial sector and other financial services. This Code of Conduct is available on the company's website (www.elia.be, under 'Company, 'Corporate Governance', 'Document library').

CORPORATE GOVERNANCE CHARTER AND INTERNAL RULES OF PROCEDURE OF THE BOARD OF DIRECTORS, THE BOARD'S ADVISORY COMMITTEES AND THE MANAGEMENT COMMITTEE

The Corporate Governance Charter and the internal rules of procedure of the Board of Directors, the Board's advisory committees and the Management Committee can be found on the company's website (www.elia.be, under 'Company', 'Corporate Governance', 'Document library'). The responsibilities of the Board of Directors and of the Management Committee are described in detail in the articles of association of the company and are therefore not reiterated in the internal rules of the Board of Directors and of the Management Committee.

Elia is currently working on new versions of the Corporate Governance Charter and internal rules of procedure in order to comply with the Group's new structure and the changes introduced by the new Belgian Code of Companies and Associations.

TRANSPARENCY RULES – NOTIFICATIONS

Elia System Operator received no notifications in 2019 within the meaning of the Act of 2 May 2007 on disclosure of major shareholdings in issuers whose shares are admitted to trading on a regulated market and laying down miscellaneous provisions, and within the m eaning of the Royal Decree of 14 February 2008 on disclosure of major shareholdings.

In accordance with Article 15 of the Act of 2 May 2007, on 18 January 2019 Elia System Operator gave notice of the capital increase reserved for the staff of Elia System Operator and its Belgian subsidiaries, which was formally recorded before a notary on 20 December 2018 and led to the issuing of 114,039 new shares in Elia System Operator. See also the press release of 18 January 2019, published on the company's website (www.eliagroup.eu, under 'News', 'Press releases', 'Regulated information').

In addition, in accordance with Article 15 of the Act of 2 May 2007, on 26 March 2019 Elia System Operator gave notice of the capital increase reserved for the staff of Elia System Operator and its Belgian subsidiaries, which was formally recorded before a notary on 22 March 2019 and led to the issuing of 9,776 new shares in Elia System Operator. See also the press release of 26 March 2019, published on the company's website (www.eliagroup.eu, under 'News', 'Press releases', 'Regulated information').

Further, in accordance with Article 15 of the Act of 2 May 2007, on 19 June 2019 Elia System Operator gave notice of the capital increase as result of its €434.8 million rights offering, which was formally recorded before a notary on 18 June 2019 and led to the issuing of 7,628,104 new shares in Elia System Operator. See also the press release of 19 June 2019, published on the company's website (www.eliagroup.eu, under 'News', 'Press releases', 'Regulated information').

Elia has issued a total of 68,652,938 shares.

For more information about the shareholder structure as at 31 December 2019, see the section 'Shareholder structure on the closing date'.

Management committee

Chris Peeters
Chairman and Chief Executive Officer

Catherine Vandenborre
Chief Financial Officer

Markus Berger
Chief Infrastructure Officer

Patrick De Leener
Chief Customers, Market & System Officer

Frédéric Dunon
Chief Assets Officer

Pascale Fonck
Chief External Relations Officer

Peter Michiels
Chief Human Resources & Internal Communication Officer

Ilse Tant
Chief Community Relations Officer

Remuneration report

REMUNERATION OF THE MEMBERS OF THE BOARD OF DIRECTORS AND THE MANAGEMENT COMMITTEE

Procedure approved in 2016 to define the remuneration policy and the remuneration of members of the Board of Directors and the Management Committee

In accordance with Articles 16.1 and 15.1 of the respective articles of association[1] of Elia System Operator[2] and Elia Asset, a remuneration policy for members of the Board of Directors and the Management Committee[3] was drawn up in 2016 by the Remuneration Committee and approved by the Boards of Directors of Elia System Operator and Elia Asset.

The remuneration policy for directors was approved by the General Meeting of Shareholders of Elia System Operator and Elia Asset on 17 May 2016. The remuneration policy for members of the Strategy Committee was approved by the Extraordinary General Meeting of Shareholders of Elia System Operator and Elia Asset on 15 May 2018.

The Remuneration Committee also made recommendations regarding the remuneration policy and the remuneration of directors and Management Committee members. The composition and activities of the Remuneration Committee are covered in greater detail on page [6].

Remuneration of members of the Board of Directors

Following the decision adopted by the Ordinary General Meeting of Elia System Operator and Elia Asset on 17 May 2016, the rules on the remuneration of directors were amended. The new rules, which have been in force since 1 January 2016, are described below.

The total cost of gross remuneration paid to the 14 directors in 2019 was €861,045.20 (€458,887.10 for Elia System Operator and €402.158,10 for Elia Asset).

The table below lists the individual gross sums paid to each director for Elia System Operator and Elia Asset combined.

These amounts were calculated on the basis of eleven meetings of the Board of Directors of Elia System Operator and six meetings of the Board of Directors of Elia Asset in 2019. In 2019, the Audit Committee met eight tim Corporate Governance Committee six times, the Remuneration Committee of Elia System Operator three times and the Strategy Committee two times.

Directors' remuneration consists of a basic remuneration of €25,000 per annum (€12,500 for Elia System Operator and €12,500 for Elia Asset) and an attendance fee of €1,500 (€750 for Elia System Operator and €750 for Elia Asset) per Board meeting, starting with the first Board meeting attended by the director. The basic remuneration and the attendance fee are increased by 100% for the Chairman of the Board of Directors and by 30% for each Vice-Chairman of the Board of Directors.

For each company, additional basic remuneration for each member of an advisory committee to the Board of Directors (the Audit Committee, the Remuneration Committee and the Corporate Governance Committee is set at €3,000 per annum per committee, and the attendance fee for each member of a committee is €750 per committee meeting (starting with the first meeting attended by the member). Both the basic remuneration and the attendance fee are increased by 30% for each committee chairman. The members of the Strategy Committee are not remunerated, with the exception of the Chairman, who is remunerated in the same way as the Chairs of the Board of Directors' other advisory committees.

The basic annual remuneration and the attendance fees are indexed in January each year on the basis of the consumer price index for January 2016.

The basic annual remuneration and the attendance fees cover all costs, except (a) any costs incurred by a director resident outside Belgium in connection with the exercise of his/her office (such as travel and accommodation costs) providing that the director in question was resident outside Belgium at the time of appointment or, if the director changed his/her place of residence after appointment, providing that the Remuneration Committee gave its approval; (b) any costs incurred by a director in the event that a meeting of the Board of Directors is held outside Belgium (e.g. in Germany); and (c) any costs incurred by a director travelling abroad in connection with the ex-

1 Please note that the articles of association of Elia System Operator and Elia Asset were amended in connection with the reorganisation of the Elia Group and to bring them into line with the new Belgian Companies and Associations Code (CAC) (see page 148). The new articles of association have been in force since 1 January 2020. Since this remuneration report is for the financial year 2019, it refers to the articles of association that applied in 2019.

2 Please note that following the reorganisation of the Elia Group, Elia System Operator's name was changed and has been Elia Group since 1 January 2020 (see page 121). Since this remuneration report is for the financial year 2019, we have used the old name, Elia System Operator [unless indicated otherwise].

3 Please note that Elia Group (the new name of Elia System Operator) has not had a Management Committee since 1 January 2020. Instead, it has a day-to-day management board.

ercise of his/her office upon the request of the Chairman or a Vice-Chairman of the Board of Directors. All remuneration and costs are included in the company's operating costs.

All remuneration is paid on a pro rata basis according to the duration of the director's term of office.

An advance on annual remuneration is paid to the directors at the end of the first, second and third quarter. A detailed account is prepared during the month of December for the current year.

Directors do not receive any other benefits in kind, stock options, special loans or advances. Neither Elia System Operator nor Elia Asset has issued credit to or on behalf of any member of the Board of Directors.

DIRECTOR	REMUNERATION	BOARD OF DIRECTORS OF ELIA SYSTEM OPERATOR	BOARD OF DIRECTORS OF ELIA ASSET	AUDIT COMMITTEE OF ELIA SYSTEM OPERATOR	AUDIT COMMITTEE OF ELIA ASSET	CORPORATE GOVERNANCE COMMITTEE OF ELIA SYSTEM OPERATOR	CORPORATE GOVERNANCE COMMITTEE OF ELIA ASSET	REMUNERATION COMMITTEE OF ELIA SYSTEM OPERATOR	REMUNERATION COMMITTEE OF ELIA ASSET	STRATEGY COMMITTEE OF ELIA SYSTEM OPERATOR	STRATEGY COMMITTEE OF ELIA ASSET
Michel ALLÉ	65,126.60 €	11/11	6/6	8/8	8/8	-	-	-	-	1/2	1/2
Luc DE TEMMERMAN[1]	69,916.60 €	10/11	6/6	-	-	6/6	6/6	3/3	3/3	-	-
Frank DONCK[2]	72,954.00 €	10/11	6/6	8/8	8/8	5/6	5/6	-	-	-	-
Cécile FLANDRE[3]	38,605.00 €	10/11	5/6	-	-	-	-	-	-	-	-
Claude GRÉGOIRE[4]	52,263.90 €	11/11	6/6	-	-	-	-	-	-	2/2	2/2
Bernard GUSTIN[5]	80,406.00 €	11/11	6/6	-	-	-	-	-	-	2/2	2/2
Philip HEYLEN	60,969.00 €	8/11	5/6	-	-	5/6	5/6	2/3	2/3	-	-
Luc HUJOEL[6]	58,894.40 €	11/11	6/6	-	-	6/6	6/6	-	-	2/2	2/2
Roberte KESTEMAN[7]	70,557.00 €	11/11	6/6	8/8	8/8	-	-	3/3	3/3	-	-
Jane MURPHY	56,179.00 €	11/11	6/6	-	-	6/6	6/6	-	-	-	-
Dominique OFFERGELD	69,758.00 €	10/11	6/6	8/8	8/8	-	-	3/3	3/3	-	-
Rudy PROVOOST	63,364.80 €	9/11	6/6	5/8	5/8	-	-	-	-	1/2	1/2
Saskia VAN UFFELEN[8]	49,787.00 €	10/11	5/6	-	-	-	-	3/3	3/3	-	-
Geert VERSNICK[9]	52,263.90 €	11/11	6/6	-	-	-	-	-	-	1/2	1/2

1 Luc De Temmerman's fees are paid to the company InDeBom Strategies CommV.
2 Frank Donck's fees are paid to the company Ibervest NV.
3 Cécile Flandre's fees are paid to the company Belfius Insurance SA.
4 Claude Grégoire's fees are paid to the company Socofe SA until 31 May 2019.
5 Bernard Gustin's fees are paid to the company Bernard Gustin SRL.
6 Luc Hujoel's fees are paid to the company Interfin [CVBA].
7 Roberte Kesteman's fees are paid to the company Symvouli BV.
8 Saskia Van Uffelen's fees are paid to the company Quadrature SRL.
9 Geert Versnick's fees are paid to the company Flemco bvba.

Management Committee remuneration policy

Aspirations :

Our remuneration system is designed to attract, retain and motivate the most talented individuals with a view to achieving our short- and long-term goals within a consistent framework.

The principles governing remuneration of the Group's executives are:

- Focus on safety first and work in the best interests of society by targeting operational performance
- Design a salary scheme that encourages executives to live up to our core values of entrepreneurship, collaboration, accountability and agility
- Attract, retain and nurture the best talent to achieve our strategy and goals in the short and long term
- Ensure that our variable remuneration rewards both team success at company level and individual contributions
- Develop a job classification and staff remuneration system based on an objective and measurable methodology
- Position the remuneration system at the appropriate point of reference in the marketplace to attract the talent we need and to be competitive, using data from multiple providers (including Hay)
- Do not discriminate between employees on any grounds whatsoever through our remuneration system
- Design our benefit plans to promote retention and provide a secure environment for our employees and their families

The Remuneration Committee evaluates the members of the Management Committee once a year. Any change in the basic remuneration is linked to the position of each member of the Management Committee with respect to the general benchmark salary in the market and the assessment of the member's individual performance. Moreover, the Remuneration Committee may, on a case-by-case basis, plan to recommend that the Board of Directors award exceptional bonuses for special services on specific, non-recurring assignments.

Since 2004, the Hay Group methodology has been used to define the weighting for each management position and to ensure that remuneration is in line with the going market rate.

The remuneration of members of the Management Committee consists of the following components:

- basic salary;
- short-term variable remuneration;
- long-term variable remuneration;
- pension;
- other benefits.

In accordance with Article 17.9 of the articles of association of Elia System Operator, an exemption from the provisions of Article 520ter, paragraphs 1 and 2 of the Belgian Companies Code[4] is provided for members of the Management Committee.

BASIC REMUNERATION:

All the members of the Management Committee of Elia System Operator and Elia Asset have employee status.

In 2019, the basic remuneration paid to the Chairman of the Management Committee was €448,812.19. The recurring remuneration paid to the other members of the Management Committee totalled €1,627,858.78 (€1,122,741.95 for management employed by Elia System Operator and €505,116.83 for management employed by Elia Asset, respectively).

Total basic remuneration of €2,076,670.97 was therefore paid to members of the Management Committee in 2019.

VARIABLE REMUNERATION:

As regards variable remuneration, the Remuneration Committee evaluates the members of the Management Committee at the end of each year based on a number of qualitative and quantitative targets. Since 2008, variable remuneration has comprised two components: a short-term one and a long-term one.

Short-term variable remuneration

The first component of variable remuneration is based on the attainment of a certain number of targets set by the Remuneration Committee at the start of the year, with 30% of variable remuneration being awarded for the attainment of the individual targets and 70% for the attainment of Elia Group's collective targets ('short-term incentive plan').

In 2019, the short-term variable remuneration earned by the Chairman of the Management Committee was €368,365.39.

The variable remuneration earned by other members of the Management Committee in 2019 was €765,724.53 (€523,229.30 for management employed by Elia System Operator and €242,495.23 for management employed by Elia Asset, respectively).

A total of €1,134,089.92 in variable remuneration was therefore paid to members of the Management Committee in 2019.

The collective targets for 2019 were:

- Net financial result after tax
- OPEX efficiency]
- Safety
- Implementation and monitoring of collective projects and our company transformation
- AIT (grid reliability)

Following the successful implementation of the Topco project and the value creation achieved in 2019 , the Board of Directors, acting on the recommendation of the Remuneration Committee, decided to award certain members of

4 Please note that since 1 January 2020, the new CAC has applied to all Elia Group companies that existed on 1 May 2019. The rules set out in Article 520ter, paragraphs 1 and 2 of the Belgian Companies Code can now be found in Article 7:91, paragraphs 1 and 2 of the Belgian Companies and Associations Code.

the Management Committee additional remuneration totalling €150,000 for [this additional work]. Of this amount, €100,000 was paid to the Chairman of the Management Committee, while €50,000 was paid to certain other members of the Management Committee (of Elia System Operator). This remuneration, which counts as exceptional remuneration for special services (on certain specific, non-recurring assignments) was paid in addition to the aforementioned short-term variable remuneration earned for 2019.

Long-term variable remuneration

The second component of variable remuneration is based on multi-annual criteria covering a period of four years ('long-term incentive plan'). The variable remuneration earned in 2019 can be estimated at €110,391.38 (maximum amount in the event of full attainment of the multi-annual criteria for the tariff period concerned) for the Chairman of the Management Committee in 2019 and €405,374.74 for the other members of the Management Committee (€279,136.90 for management employed by Elia System Operator and €126,237.83 for management employed by Elia Asset, respectively).

These amounts are reviewed at the end of each year based on the achievement of the multi-annual criteria. The first part of the long-term variable remuneration for the 2016-2019 tariff period was paid in 2018. The balance will be paid in 2020. Remuneration is definitively acquired at the moment of payment.

Clawback

Bonuses paid for the prior period may be clawed back in case of proven fraud or material misstatement.

CONTRIBUTIONS TO THE CORPORATE PENSION SCHEME:

Since 2007, all pension plans for Management Committee members have been defined-contribution plans, where the amount paid, excluding tax, is calculated on the basis of annual remuneration.

In 2019, Elia System Operator paid a total of €115,303.76 for the Chairman of the Management Committee. For the other members of the Management Committee, Elia paid a total of €368,908.96 (€244,416.01 for management employed by Elia System Operator and €124,492.95 for management employed by Elia Asset, respectively).

OTHER BENEFITS:

Other benefits awarded to members of the Management Committee, such as guaranteed income in the event of long-term illness or an accident, healthcare and hospitalisation insurance, invalidity insurance, life insurance, reduced energy prices, other allowances, assistance with public transport costs, provision of a company car, employer-borne costs and other minor benefits, are in line with the regulations applying to all company executives.

The cost of these other benefits for 2019 was valued at €38,936.70 for the Chairman of the Management Committee and at €224,077.01 for the other members of the Management Committee (€156,549.78 for management employed by Elia System Operator and €67,527.23 for management employed by Elia Asset, respectively). No stock options were awarded at Elia for the Management Committee in 2019.

Employment contract provisions and severance benefits of members of the Management Committee

Management Committee members' employment contracts concluded after 3 May 2010 were drawn up in accordance with the prevailing legislation on notice and dismissal.

The employment contracts of members of the Management Committee hired before 3 May 2010 contain no specific provisions regarding dismissal.

If the company decides to impose a 12-month non-compete restriction on a Management Committee member, that member is entitled to an additional six months' compensation.

Elia System Operator shares held by members of the Management Committee

The members of the Management Committee held the following number of shares as at 31 December 2019 :

MEMBER OF THE MANAGEMENT COMMITTEE	as at 31 Dec. 2019	as at 31 Dec. 2018
Chris PEETERS *Chief Executive Officer - président du comité de direction*	3,758	3,324
Markus BERGER *Chief Infrastructure Officer*	5,156	9,156
Patrick DE LEENER *Chief Customers, Market & System Officer*	2,652	3,886
Frédéric DUNON *Chief Assets Officer*	2,268	2,171
Pascale FONCK *Chief External Relations Officer*	661	661
Peter MICHIELS *Chief Human Resources & Internal Communication Officer*	839	729
Ilse TANT *Chief Community Relations Officer*	2,460	2,460
Catherine VANDENBORRE *Chief Financial Officer*	1.422	1.406

No stock options were awarded at Elia System Operator for the members of the Management Committee in 2019. Members of the Management Committee may purchase shares via capital increases, capital increases reserved for members of staff, or on the stock exchange.

Total annual remuneration

In 2019, the total remuneration paid to the Chairman of the Management Committee was €1,181,809.42.

The total annual remuneration of other members of the Management Committee was €3,441,944.01 (€2,376,073.94 for management employed by Elia System Operator and €1,065,870.08 for management employed by Elia Asset, respectively).

Total annual remuneration for all members of the Management Committee in 2019 was therefore €4,623,753.43.

Risk management and uncertainties facing the company

GRI 102-15, GRI 102-30

1. What for?

Elia group's ambition to deliver the infrastructure of the future and enable a successful energy transition to the benefit of the consumer is formulated in a highly challenging context.

Changing European Energy market, large-scale deployment of renewable-based generation technologies, with intermittent and harder to predict production patterns, steadily increasing energy consumption, ageing infrastructure, resource bottlenecks, to name but a few, increase the complexity of our transmission system operator's mission. There is a need to anticipate (unwanted) events and understand their causes, consequences and likelihood. All this with the aim of making informed decisions. That is exactly what risk management is about: it allows us to manage the effect of uncertainties on the achievement of objectives[1].

As put in a mildly provocative way by James Lam[2]: "The only alternative to risk management is crisis management and crisis management is much more expensive, time consuming and embarrassing. "

2. How does it work?

Uncertainties may generate desirable events, the opportunities, and unwanted events, the risks. Both are in the scope of risk management.

Different types of objective aspects might be impacted by risks, like health and safety, continuity of supply or profitability. These are called the risk dimensions.

The Risk Management framework of Elia Group is strongly linked to COSO's framework[3], which gathers best practices for assessing business risks.

In line with these guidelines, risk management takes place at different levels in the organization (strategic, business/operational, project…) and relies on Elia group's strategy and risk appetite, the levels of risks our organization is prepared to accept in pursuit of its objectives. If the (aggregated) risk is below the critical level defined by the risk appetite a cost-benefit analysis determines the use of control measures to reduce risks. For a few cases where it facilitates decision-making, the risk appetite has been translated into more operational criteria, which are used by the operational entities.

There are processes in place which aim at identifying key risks, assessing them, defining appropriate responses, communicating them to the board of directors and monitoring the effectiveness of mitigation actions . All information collected by these processes is recorded into risk registers. Regular exchanges between risk managers & risk owners allow these registers to be kept up to date. The most important elements are summarized into risk reporting's, which are presented four times a year to the Board of directors & audit committee.

FIGURE 1 ILLUSTRATION OF THE STEPS OF THE RISK MANAGEMENT PROCESS

1 ISO 31000
2 JAMES LAM, Enterprise Risk Management, Wiley Finance
3 COSO: Committee of Sponsoring Organisations

3. Link between main risks, opportunities materiality topics & strategic priorities

Risk		Materiality topics	Strategic priorities			Short term trend
Category	Topic		Secure, reliable & efficient grid	Energy transition	Community's interest	
Strategic/ Regulatory	**Changing/ new regulatory conditions**	Regulation misinterpretations, conflicts with envisioned strategy, clean energy package, evolution of TSO role	x	x		=
Strategic/ Regulatory	**Early termination of TSO licence**	TSO appointment, licence renewal, image, real/perceived failure of governance or compliance, "caretaker" government	x		x	↓
Strategic/ Regulatory	**Sustainability of incomes**	Maintain & grow asset base, timely project execution, increase overall efficiency, tariff methodology/parameters which takes into account energy decentralization, supplier's risk (material)	x	x	x	=
Strategic/ Regulatory	**Anticipate HR needs**	Culture change to deliver our vision & strategy, sufficient technical profiles, succession planning, training & development, new skills	x	x	x	=
Operational	**Balancing**	Integration of RES, harder to predict energy flows	x	x	x	=
Operational	**Adequacy**	Evolution of generation units fleets, CRM (law voted in April 2019 in BE), nuclear phase out	x	x	x	=
Operational	**Contingency events & Business continuity disruption**	Cyberattacks (IT/OT), failure of IT systems, supplier's risk (design), unavailability of critical software, malicious attacks, unfavorable weather events, offshore/new technologies, ageing infrastructure	x		x	=
Operational	**Failure of Information & communication technology & data security**	Compliance, GDPR, network codes, data security, privacy & cybersecurity, reputation, communication issues, less performant fault elimination	x		x	=
Operational	**Permitting**	Changing European Energy market, Integration of RES, community acceptance of projects, delay in execution of key projects, "caretaker" government	x	x	x	=
Operational	**Supplier's risk**	Limited number of key suppliers, increasing demand for works & supplies, pressure on supplier's business models, ability to deliver the required capacity on time & with quality, availability of skilled technical profiles, safety on works	x	x	x	=
Operational	**Health & safety accidents**	Safety for contractors, error producing conditions	x		x	=
Financial	**Negative changes in financial markets**	Financial rating, access to debt & capital market, instable interest rates, macro-economic context	x	x	x	↑
Financial	**Cashflow**	Cost/revenue forecast/actuals, Levies & green certificates,	x	x	x	=
Financial	**New business developments**	Capped liabilities, new ring-fencing structure, EGI		x	x	=
Financial	**Legal disputes, liabilities**	Capped liabilities, appropriate provisions	x		x	=

Opportunities are further discussed in the R&D section.

4. Strategic/regulatory risks & responses provided

Changing/new regulatory conditions

Given the specificities of its activities, the Group is subject to extensive European, federal and regional legislation and regulation. Unplanned and/or inconvenient changes or misinterpretations in regulatory or policy mechanisms in Belgium or Germany could conflict with the Group's existing and envisioned strategy causing severe financial and organizational impacts.

Responses
In order to minimize uncertainties, the two transmission system operators in the Elia Group strive to proactively anticipate European legislation, new directives and regulations being prepared at EU level or awaiting transposition into Belgian and German law, notably as part of the "Clean Energy Package" and the possible evolution of the Transmission System Operator (TSO) role to Regional Operational Center (ROC) one.

Elia and 50Hertz are also founding members of the European Network of Transmission System Operators for Electricity (ENTSO-E). Through participating in this network, the transmission system operators provide advocacy for evolutions in line with their strategy.

Further information
The regulatory and legal framework entails risks with regard to the division of powers between Belgium's federal and regional entities. For instance, contradictions between the various regulations, including the grid codes, could hinder the exercise of the Group's activities. The further development of and changes to these regulations may also impact the Group's liability in the event of a power outage on the grid or – in the context of a reform of the State – the division of powers between federal and regional authorities, potentially including the power to approve transmission tariffs. In order to minimize those risks, Elia also strives to anticipate proactively evolution brought to national or local legislations.

Risk of early termination of TSO licence

To execute its activities, Elia and 50Hertz have licenses, which can be revoked earlier if Elia or 50Hertz do not have, inter alia, the human, technical and/or financial resources to guarantee the continuous and reliable operation of the grid in accordance with the applicable legislation, as well as the unbundling obligations as described in Article 9 of the EU Electricity Directive. Such a revocation would have an adverse material impact on Elia and/or 50Hertz.

Responses
The Elia group has performed a reorganization by the end of 2019, which enables the ring-fencing of the Belgian regulated activities of Elia from its other activities (German regulated activities or non regulated activities). This in turn limits the risk of cross-subsidy between regulated activities or with non-regulated activities. It thereby provides a suitable framework for the further development of all activities by Elia Group (regulated in Belgium and Germany, as non-regulated activities).

Further information
Elia Transmission Belgium was recently designated as Belgian transmission system operator with effect as from 31 December 2019 by different public entities (the Federal Government including for the Walloon region for a period of 20 years, the Brussel's Government for a period of 20 years, and the Flemish regulator (for a period of 4 years). The risks of early termination of TSO licences are therefore limited in the short term. It is noted, however, that some discussions around interpretation to give to Corporate Governance rules shall be conducted prior to the next renewal of the Flemish licence.

Sustainability of incomes

The remuneration of the Group is almost entirely driven by the regulatory framework applicable to Elia, 50Hertz and Nemo. Changes to the regulatory parameters could impact the profitability of the Group. In addition, the realization of certain parameters defined in the tariff methodologies are subject to specific uncertainties that could affect the Group's financial position.

In particular, the remuneration of the Group depends in part on its ability to realize the needed projects and maintain the realized assets, as the current remuneration in both Belgium and Germany is subject to the Regulatory Asset Base. This depends on its ability to obtain the necessary permits and to manage potential environmental and public health risks and accommodate city planning constraints without incurring significant costs. In case the group would not be able to realize or not timely/economically realize its investment program, this could have a negative impact on the Group's future profits.

Responses
In the context of the Energy transition, the development needs of transmission infrastructure in Belgium and Germany require the implementation of ambitious investment program, which indirectly contributes to increase their regulatory asset base.

The Group also strives to develop tariff methodologies that take into account the changes brought about by the energy transition and the decentralization of energy generation.

Lastly, the Group seeks to act as efficiently as possible in its investment & asset maintenance policies. This allows consumers to benefit from the scale effect of centralized grid management.

Further information
CREG's Management Committee has approved Elia's Tariff proposal for the 2020-2023 regulatory period. Despite inflation and the continuation of Elia's ambitious investment program, electricity transmission tariffs will decrease over the period 2020-2023, ending up 1% lower than the current 2019 tariffs by the end of that period. This effect can be explained mostly by the expected reduction in financial charges and ancillary service costs, as well as by the restitution of the tariff excesses collected in the past.

https://www.elia.be/en/news/press-releases/2019/11/20191107_elia-press-release-creg-approves-tariff-proposition

Anticipate HR needs

The energy transition drives us to a consumer centric model on which our strategy and ambition is based. To enable this consumer centric model the group culture and emerging changes must be fully aligned with the group strategy.

Additionally, with regard to talent management we are aware that specific technical expertise (offshore, digitalization, IP...) will be required in the future to support the achievement of the group strategy.

Responses
A reinforced focus on talent and culture led to several anticipating actions, like workshops, transparent communication, a group wide roll-out of a culture change project, as well as specific trainings, that are currently ongoing to achieve this alignment.

A succession planning is being implemented with a focus on leadership skills and an upgrade in the mapping of critical functions is also foreseen.

5. Operational risks & responses provided

Balancing

The consumption of electrical energy should be equal to the production at any time. The two transmission system operators use balancing energy to balance unplanned fluctuations in the production of electricity or the energy load.

The growth across Europe in the number of renewable energy units connected to distribution systems, the connection of large offshore wind farms, also creates new challenges for operational grid management, particularly through increased volatility of energy flows on our network.

Responses
Maintaining security of the grid with respect to balancing at reasonable costs for the society relies on a mix of measures. These involve improving the cooperation for grid control at both national & international levels, enhancing the quality of forecasts (consumption, offshore, etc), ensuring a market design that incentivizes the Balancing Responsible Parties to manage their portfolio balance whilst at the same time offering them the market arrangements allowing them to trade out their imbalances as close as possible to real time (e.g. intraday markets) and implementing market reforms that unlock as much flexibility as possible that can be called upon in real time to keep the grid balanced at least cost. The latter market reforms aim at opening balancing markets to all technologies and all players, irrespective of the voltage level at which these are connected to.

As an illustration of the latter measure, in Belgium, in course of 2020, Elia will move from monthly procurement of mFRR (manual frequency restoration reserve) and weekly procurement of aFRR (automatic frequency restoration reserve) to a daily procurement of both reserves. This will greatly lower the entry barrier for the reserve market and allow the effective participation of more technologies.

Adequacy

The federal governments in place have a key role to play in ensuring enough generation capacity is available in their countries to avoid risk of electricity shortage and problems of supply. The transmission system operators of our group, for their part, provide them with useful information. As an example, Elia performs, in accordance with the legal prescriptions in this respect regular assessments of Belgium's security of supply situation in the short and the longer term.

For the adequacy situation in the short-term, Elia mainly assesses the adequacy between load projections and available generation (incl. Demand Side Response, denoted DSR, load shifting...) in Belgium and the surrounding countries against security of supply criteria defined by law. If the study reveals that the latter criteria may not be met, the Minister in charge of Energy can ask Elia to constitute a Strategic Reserve. A Strategic Reserve is composed of assets sitting out of the market and that can be called upon in the event that the market cannot ensure security of supply.

On 2 December, Elia has published its probabilistic analysis of Belgium's adequacy situation for the winter 2020-21. The results of this study are available here:

https://www.elia.be/en/news/press-releases/2019/12/20191202_strategic-reserve-for-winter-2020-21

Elia also looks at Belgium's adequacy situation on the longer term. These studies assesses the adequacy between load projections and anticipated available generation (incl. DSR, load shifting...) in Belgium and the surrounding countries on the longer term. The anticipated available generation includes politically set objectives in terms of renewable generation as well as an economic viability gap to assess if sufficiently robust signals are

available to trigger investments in the market to close any potential adequacy gap against the legally defined security of supply criteria.

Elia's latest study in this respect "Adequacy & Flexibility study 2020-2030", dates from June 28th, 2019. It is available here:

https://www.elia.be/en/publications/studies-and-reports

This study concluded that by 2025, as a result of the nuclear phase out, Belgium would face an adequacy gap and that there are insufficient robust investments signals to expect this gap to be filled up by the market without additional intervention.

As a result, and in order to guarantee Belgium's security of supply in the longer term, the Belgian government decided on the introduction of a capacity remuneration mechanism ("CRM"). To this end, a law proposal on this CRM mechanism was debated and adopted on April 4th 2019. Elia is assisting the government in designing and implementing this CRM mechanism.

The aforementioned study also indicated that Belgium might face an adequacy issue already between 2022 and 2025 (period during which some nuclear units will leave the market already). An assessment of the exact scale of the identified deficit as well as the (need for) possible mitigating mechanisms will be conducted in the course of 2020.

Contingency events & Business continuity disruption

The transmission systems operated by the Group are very reliable. Nonetheless, unforeseen events, such as unfavorable weather conditions, may occur and alter the smooth operation of one or more infrastructure components. In most cases, these will lead to a so-called single contingency event, and have no impact on end customers' power supply because the meshed structure of the grids operated by the Group. Indeed, electricity can often reach end customers via a number of different connections in the system. However, in other cases, an incident in the electricity system may lead to a multiple contingencies event. This may lead to a local or widespread electricity outage provoking liability claims and litigation which could negatively impact the financial position of the Group.

There are causes other than unfavorable weather conditions for contingency events & business continuity disruption. Examples include human errors, malicious attacks, terrorism, equipment failures, etc.

The case of offshore equipment has our full attention, in a context where there are less years of track records with these technologies and a higher complexity for curative actions.

The probability of the occurrence of one or more of the above-mentioned events may increase if the competent authorities do not approve the necessary operational procedures, investments or full time equivalent (FTE) resources proposed by Elia & 50Hz.

Response
There are several procedures in place to manage these risks, going from crisis management plans to operational procedures like defense plans and restoration plans. All of them are regularly trained and tested with large-scale exercises and simulator trainings so that our staff and transmission system operators, as the case may be, are ready to deal with the most unexpected and extreme situations. In the event of an error attributable to Elia or 50Hz, the respective general terms and conditions of its contracts provide for appropriate liability caps for the Group and the relevant affiliate, as the case may be, to a reasonable level. Each relevant insurance policy is designed to limit some of the financial repercussions if these risks were to occur.

Should unfavorable circumstances occur, the TSO may take any emergency measures it deems appropriate, such as disconnecting some or all electricity exports, requesting electricity-generating companies to increase or decrease their electricity production or requesting from the competent Minister a reduction in the electricity consumption in the relevant area to reduce the event impact.

Also, the design and operation of as well offshore as onshore technologies takes into account constraints related to repair time, monitoring opportunities & grid resilience.

Further information
As a regulated entity, Elia acts in accordance with the "network codes" applicable at European, federal and regional level, while network access contracts are approved by the regulator.

Elia's exposure under the regulatory framework and these contracts is limited to an acceptable amount.

These risks are generally covered by a "liability" insurance contract for appropriate amounts.

In Belgium, due to resource bottlenecks, asset replacements and capital expenditures in general are subject to arbitration, which contributes to the ageing of some asset fleets, complicates the asset management and may eventually affect the availability of some network components & performance of protection devices.

Failure of Information and Communication Technology (ICT) and data security

A failure of the ICT systems and processes used by the Group or a breach of their security measures may result in losses for customers and reduced revenues for the Group and its affiliates.

The Group and its relevant affiliates also collect and store sensitive data, their own business data and that of their suppliers and business partners. The Group and its relevant affiliates are subject to several privacy and data protection rules and regulations, including, as of May 25, 2018, the General Data Protection Regulation (EU Regulation 2016/679 of April 27, 2016), Despite all precautions taken, important system hardware and software failures, failure of compliance processes, computer viruses, malware, cyber-attacks, accidents or security breaches could still occur.

Any such events could impair the ability of the Group and/or the ability of any of the Group's relevant affiliates to provide all or part of their services and generally may result in a breach of its legal and/or contractual obligations. This could, in turn, result in legal claims or proceedings, contractual liability, liability under any other data protection laws, criminal, civil and/or administrative sanctions, a disruption of the operations of the Group or the operations of the relevant affiliates of the Group, or damage to the reputation of the Group or to the reputation of the relevant affiliates of the Group, and in general could adversely affect the business of the Group & its relevant affiliates.

Response
The Group and each of its relevant affiliates take appropriate measures to revise, update and back up its ICT processes and hardware, software and network protection (for example, failover mechanisms) on an ongoing basis to the maximum extent permitted by technical and financial considerations. The two transmission system operators also continuously adapt their processes and are putting in place new processes to ensure compliance.

Permitting risk

The changing European Energy market and largescale deployment of renewable-based generation technologies also requires the further development of the infrastructure of the two transmission system operators. The development of such infrastructure and interconnectors with other neighbouring countries are dependent on securing permits and approvals from local, regional, national and international authorities. The need to obtain such approvals and permits within certain timeframe represents a critical challenge to timely implementation. Moreover, these approvals and permits can be contested in the relevant courts.

Responses
In order to manage uncertainties related to permitting, concrete and upfront stakeholder management takes place, as well as transparent communication to the community.

Further information
In Belgium, one may mention three projects that are particularly important to facilitate the energy transition, but which also require a great deal of effort to gain community acceptance: Boucle du Hainaut, Ventilus and MOG II.

Supplier's risk

The two TSO's rely on a limited number of key suppliers to provide them with material and realize their investment projects. Given the complexity of the infrastructure works, the increasing demand in the market, and the filling level of the factories' order books, the Group may not be able to find sufficient suppliers or supply capacity for their projects. These key suppliers also face the challenge of having enough skilled HR profiles, so that the design of their products is adequate, their production capacity is sufficient, the quality of their supplies is good and their work teams demonstrate a deeply embedded safety culture. Should they fail to have enough skilled profiles, this might adversely impact our business, including the safety of our works. In addition, the Group and the relevant affiliates of the Group are also exposed to the risk of public procurement claims and that their respective suppliers, when facing financial difficulties, may not be able to comply with their contractual obligations. Any cancellation of or delay in the completion of its infrastructure works could have an adverse effect on the business & reputation of the Group & its affiliates.

Responses
In order to minimize supplier's risk, the two TSO's from the group maintain ongoing dialogue with their suppliers and regularly perform predictive capacity analysis at market level. They also develop more resilient purchasing strategies and diversify the supplier portfolio.

Health & safety accidents

Elia & 50Hz operate facilities where accidents, asset failure or external attacks may cause bodily harm to persons. As a result, the Group and its relevant affiliates may be exposed to potential liabilities that may have a material, negative impact on their financial position, require significant financial and managerial resources, or possibly harm their respective reputations.

Response
The safety and welfare of individuals (both the Group's staff, the staff of the relevant affiliates of the Group and third parties) is a key priority and a daily preoccupation for the Group and for the relevant affiliates of the Group. The Group and its relevant affiliates have put in place a health and safety policy, undertake safety analyses and promote a safety culture.

Financial risks & responses provided

Negative changes in financial markets

The ability of the Group to access global sources of financing to cover its financing needs or repayment of its debt could be impacted by the deterioration of financial markets.

Fluctuations of interest rates may negatively influence the financial situation of the Group. Indeed, in order to finance its investments and to achieve its short and long-term strategic goals, the Group and its affiliates need to access to capital markets. In the current bank and capital market environment characterized by a low interest rate environment, the Group has currently no constraints on the availability of funding. However, the Group is partly financed by debt instruments with floating interest rates, and a change in interest rates of financial instruments in the market can have an impact on the financial charges. Regulatory schemes can also be adversely affected by these fluctuations of interest rates when impacting the allowed return on equity.

In order to finance their investments, the Group is dependent on its ability to access debt and capital markets in order to raise funds necessary to repay its existing indebtedness and meet its financial needs under its future investments. This **funding risk** is heavily impacted by macro-economic trends. In 2020, these will be mainly shaped by the outcome of the trade discussion between the US and China, the evolution in the Middle East and the execution of the Brexit. All of these macroeconomic factors are reflected at market level by major volatility, which could have a negative impact on the growth of the Elia Group and on the pursuit of their objectives.

Elia Group, financial instruments issued by Elia Transmission and Eurogrid GmbH are rated by S&P. There is no assurance that the rating will remain the same for any given period or that the rating will not be lowered by the rating agency if, in its judgment, circumstances in the future so warrant. A decision by a rating agency to downgrade or withdraw the Company's credit rating could reduce the Group's funding options and increase its cost of borrowing.

Responses
The risks the Group faces are identified and analysed in order to establish appropriate limits. The Group controls and monitor risks and compliance with such limits. To this end, the Group has defined responsibilities and procedures specifically for the financial instruments to be used and the operating limits for managing them. These procedures and related systems are revised on a regular basis to reflect any changes in market conditions and the activities of the Group. The financial impact of these risks is limited, as Elia and 50Hertz operate under the Belgian or German regulatory framework.

As part of the Group's efforts to mitigate the funding risk, the Group aims to diversify its financing sources in debt instruments. As a stock quoted company, the Group also has access to the equity market. The refinancing risk is managed through developing strong bank relationships with a group of financial institutions, through maintaining a strong and prudent financial position over time and through diversification of funding sources. The short-term liquidity risk is managed on a daily basis with funding needs being fully covered through the availability of credit lines and commercial paper program.

Further information
In Belgium, the funding costs linked to the financing of the regulated activities are qualified as "Noncontrollable elements" and potential deviations from budgeted figures can be passed on in a subsequent regulatory tariff period (or in the same period in the event of an exceptional change in charges). The regulated tariffs are set pursuant to forecasts of interest rate.

Cashflow

The fluctuation in interest rates of the Group's debt mentioned in the previous section can also have an impact on the actual financial charges by causing a time differential (positive or negative) between the financial costs effectively incurred by the Group and the forecasted financial costs. This could cause transitory effects on the cash position of the Group.

Deviations between actual and budgeted volumes of electricity transmitted and between effectively incurred and budgeted costs/revenues may have a negative short-term effect on the cash position of the Group as well a negative medium-term impact on the tariff setting for the next period.

In the framework of their respective competences, national & regional governments have taken measures to support the further development of renewable energy by introducing different support mechanisms. The two TSO's of the Group are entitled several of these public service obligations mechanisms. This may have an indirect impact on the Group's cashflow. Deviations from the expected number of sales of green certificates at a guaranteed minimum price or deviations from the expected volumes of sales of renewable energy at a fixed price could generate short-term significant cash expenses. TSO Public Service Obligations costs are covered by tariffs to be approved on regular base by regulators.

Responses
The short-term liquidity risk is managed on a daily basis with funding needs being fully covered through the availability of credit lines and a commercial paper program.

Other risk mitigation measures include involvement in the design of public service obligation mechanisms aiming to support the development of renewable energy. Once these mechanisms are in place, performing good forecasts, as well as reporting and communicating issues to governments and regulators contribute to keep a sound balance.

Further information
With the advent of Belgian laws and regulations governing decentralised or renewable energy generation, notably via photovoltaic solar panels and wind turbines, the Federal and Regional governments organized the issuance of so-called 'green certificates' (GC), which are used as a financial support mechanism for renewable energy.

On the federal level in Belgium, last years, offshore wind turbines have been installed in the North Sea and their number will continue to grow, generating green certificates which are sold to Elia. This offshore green certificate public service obligation generates an increasing large cash out flow, compensated by an equivalent cash in flow resulting from an increasing tariff to be approved on an annual basis in the coming years by the government.

In terms of the regional public service obligations, the imbalance on the green certificates market in Wallonia will continue the first next coming years, with high levels of sales of green certificates at the guaranteed minimum price to Elia. The high tariff for public service obligations for financing the support measures for renewable energy in Wallonia, which is established to cover the cost of selling green certificates to Elia, was completed in late 2017 by a new green certificate temporisation mechanism. In this context, the Walloon Region is entitled to buy to Elia appropriate quantities of GC and to resell these GC to the market in a few years. A new decree of May 2, 2019 amending the decree of April 12, 2001 relating to the organization of the regional electricity market should provide an additional structural and lasting solution as from 2020 to the imbalance on the GC market in Wallonia and organize the establishment of a mobilization mechanism of some GCs bought by the Local TSO. Unlike the mechanisms already in place, the mobilization mechanism will make it possible to avoid deferring Walloon debt over time by cancelling the excess GCs on the market. The mobilization mechanism is based on a Special Purpose Vehicle (SPV) which is not consolidated with the Local TSO and is financed by the issue of bond loans. The income of the SPV is generated by a new charge collected on the final Walloon consumers.

At the stage of writing, the compliance of this decree with the current European state-aid regulation still needs to be confirmed. The operationalisation of the mechanism is still in progress and is expected to be ready for mid-2020.

New business developments

Any negative results from new business developments are entirely born by the Group and represent an additional financial risk.

Responses
The new ring-fencing structure explained in the "Risk of early termination of TSO licence" section is one of the responses provided.

For what concerns the group affiliate EGI, the services provided so far are mainly owner's engineering ones, characterized by lower risks of claim and liabilities.

Legal disputes & liabilities

The outcome of legal disputes and lawsuits may negatively affect the business operations and/or the financial results.

Response
The Group and the relevant affiliates of the Group carry out their activities in such a way as to reduce (as much as possible) the risk of legal disputes and, if necessary, the appropriate provisions are identified and implemented on a quarterly basis.

6.R&D activities

In line with our strategic priority to facilitate the energy transition, the group explores, with partners, ideas that could help reshape the future of energy & lead the way into a group of digital TSO's.

Our R&D activities relate to three domains: asset, market & system operation.

The first one provides a valuable contribution to manage the continuity of supply & health & safety risks topics through using advanced analytics to increase the efficiency of maintenance activities, connecting assets so as to improve their monitoring and maximize their use, increasing automation of asset inspection and developing devices which alert workers in case some specific risks are detected. It also explores some options to reduce the environmental impact of assets.

In the market domain, activities aim at providing a digital test bed to put consumer centricity into practice and to understand the potential of advanced technologies for existing processes & new ways of market facilitation. These activities are a valuable contribution to manage the balancing and changing/ new regulatory condition's risks.

With the third domain, system operation, the transmission system operators of our group start getting ready to operate the increasingly complex system reliability, by studying challenges related to the changed context and by learning to anticipate and act on grid state, in order to automate tasks and free up human resources. These activities are a valuable contribution to manage the continuity of supply risks and HR needs risks.

7. Contextual factors

Caretaker government
In Belgium, the presence of a "caretaker government" may lead to increased delays in some decision-making processes.

Preparing the energy transition
As outlined in the risk description, in a context of nuclear phase out, preparing the energy transition requires additional generation units to be available, in order to ensure both the network balancing and adequacy. This in turns requires a framework in which investors will feel confident enough to invest in those generation units. This framework is not yet available.

Also, preparing for the energy transition has a cost. Finding ways to finance them in a manner that is responsible toward future generations and in a context of indebtedness is a challenge in itself.

Energy demand & energy efficiency
While global energy demand has steadily increased over the past decades, energy efficiency is also one of the key measures outlined by the EU in respect of Union-wide CO_2 footprint reduction. Significant energy efficiency measures in Belgium and Germany can potentially affect power consumption and thus reduce the volumes of electricity transmitted via the Group's networks. The same applies for a slowing down of the economic activities of industrial clients and reduction of their consumption.

Macroeconomic context
2019 was characterized by a rather uncertainty macro-economic climate, in particular due to high indebtedness and the perspective of a no-deal Brexit.

Also, interest rates remained very low, following the ECB's highly accommodative monetary policy stance, but this situation may change in the future.

Evolutions in long-term interest rates may affect the expected return for transmission system operators.

Features of the internal control and risk management systems

GRI 102-17, GRI 102-30

The reference framework for internal control and risk management, established by the Management Committee and approved by the Elia Board of Directors, is based on the COSO II framework. The framework has five closely linked basic components, providing an integrated procedure for internal control and risk management systems: control environment, risk management, control activities, information and communication, and monitoring. The use and inclusion of these concepts in Elia's various procedures and activities enables the company to control its activities, improve the effectiveness of its operations, optimally deploy its resources, and ultimately achieve its objectives. The implementation of COSO II at Elia is described below.

1. Control environment

ORGANISATION OF INTERNAL CONTROL

Pursuant to the Elia articles of association, the Board of Directors has established various committees to help it fulfil its duties: the Management Committee, the Audit Committee, the Strategic Committee, the Remuneration Committee and the Corporate Governance Committee. The Board has charged the Audit Committee with the task of monitoring: (i) the financial reporting procedure; (ii) the effectiveness of internal control and corporate risk management systems; (iii) the internal audit and its effectiveness; (iv) the statutory audit of annual and consolidated accounts, including the follow-up of any issues raised or recommendations made by external auditors; (v) the independence of external auditors, (vi) examining accounts and controlling budgets.

The Audit Committee generally meets quarterly to discuss the above points.

The Finance Department helps the Management Committee by providing, in a timely manner, correct and reliable financial information to aid not only decision-making with a view to monitoring the profitability of activities, but also effective management of corporate financial services. External financial reporting – one of Elia's duties – includes (i) statutory financial and tax reporting; (ii) consolidated financial reporting; (iii) specific reporting obligations applicable to public companies; (iv) reporting obligations under the regulatory framework. The structured approach developed by Elia helps to ensure that financial data is both exhaustive and precise, taking into account the deadlines for activity reviews and the actions of key players so as to ensure adequate control and accounting.

INTEGRITY AND ETHICS

Elia's integrity and ethics are a crucial aspect of its internal control environment. The Management Committee and management regularly communicate about these principles in order to clarify the mutual rights and obligations of the company and its employees. These rules are disseminated to all new employees, and compliance with them is formally included in employment contracts. The Code of Conduct also helps to prevent employees from breaching any Belgian legislation on the use of privileged information or market manipulation and suspicious activities. Management consistently ensures that employees comply with internal values and procedures and – where applicable – take any actions deemed necessary, as laid down in the company regulations and employment contracts.

The Ethical Code defines what Elia regards as correct ethical conduct and sets out the policy and a number of principles on the avoidance of conflicts of interests. Acting honestly and independently with respect to all stakeholders is a key guiding principle for all of our employees. Elia's Ethical Code expressly states that the Group prohibits bribery in any form, misuse of prior knowledge and market manipulation. This is confirmed by the Elia Code of Conduct. Elia and its employees do not use gifts or entertainment to gain competitive advantage. Facilitation payments are not permitted by Elia. Disguising gifts or entertainment as charitable donations is also a violation of the Ethical Code. Moreover, the Ethical Code prohibits all forms of racism and discrimination, promotes equal opportunities for all employees, and ensures the protection and confidential use of IT systems. All parties involved in procurement must abide by Elia's Purchasing Code of Ethics and all associated regulations. Elia's Purchasing Code of Ethics is published internally and externally and is based on four pillars: confidentiality, non-discriminatory treatment of suppliers, transparency, and avoidance of con-

flicts of interest. The management of the employees involved in the procurement and payment processes regularly provides opportunities for training and awareness-raising on these topics.

Elia offers its employees the opportunity to express their concern about an (alleged) breach of the ethical code without fear of sanctions and/or unfair treatment. In addition to the existing reporting channels, an external system for reporting breaches of professional integrity has been implemented. Internal employees can report via this platform their suspicions about possible breaches of the Elia Code of Ethics which may harm Elia's reputation and/or interests in a protected manner.

By virtue of its legal status as a power transmission system operator, Elia is subject to a large number of statutory and regulatory rules setting out three fundamental principles: non-discriminatory conduct, confidential processing of information, and transparency towards all electricity market players as regards non-confidential market information. With a view to meeting these specific obligations, Elia has drawn up an Engagement Programme, which has been approved by the Corporate Governance Committee. The Compliance Officer reports annually to the relevant regulatory bodies in this regard.

Any violations of these codes can be reported to the Compliance Officer, who handles them objectively and confidentially. The Compliance Officer declares that no such violations were reported by internal employees or external stakeholders in2019.

Internal Audit's annual programme includes a number of actions and verification audits designed to act as specific safeguards against fraud. Any findings are systematically reported to the Audit Committee. In2019, no relevant findings relating to financial fraud were reported in the audits making up the annual audit plan of 2019.

ROLES AND RESPONSIBILITIES

Elia's internal control system relies on clearly defined roles and responsibilities at all levels of the organisation. The roles and responsibilities of the various committees established within Elia are primarily identified in the legal framework applicable to Elia, the articles of association and the Corporate Governance Charter. Under the supervision of the Chief Financial Officer, the Accounting Department is responsible for statutory financial and tax reporting and the consolidation of the Elia Group's various subsidiaries. The Controlling Department monitors analytical accounting and reporting and assumes responsibility for all financial reporting in a regulatory context. The Investor Relations Department is responsible for specific reporting applicable to companies listed on the stock exchange.

As regards the financial reporting process, the tasks and responsibilities of all employees in the Accounting Department have been clearly defined with a view to producing financial results that accurately and honestly reflect Elia's financial transactions. A detailed framework of tasks and responsibilities has been drawn up to identify the main control duties and the frequency with which tasks and control duties are performed.

An IFRS Accounting Manual is used by all entities within the scope of consolidation as a reference for accounting principles and procedures, thus ensuring consistency, comparability and accurate accounting and reporting within the Group.

The Finance Department has the appropriate means (including IT tools) to perform its tasks; all entities within the scope of consolidation use the same ERP software, which has a range of integrated controls and supports task separation as appropriate. Elia also clarifies the roles and responsibilities of all its employees by providing a description of each job in line with the Business Process Excellence methodology.

COMPETENCIES

With a view to ensuring its various activities are performed reliably and effectively, Elia clearly spells out the vital importance of its employees' competencies and expertise in its recruitment, training and retention procedures. The Human Resources Department has drawn up the appropriate policies and defined all jobs in order to identify the relevant roles and responsibilities as well as the qualifications needed to fulfil them.

Elia has drawn up a policy for the management of generic and specific competencies in line with the company's values, and promotes training so as to enable all its employees to effectively perform the tasks allocated to them. Requirements with regard to competency levels are continually analysed by means of formal and informal self-assessments at various stages of an employee's career.

Training programmes on financial reporting are offered to all employees involved directly or indirectly with that task. The training emphasises the existing regulatory framework, accounting obligations and actual activities, with a high level of understanding enabling participants to address the appropriate issues.

2. Risk management

Risk management is another internal control system that is crucial in helping Elia to achieve its strategic objectives as defined in its mission. The Board of Directors and the Risk Manager jointly and regularly identify, analyse and assess key strategic and tactical risks. The risks are assessed qualitatively and/or quantitatively depending on their nature and potential effect. The Risk Manager then makes recommendations on how best to manage each risk considering the close interaction of Elia's entire risk universe. Based on this assessment, preventive, remedial and/or corrective actions are implemented, including the strengthening of existing internal control activities where applicable.

As part of its responsibilities, Elia's management establishes an effective internal control system to ensure, among other objectives, accurate financial reporting. It emphasises the importance of risk management in financial reporting by taking into account, with the Audit Committee, a whole range of associated activities and risks. It ensures that risks are truly reflected in financial results and reports. In addition, Risk Management goes beyond those risks known to Elia and tries to anticipate the nature and characteristics of emerging risks, which may impact Elia's objectives. Financial risk assessments primarily involve the identification of:

1. significant financial reporting data and its purpose;
2. major risks involved in the attainment of objectives;
3. risk control mechanisms, where possible.

Financial reporting objectives include (i) ensuring financial statements comply with widely accepted accounting principles; (ii) ensuring that the information presented in financial results is both transparent and accurate; (iii) using accounting principles appropriate to the sector and the company's transactions; (iv) ensuring the accuracy and reliability of financial results. The activities undertaken by Elia, as an electricity transmission system operator in relation to its physical installations, contribute significantly to its financial results.

Therefore, appropriate procedures and control systems have been established to ensure an exhaustive and realistic inventory of physical installations. Risk management is a company-wide activity, actively supported by the delegation of relevant responsibilities to all employees as part of their specific activities, as defined in the Policy.

CONTINUOUS ASSESSMENT

Employing a simultaneously top-down and bottom-up approach enables Elia to identify and, where possible, anticipate forthcoming events and react to any incidents occurring inside or outside the organisation which might affect the attainment of objectives.

TOP-DOWN APPROACH BASED ON STRATEGIC RISKS

Elia's strategic risk assessments are reviewed on a quarterly basis in the Audit Committee. Action plans or specific, theme-based risk assessments are carried out whenever there is a perception of potential threats or opportunities.

BOTTOM-UP APPROACH WITH REGARD TO BUSINESS

With a view to identifying new risks or evaluating changes in existing risks, the Risk Manager and management remain in contact and look out for any changes that may call for the relevant risk assessment and associated action plans to be amended. Various criteria are used to determine the need to re-evaluate financial reporting procedures and associated risks. Emphasis is put on risks associated with changes in the financial and regulatory context, industrial practices, accounting standards and corporate developments such as mergers and acquisitions.

Operational management assesses the relevant risks and puts forward action plans. Any significant changes to assessment rules must be approved by the Board of Directors. Risk Management is instrumental for Elia to maintain its value for stakeholders and the community, works with all departments with a view to optimising Elia's ability to achieve its strategic objectives, and advises the company regarding the nature and potential effects of future risks.

3. Control activities

MAIN CONTROL ACTIVITIES

Elia has established internal control mechanisms at its various structural levels so as to ensure compliance with standards and internal procedures geared to the proper management of identified risks. These include:

(i) clear task separation as part of procedures, preventing the same person from initiating, authorising and recording a transaction – policies have been drawn up regarding access to information systems and the delegation of powers;

(ii) integrated audit approach as part of internal procedures so as to link end results with the transactions supporting them;

(iii) data security and integrity through the appropriate allocation of rights;

(iv) appropriate documentation of procedures through the use of the Business Process Excellence Intranet, which centralises policies and procedures. Departmental managers are responsible for establishing activities to control the risks inherent to their department.

FINANCIAL REPORTING PROCEDURE

For all significant financial reporting risks, Elia sets out appropriate control mechanisms to minimise the probability of error. Roles and responsibilities have been defined in connection with the closing procedure for financial results. Measures have been established for the continuous follow-up of each stage, with a detailed agenda of all activities undertaken by Group subsidiaries; control activities are performed to ensure quality and compliance with internal and external requirements and recommendations. During the financial closing period, a specific test is performed to ensure control over significantly unusual transactions, accounting checks and adjustments at the end of the relevant financial period, company transactions and critical estimates. The combination of all these controls ensures the reliability of financial results. Regular internal and external audits also contribute to financial reporting quality.

In identifying those risks that may affect the achievement of financial reporting objectives, the management takes into account the possibility of misreporting associated with fraud and takes appropriate action where internal control needs to be strengthened. Internal Audit performs specific audits based on the risk assessment for potential fraud, with a view to avoiding and preventing any instances of fraud.

4. Information and communication

Elia communicates relevant information to its employees to enable them to fulfil their responsibilities and achieve their objectives. Financial information is needed for budgeting, forecasts and ensuring compliance with the regulatory framework. Operational information is also vital for the production of various reports, essential for the well-functioning of the company. As such, Elia records recent and historical data needed for corporate risk assessments. Multiple communication channels are used: manuals, memos, emails, bulletin boards and intranet applications. Financial results are reported internally and validated at different levels. The management responsible for financial reporting regularly meets other internal departments (operational and control departments) to identify financial reporting data. It validates and documents the critical assumptions underpinning booked reserves and the company's accounts.

At Group level, consolidated results are broken down into segments and validated by means of a comparison with historical figures and a comparative analysis between forecasts and actual data. This financial information is reported monthly to the Management Committee and is discussed quarterly with the Audit Committee. The Chairman of the Audit

Committee then reports to the Board of Directors.

5. Monitoring

Elia continually re-evaluates the adequacy of its risk management approach. Monitoring procedures include a combination of monitoring activities carried out as part of normal business operations, in addition to specific ad hoc assessments on selected topics. Monitoring activities include (i) monthly reporting of strategic indicators to the Management Committee and the management; (ii) follow-up on key operational indicators at departmental level; (iii) a monthly financial report including an assessment of variations as compared with the budget, comparisons with preceding periods and events liable to affect cost controlling. Consideration is also given to third-party feedback from a range of sources, such as (i) stock market indices and reports by ratings agencies; (ii) share value; (iii) reports by federal and regional regulators on compliance with the legal and regulatory framework; (iv) reports by security and insurance companies. Comparing information from external sources with internally generated data and ensuing analyses allows Elia to keep on making improvements.

Internal Audit also plays a key role in monitoring activities by conducting independent reviews of key financial and operational procedures in view of the various regulations applicable to Elia. The findings of those reviews are reported to the Audit Committee to help it monitor internal control and risk management systems and corporate financial reporting procedures.

The Group's legal entities are also subject to external audits, which generally entail an evaluation of internal control and remarks on (annual and quarterly) statutory and consolidated financial results. External auditors make recommendations for improving internal control systems. In entities that have an Audit Committee, the recommendations, action plans and their implementation are reported annually to that Committee, which in turn reports to the Board of Directors on the independence of the auditor or statutory audit firm and drafts a motion for a resolution on the appointment of external auditors.

Investor Relations

LEGAL STRUCTURE 148

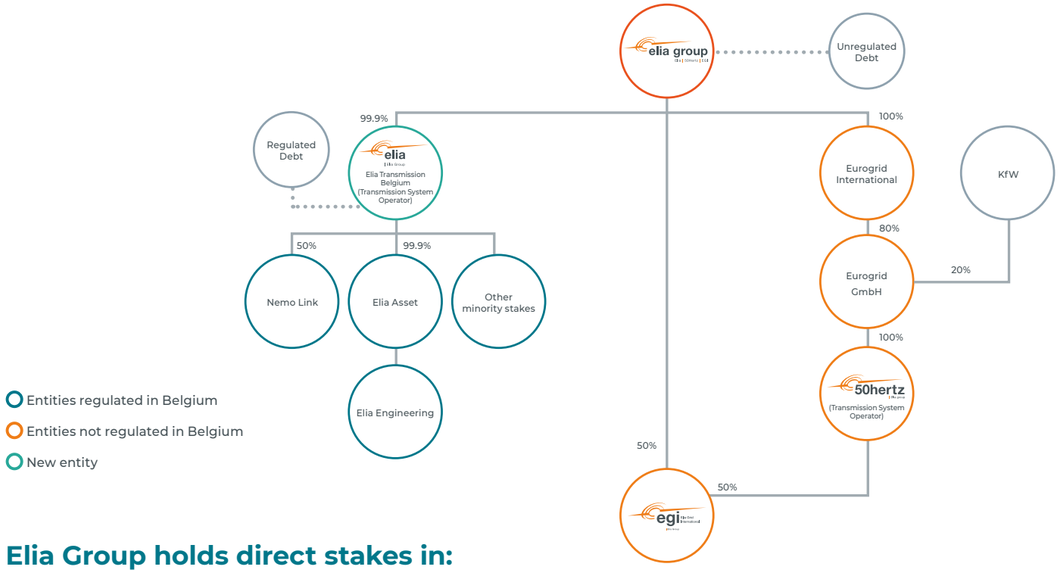
ELIA ON THE STOCK EXCHANGE 150

MANAGEMENT REPORT AND ANALYSIS OF THE 2019 RESULTS 153

Legal Structure

GRI 102-5, GRI 102-45

Elia Group acts as a holding company owning Elia Transmission Belgium (Belgian TSO), Eurogrid International (comprising the activities of 50Hertz, the German TSO) and Elia Grid International (the Group's international consultancy branch). Its main shareholder is the municipal holding Publi-T. Elia Group (formerly Elia System Operator SA/NV) has been listed on the regulated market of Euronext Brussels, since June 2005.



Elia Group holds direct stakes in:

GRI 102-10

Elia Transmission Belgium (ETB) fully owned. ETB is the Belgian transmission system operator for high-voltage electricity (30,000–380,000 volts). Its main activities include managing grid infrastructure (maintaining and developing high-voltage installations) and electrical system (monitoring flows, maintaining the balance between electricity consumption and generation 24/7, importing and exporting to and from neighbouring countries) as well as facilitating the market (developing services and mechanisms with a view to developing the electricity market at national and European level).

Eurogrid GmbH (80% stake) and comprising the activities of 50Hertz, the German TSO. The remaining 20% being held by the German state-owned Bank Kreditanstalt für Wiederaufbau (« KfW»). KfW is one of the world's leading promotional banks. With its decades of experience, KfW is committed to improving economic, social and ecological living conditions across the globe on behalf of the Federal Republic of Germany and the federal states. KfW does not have any branches and does not hold customer deposits. It refinances its promotional business almost entirely through the international capital markets. In Germany, the KfW Group is represented in Frankfurt, Berlin, Bonn and Cologne. Its network includes 80 offices and representations around the world.

Elia Grid International (EGI), a 50/50 joint venture with 50Hertz Transmission GmbH. EGI offers supporting services and advice to government bodies, utilities and other key players around the world seeking support for the design and implementation of future projects in the power sector. It provides advisory services in the following domains: Asset Management, System Operations, Grid Development and RES integration. Its activities are considered to be non-regulated.

Re.Alto: To become the main European digital energy marketplace/platform for data and digital services to accelerate the innovation and digital transition towards energy as a service.

INTERVIEW WITH CATHERINE VANDENBORRE, CHIEF FINANCIAL OFFICER ELIA

2019, an ambitious year for our growth strategy

Looking at Elia Group's ambitious CAPEX programme, it seems like it might be very challenging to get all the projects financed.

Catherine: "There is ample liquidity on the financial markets and interest in a company like Elia remains high. The primary challenge still lies in delivering critical infrastructure in a timely manner, despite the length of time required to secure permits."

You received the CFO of the Year Award 2019 in recognition of Elia Group's excellent financial performance. What do you think swayed the jury?

Catherine: "This accolade recognises the hard work put in by Elia's entire financial team. We've managed a number of significant transactions in recent years and have thus made a substantial contribution to the company's value. Moreover, Elia has been performing increasingly well for some years now. The jury was looking to honour a financial team that excelled on both the transactional and strategic sides of finance."

The Elia share performed particularly well in 2019. Why do you think that is?

Catherine: "First of all, our peers' share prices followed a similar trend: Elia is not the only utility company to have seen strong share price performance in 2019. However, I also believe that the increase is partly driven by Elia's track record of following through in recent years: we have implemented the investments we announced, and these have translated into strong RAB growth."

> **We've managed a number of significant transactions in recent years and have this made a substantial contribution to the company's value.**
>
> **Catherine Vandenborre**

Elia on the stock exchange

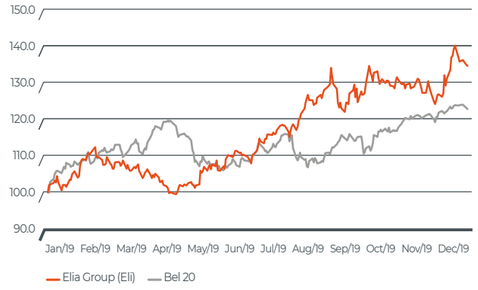
Strong performance of the Elia share, hitting a new record high in 2019. €435 million rights offer fully subscribed.

“I’m delighted that the financial markets subscribed to such a huge extent and once more demonstrated their confidence in the company’s strategy.

Catherine Vandenborre,
Chief Financial Officer Elia

EVOLUTION IN PRICE AND TRADED VOLUMES

EVOLUTION OF THE ELIA SHARE AGAINST THE BEL20 INDEX



51.90%

CONTRIBUTION OF GERMANY TO THE NET PROFIT ATTRIBUTABLE TO THE ELIA GROUP

€ 1.69

GROSS DIVIDEND PER SHARE

Following the completion by the Elia group of its internal reorganisation on 31st of December 2019, the listed company Elia System Operator SA/NV was renamed Elia Group SA/NV.

The Elia group delivered strong financial results over the year supported by the first full year of control and consolidation of 50Hertz, the comissionning of Nemo Link and the realisation of investments in the grid in the interest of society.

2019 was marked by fully susbcribed rights issue of €435 million, marking one of the largest rights issue over the last years on Euronext Brussels. The subscription price for this 1-for-8 rights issue was set at €57.00 per new share, which implied a discount to TERP of 8.03%. The take-up of existing shareholders during the subscription period stood at 92%, highlighting shareholders’ confidence in the group.

The Elia share price, closed the year at a price of €79.10, up 35.7% from €58.30 at the end of 2018. On the 23rd of April 2019 the share price hit a low of €57.77 and recorded a high of €82.40 on 20th of december 2019.The yearly return including the dividend is 40.21% and hereby largely outperforming peers and the BEL 20 Index.

Liquidity of the Elia share increased together with its value from an average of 27.793 shares traded per day in 2018 to 39.559 in 2019.

With 68,652,938 shares outstanding, the company’s market capitalisation stood at €5,430,447,396 at the end of December. In 2019, 10,048,162 Elia shares were traded on the Euronext Brussels market.

Appointment of three liquidity providers for the elia share

Elia concluded liquidity provider contracts with KBC Securities, Bank Degroof and Belfius Bank. These three financial institutions have been continually present in the order book for the Elia share and are involved in both sales and purchases.

Dividend

On 5 March 2020, the Elia Group Board of Directors decided to propose a nominal dividend of €116.0 million, or €1.69 per share (gross) to the general meeting of shareholders of 19 May 2020, in accordance with the dividend policy and subject to approval of the profit appropriation by the annual general meeting of shareholders. This represents an increase in dividend for the fifth consecutive year and an increase of 1.81% compared to 2018.This gives a net dividend of €1.183 per share.

The following paying agents will pay out dividends to shareholders: BNP Paribas Fortis, ING Belgium, KBC and Belfius. Dividend pay-outs for shares held in a stock account will be settled automatically by the bank or stockbroker. Elia Group will pay out dividends on registered shares directly to shareholders.

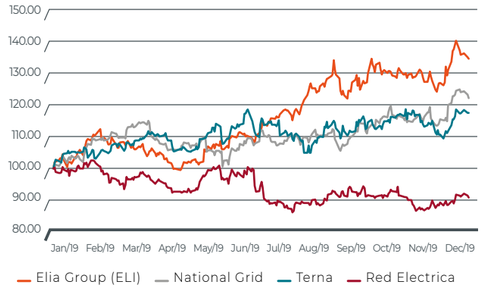
Dividend policy

On March 21, 2019 the Board of Directors formally approved the policy it intends to apply when proposing dividends to the General Shareholder’s Meeting. Under this policy, the full-year dividend growth is intended not to be lower than the increase of the Consumer Price Index (“inflation”) in Belgium. The completed reorganisation of the group has no impact on this dividend policy. The policy supports the group’s long-term ambition to offer a secure dividend in real terms to the shareholders while at the same time enabling the group to sustain a strong balance sheet that is needed to fund the group’s investment program.

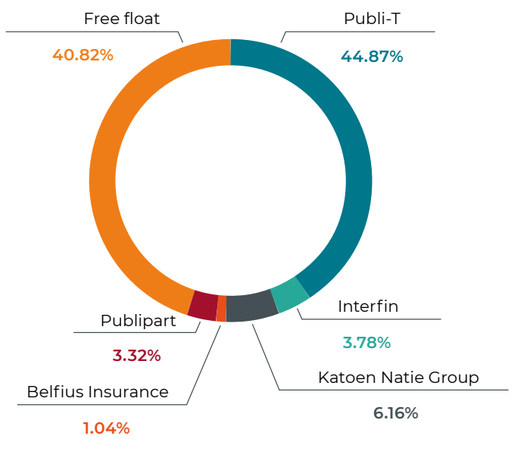
Nevertheless, future dividends will remain dependent upon the results of the group (which are affected by a number of factors, outside the Company’s control) as well as the Company’s financial situation, financing needs (in particular, capital expenditures and investment plan) and business perspectives.

The proposed dividend represents a payout ratio of 45.6% of the IFRS reported profit attributable to owners of ordinary shares.

EVOLUTION OF THE ELIA SHARE AGAINST ITS EUROPEAN COUNTERPARTS



SHAREHOLDER STRUCTURE



FINANCIAL CALENDAR

13 April 2020	Publication Annual Report 2019
19 May 2020	General meeting of shareholders
20 May 2020	Interim statement for Q1 2019
01 June 2020	Payment of 2018 dividend
29 July 2020	Publication of half-yearly results for 2019
25 November 2020	Interim statement for Q3 2019

INVESTORS

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Information about the Group (press releases, annual reports, share prices, disclosures, etc.) can be found on the Elia Group website www.eliagroup.eu.

Key figures

(in million EUR)	2019	2018	2017 (1)	2016	2015
Consolidated results					
Total revenue and other operating income	**2,319**	1,931.8	867.1	868.1	851.4
EBITDA (*)	**930.2**	750.5	455.4	425.0	442.8
Results from operating activities (EBIT) (*)	**569.7**	*502.6*	*324.6*	*295.0*	*336.4*
Net finance costs	**(139.6)**	(93.2)	(76.5)	(82.9)	(92.8)
Income tax	**(121.0)**	(102.2)	(39.6)	(32.0)	(32.9)
Adjusted net result (*)	**306.8**	280.8	203.4	168.0	175.8
Reported net result	**309.1**	307.1	208.5	179.9	210.6
Non-controlling interest	***35.5***	*25.7*	*0.0*	*0.0*	*0.0*
Hybrid securities	***19.3***	*6.2*	*0.0*	*0.0*	*0.0*
Profit attributable to owners of ordinary shares	**254.3**	275.2	208.5	179.9	210.6

(in million EUR)	31.12.2019	31.12.2018	31.12.2017	31.12.2016	31.12.2015
Consolidated balance					
Total assets	**13,893.4**	13,754.3	6,582.3	6,241.5	6.435,6
Equity attributable to owners of the company	**4,022.3**	3,447.5	2,563.3	2,511.4	2.413,6
Equity attributable to ordinary shares	***3,320.9***	*2,741.3*	*2,563.3*	*2,511.4*	*2.413,6*
Hybrid securities	***701.4***	*706.2*	*0.0*	*0.0*	*0.0*
Net financial debt	**5,523.1**	4,605.6	2,689.1	2,557.3	2.583,4

	31.12.2019	31.12.2018	31.12.2017	31.12.2016	31.12.2015
Other key figures					
Regulatory Asset Base (RAB) (bn EUR) (2)	**8.9**	9.2	7.4	7.1	6.7
Dividend per share (EUR)	**1.69**	1.66	1.62	1.58	1.55
Return on Equity (%)	**6.80%**	8.16%	8.14%	7.16%	8.73%
Return on Equity (adj.) (*)	**7.66%**	10.04%	8.14%	7.16%	8.73%
Earnings per share (adj.) (EUR) (*)	**3.91**	4.52	3.42	2.95	3.47
Equity per share (EUR)	**48.4**	44.9	42.1	41.2	39.7
Number of shares (period-end)	**68,652,938**	61,015,058	60,901,019	60,753,714	60,750,239

(*) See the Elia Group Financial Report 2019 for a detailed glossary of definitions.

(1) The Group applies IFRS 15 under the full retrospective method under which comparative figures for financial year 2017 have been restated
(2) The Regulatory Asset Base includes 60% of the RAB of 50Hertz until 2017 and 80% of the RAB as from 2018.

Management report and analysis of the 2019 results

Elia Group realised its ambitious investment program, achieved strong operational and financial results and is ready to realise the next phase of the energy transition bringing maximum welfare to society.

- Grid investments of €723.5 million in Belgium and €488.6 million in Germany to ensure a reliable and sustainable energy system leading to an asset growth of 9.0%
- Good progress in the increase of interconnections capacities with commissioning of Nemo Link
- Adjusted net profit up 9.0% to €306.2 million driven by the timely realisation of investments and solid operational performance
- Realisation of a new corporate structure to increase regulatory transparency and pursue our growth strategy
- Implementation of a Group functional organisation to leverage synergies and improve services to the benefit of consumers
- A dividend of €1.69 per share will be proposed at the General Meeting on 19 May 2020

Elia group

Key figures (in € million)	2019	2018	Difference (%)
Revenue, other income and net income (expense) from settlement mechanism	**2,319.0**	1,931.8	20.0%
Equity accounted investees	**8.3**	65.6	(87.3%)
EBITDA	**930.2**	*750.5*	*23.9%*
EBIT	**569.7**	502.6	13.4%
Adjusted items	***6.0***	*28.1*	n.r.
Adjusted EBIT	***563.7***	*474.5*	*18.8%*
Net finance costs	**(139.6)**	(93.2)	49.8%
Adjusted net profit	**306.2**	**280.8**	**9.0%**
Net profit	**309.1**	**307.1**	**0.7%**
Non-controlling interests	***35.5***	*25.7*	n.r.
Net profit attributable to the Group	**273.6**	**281.4**	**(2.8%)**
Hybrid securities	***19.3***	*6.2*	n.r.
Net profit attributable to owners of ordinary shares	***254.3***	***275.2***	***(7.6%)***
Total assets	**13,893.4**	13,754.3	1.0%
Equity attributable to the owners of the company	**4,022.3**	3,447.5	16.7%
Net financial debt	**5,523.1**	4,605.6	19.9%
Key figures per share	**2019**	2018	Difference (%)
Reported earnings per share (EUR) (Elia share)	**3.91**	4.52	(13.5%)
Return on Equity (adj.) (%) (Elia share)	**7.66**	10.04	(23.7%)
Equity attributable to owners of the company per share (EUR)	**48.4**	44.9	7.8%

1 Reported net profit Elia Group amended with adjusted items linked to the corporate reorganisation and regulatory compensation linked to prior year acquisition.

Results

The comparison of the 2019 and 2018 financial statements is still substantially affected by the Group's acquisition of an additional 20% stake in Eurogrid on 26 April 2018. After that transaction, the consolidation of Eurogrid and its affiliates switched from the equity method, which applied for the first four months of the 2018 financial year, to a full consolidation from the date of the acquisition. Consequently, the 2019 financial statements present a full consolidation of Eurogrid and its affiliates, whereas the 2018 financial statements present four months of figures according to the equity method and eight months using the full consolidation method.

In addition, Nemo Link, a joint venture with National Grid that was commissioned in January 2019 is treated as an equity- accounted investee.

Elia Group's adjusted net profit rose by 9.0% to €306.2 million. This increase was the result of the aforementioned acquisition (and its impact on consolidation), a higher result for Elia Transmission and the contribution by Nemo Link and the lower result in Germany.

Looking at the various segments, we remark an increase of the adjusted net profit in **Belgium** increasing by €7.4 million to €122.3 million and mainly driven by the realisation on the mark-up investments, higher incentives and efficiency and higher capitalised borrowing costs due to the growing asset base. This was offset to a certain extent by a lower equity remuneration due to a decreasing OLO, higher IAS 19 and tax provisions. The tariff compensation for the financial costs linked to the capital increase contributes positively to the result (€6.1 million).

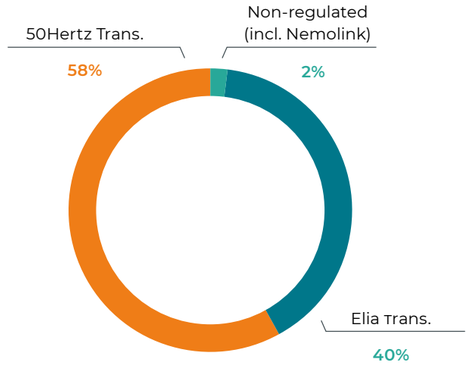
In **Germany**, the adjusted net profit drops by €38.8 million to €177.5 million. This effect is almost entirely attributable to the release of the legal claim easements that occurred in 2018 (down €46.4 million Y-O-Y). The effect from the lower regulatory return with the start of the new regulatory period is almost entirely offset by higher base year revenues and higher capex remuneration. The commission of CWA 1 end 2018, lead to higher depreciation and financial cost.

With Nemo starting operations since end of January, it contributed €6.5 million to the Group result in 2019. Additionally the Group's result benefited from a stronger performance of EGI, partially offset by higher non-regulated financial costs.

Elia Group's reported net profit rose less sharply (by 0.7%) to €309.1 million. Adjusted items totalling €2.9 million were recognised, being mainly related to costs linked to the Group's corporate reorganisation (-€2.2 million), regulatory compensation linked to the acquisition made the previous year (€5.1 million).

Elia Group's **net profit attributable to owners of ordinary shares** (after deducting the €35.5 million in non-controlling interests and €19.3 million attributable to hybrid securities holders) was down 7.6% to €254.3 million as prior year benefited from the release of the major bulk of the easement provision (making a net contribution of €30.9 million in 2018), offset to a certain extent by the timely realisation of investments and a solid operational performance by Elia Group in 2019.

COMPONENTS OF ELIA GROUP'S ADJUSTED NET PROFIT

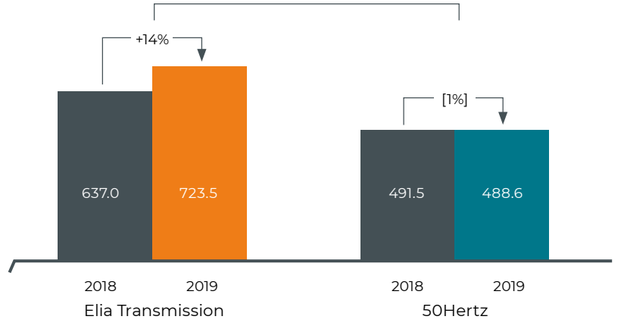


Capital expenditures

By expanding international connections and integrating ever-increasing amounts of renewable energy generation, the Elia Group promotes both the integration of the European energy market and the decarbonisation of our society.

In 2019, the Elia Group invested €723.5 million in Belgium and €488.6 million in Germany to ensure a reliable and sustainable energy system leading to a growth of the Regulatory Asset Base (RAB) of 9.0%.

ELIA GROUP INVESTMENTS IN 2019 TOTALS €1,212 M



Infrastructure work for great interconnectivity

Work on the **ALEGrO** project is making good progress. The first interconnector between Belgium and Germany is being implemented in partnership with the German system operator Amprion and is scheduled for commissioning in 2020. On the Belgian side, work on the cable for the underground HVDC connection and the construction of the converter station in Lixhe, have been completed.

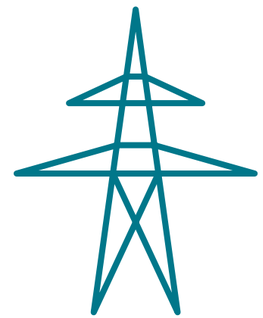
After a 10-year development and construction phase, transmission capacity on **Nemo Link**, the subsea interconnector between Great Britain and Belgium, has been available for purchase by implicit day-ahead auction since 30 January 2019. The cable has a capacity of 1,000 MW and is Elia's first subsea interconnector in Belgium. It is also the country's first high-voltage direct current (HVDC) project.

In the second phase of the **Brabo** project, Elia built the tallest electricity pylons (192 m) in the Benelux countries to span the River Scheldt in the Port of Antwerp. Designed to strengthen the high-voltage grid from 150 kV to 380 kV in and around the Port of Antwerp, the Brabo project is being implemented in three phases between 2016 and 2023.

In August 2019, Elia finalised the **Mercator-Horta** project between Zomergem and Kruibeke. Over the past few years, pylons, foundations and conductors have been replaced to increase the transmission capacity to 380 kV. The Mercator-Horta project is part of the bigger Mercator-Avelin interconnection project that is 110 km long and passes through 25 municipalities before extending into France.

In May 2019, work to replace the first section of the 380 kV overhead line from **Perleberg** to **Wolmirstedt** began. Several construction companies are working simultaneously along the route to ensure rapid progress with its construction and minimise the project's impact on local residents and nature.

In addition, Elia Group is investing in the optimisation of existing assets by integrating new technologies and more advanced system operation concepts. We are focusing on replacing overhead lines by introducing a new type of conductor that can support higher flows, increasing grid capacity in cold and windy weather (Dynamic Line Rating) where appropriate, and finding better ways to control electricity flows via devices such as Phase Shifting Transformers (PST) and High Voltage Direct Current (HVDC) lines.



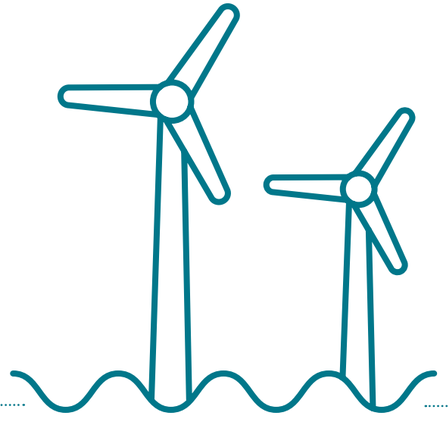
Infrastructure work to integrate offshore wind

The **MOG** is Elia's first power hub in the Belgian North Sea, 40 km off the coast. In September 2019, it was inaugurated in the presence of His Majesty King Philippe of the Belgians. The MOG is a critical link in transmitting the renewable energy generated by offshore wind farms safely and efficiently to the mainland. Bringing together the cables from four wind farms (Rentel, Seastar, Mermaid and Northwester 2) saves 40 km of cable compared to point-to-point connections.

After three years of construction and a total investment volume of ca 1.3 billion euros, the **Ostwind 1** project in the Baltic Sea was finalised. Ostwind 1 connects two offshore wind farms (Arkona and Wikinger) via three 90 km long submarine cables to the Lubmin substation. For the first time, 50Hertz is using 220 kV three-phase AC cables (instead of 125 kV AC). This enables a higher transmission capacity. In April 2019, German Chancellor Angela Merkel attended the inauguration of the Arkona wind farm (E.ON & Equinor).

Meanwhile, 50Hertz is progressing according to schedule on **Ostwind 2**. This project will connect two additional wind farms to the Lubmin substation: Arcadis Ost (Parkwind) and Baltic Eagle (Iberdrola). Both are located 20 to 30 km northeast of the island of Rügen. In October 2019, 50Hertz and Parkwind signed a Memorandum of Understanding (MoU) including specific arrangements for the development, procurement, construction and operation of a joint offshore platform. The corridor for the submarine cables has been explored and contaminated sites cleaned up.

With the **Combined Grid Solution** project, 50Hertz and the Danish grid operator Energinet are realising a worlds' first; connecting the electricity grids of two countries via offshore wind farms. In 2019, submarine cables were installed between the offshore substation of the wind farms Baltic 2 and Kriegers Flak (see illustration 3). The electrical installations at sea are now ready for operation. The renewable energy generated by the wind turbines will always have priority. Free capacity from the connecting line can be used for electricity trading between both countries.



NET DEBT & CREDIT METRICS

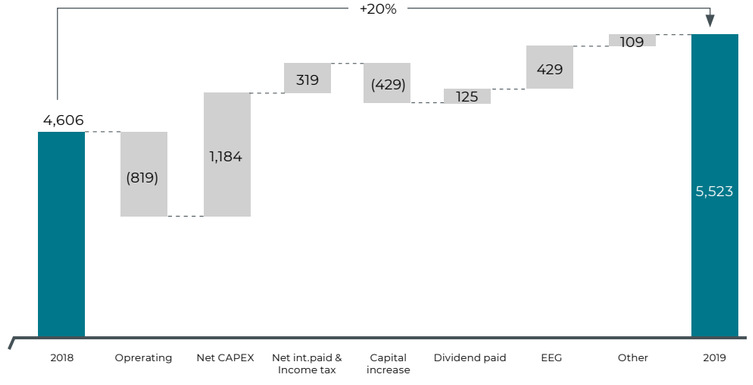
(in € million)	2018	2019
Net debt	4,605.6	5,523.1
Leverage (D/E) (incl. NCI & hybrid))	1.71x	1.5x
Net debt / EBITDA	6.1	5.9
EBITDA / Gross interest	6.5	6.4
Average cost of debt	2.30%	2.13%
% fixed of gross debt	94.39%	96.8%

Net financial debt increased to €5,523.1 million (up 19.9%), driven by the Group's investment programme totalling €1.2 billion in 2019. In Belgium, net debt rose by €188.3 million with organic growth financed by the cash flow from operating activities and proceeds from the capital increase. For Germany, the financing of the investment programme and EEG's lower cash position (down €429.0 million) led to a rise in net debt (up €835.1 million).

Besides a €434.8 million capital increase, Elia Group also accessed the debt capital market in 2019. Early 2019, Elia Transmission benefited from favourable market conditions to manage its liquidity position and lower its average cost of debt (dropped by 17bps), successfully refinancing a €500 million Eurobond at a significantly lower coupon, to the benefit of society. Eurogrid issued no external debt in 2019.

Elia Group's rating by S&P remained unchanged at BBB+ with stable outlook. Eurogrid GmbH also carries a BBB+ rating with stable outlook, while the bonds of Elia Transmission Belgium are rated BBB+ aswell.

2019 NET DEBT EVOLUTION



Elia Transmission in Belgium

Elia Transmission key figures (in € million)	2019	2018	Difference (%)
Revenues, other income and net income (expense) from settlement mechanism	**948.8**	959.4	(1.1%)
Revenues	***914.2***	*908.1*	0.7%
Other income	***60.7***	*57.2*	*6.1%*
Net income (expense) from settlement mechanism	***(26.1)***	*(5.9)*	*n.r.*
Equity accounted investees	**1.8**	1.8	n.r.
EBITDA	**394.8**	369.1	7.0%
EBIT	**243.9**	228.9	6.6%
Adjusted items	***4.7***	*0.0*	*n.r.*
Adjusted EBIT	**239.2**	228.9	4.5%
Net finance costs	**(64.4)**	(65.4)	(1.5%)
Income tax expenses	**(54.4)**	(48.6)	11.9%
Net profit	**125.0**	114.9	8.8%
Adjusted items	*2.7*	*0.0*	*n.r.*
Adjusted net profit	**122.3**	*114.9*	*6.4%*
Total assets	**6,452.1**	5,909.2	9.1%
Total equity	**2,157.5**	1,757.1	22.8%
Net financial debt	**3,013.4**	2,825.1	6.7%
Free cash flow	**(444.9)**	(263.3)	68.9%

Elia Transmission's total revenues decreased to €948.8 million, 1.1% down on the previous year. Revenues were impacted by higher depreciations, higher financial costs linked to the capital increase and the bond consent process for the corporate reorganization and higher taxes however are fully offset by lower costs for ancillary services and lower regulated net profit, which are all passed through into revenue to the benefit of consumers.

EBITDA (up 7.0%) and **EBIT** (up 6.6%) were mainly affected by higher depreciations attributable to the growing asset base, higher financing costs and higher current taxes to be passed on in tariffs. These increases were partly offset by a slightly lower regulated net profit. The contribution of equity-accounted investments (HGRT, Ampacimon and Coreso) remained flat at €1.8 million.

Net finance costs dropped by €1.0 million (down 1.5%) compared to the previous year. Early in 2019, Elia took advantage of supportive market conditions to manage its liquidity position by refinancing a €500 million bond that matured in May 2019, and thereby significantly reduced its average cost of debt, to consumers' benefit. This was partially offset by a full year of interest charges linked to a €100 million EIB loan drawn in the last quarter of 2018 and lower interest income on cash advances provided to Nemo Link during the construction phase, because Nemo Link interconnector was commissioned at the beginning of 2019. The push-down of regulated debt from Elia System Operator to Elia Transmission Belgium as part the Group's corporate reorganisation (Adjusted item), generated financial charges totalling €4.7 million. As the bank and consent fees are spread over the maturity of the various bonds under IFRS, the net financial costs recognised for regulated debt in 2019 totals to €0.9 million.

Elia Transmission achieved strong results, with an **adjusted net profit** of €122.3 million (up €7.4 million) driven mainly by the realisation of mark-up investments since the start of the tariff period in 2016 (up €6.2 million), the strong operational performance on incentives (up €4.9 million) and higher capitalised borrowing cost linked to the growing asset base (up €2.2 million). These impacts were offset to some extent by the lower average OLO compared to 2018, impacting equity remuneration (down €5.5 million), higher IAS 19 and tax provisions (down €4.1 million) and slightly more damages to electrical installations (down €1.4 million). The result also benefitted from a one-off tariff compensation for the financial costs linked to the capital increase (up €6.1 million) and accounted through equity under IFRS.

Net profit increased by a more pronounced 8.8% to €125.0 million due to tariff compensations for the financial costs linked to the push-down of regulated debt to ETB as part of the corporate reorganisation and amortised under IFRS.

Total assets increased by €542.9 million to €6,452.1 million, mainly as a result of the investment programme.

50Hertz Transmission in Germany

50Hertz Transmission key figures (in € million)	2019	2018	Difference (%)
Total revenue and other income	1,360.1	1,364.9	(0.4%)
Revenue	*1,323.6*	*1,403.6*	*(5.7%)*
Other income	*84.1*	*67.4*	*24.8%*
Net income from settlement mechanism	*(47.6)*	*(106.1)*	*(55.1%)*
EBITDA	530.5	475.0	11.7%
EBIT	321.3	385.4	(16.6%)
Adjusted items	0.0	30.6	n.r.
Adjusted EBIT	321.3	354.8	(9.4%)
Net finance costs	(65.3)	(45.6)	43.2%
Income tax expenses	(78.6)	(101.9)	(22.9%)
Net profit	177.5	237.9	(25.4%)
Of which attributable to Elia Group	142.0	169.2	(16.1%)
Adjusted items	*0.0*	*21.6*	*n.r.*
Adjusted net profit	177.5	216.3	(17.9%)
Total assets	6,279.6	6,752.1	(7.0%)
Total equity	1,546.5	1,491.8	3.7%
Net financial debt	2,108.1	1,272.9	65.6%
Free cash flow	(656.8)	278.7	(335.7%)

50Hertz Transmission's total revenues and other income are stable compared to last year (down 0.4%). With the start of a new regulatory period in 2019, the regulatory return on equity dropped from 9.05% to 6.91% before tax, but this decrease was mainly offset by asset growth. Furthermore, the offshore remuneration scheme changed and is now remunerated via a separate offshore surcharge. Although the asset growth and updated Opex revenue base positively impacted the remuneration the turnover dipped due to the lower regulatory return on equity. Moreover the new offshore surcharge leads to decreased pass-through third-party revenues for the offshore business.

Although the new regulatory period is marked by a lower regulatory return on equity, the **EBITDA** increased by €55.5 million (up 11.7%). With the start of the new regulatory period, the completed onshore investments measure projects have rolled over to being remunerated via the Base Year Mechanism. Together with the decrease of the regulatory return on equity from 9.05% to 6.91%, the remuneration for investment measures dropped (down €64.7 million). However this decrease was more than offset by higher revenues from the Base Year mechanism (up €100.4 million) as firstly completed onshore investment projects are now remunerated via the Base Year and secondly the OPEX revenue base was updated at the beginning of the new regulatory period. Despite the drop in regulatory return on equity, the offshore investment remuneration increased driven by the asset growth and the successful commissioning of Ostwind 1 last year (up €15.7 million). Personnel costs increased compared to the same period last year, following continuous business growth (down €8.2 million) leading as well to higher own work capitalised (up €2.6 million). Finally, EBITDA was also impacted by the treatment of leasing costs with the adoption of IFRS 16 (up €7.6 million) and higher other revenues, e.g. from damage claim payments (up €1.5 million).

EBIT dipped by €64.1 million (down 16.6%) due to the release of a large portion of the easement claim provision in 2018 (€72.1 million) following a re-assessment after a tax audit. A further portion was released in 2019, amounting to €5.9 million pre-tax (down €66.2 million). Depreciations increased (down €53.7 million), mainly as a result of commissioning the first cables and platform of Ostwind 1 in December 2018 (€36.5 million) and due to the depreciation component of leasing as per IFRS 16 (€6.9 million).

Excluding the impact of the major release of the easement provision in 2018, the **EBIT** would have increased (up 13.7%), attesting to the strong operational performance of 50Hertz despite the drop in regulatory return on equity with the start of the third regulatory period.

50Hertz Transmission (Germany) (on a 100% basis) recorded an **adjusted net profit** of €177.5 million. The lower result (down €38.8 million) is almost fully attributable to the release of the legal claim easement provision that occurred in 2018 (down €46.4 million). Moreover the regulatory return on equity (RoE) decreased (from 9.05% to 6.91% pre-tax) when the new regulatory period began, though this drop was partly compensated by asset growth and an updated revenue base for that period. In combination with the roll-over of completed onshore projects to the base year, the Base Year revenues increased (up €70.7 million) while the onshore investment remuneration for investment measures decreased (down €45.5 million). The offshore investment remuneration increased (up €34.5 million) following the commissioning of Ostwind 1 in late 2018. Finally, the result was also impacted by higher depreciations (down €37.8 million) linked to the ongoing investment programme and higher financial costs (down €13.9 million).

Total assets were €472.5 million down on the year-end total in 2018, mainly due to a reduction in EEG cash (down €429.0 million). In 2019 there was also a negative **free cash flow** of €656.8 million, including €429.0 million associated with the EEG mechanism. No new debts were issued in 2019. **Net financial debt** rose by €835.1 million mainly due to the financing of the ongoing investment programme and the high EEG cash-out. The EEG cash position as at December totalled to €430.5 million.

Non-regulated activities & Nemo Link

Non-regulated activities & Nemo Link key figures (in € million)	2019	2018	Difference (%)
Total revenue and other income	**20.7**	13.9	48.9%
Equity accounted investees	**6.5**	0.3	n.r.
EBITDA	**4.8**	(7.9)	(160.8%)
EBIT	**4.5**	(8.9)	(150.6%)
Adjusted items	***1.3***	(3.3)	n.r.
Adjusted EBIT	**3.2**	(5.6)	(157.0%)
Net finance income	**(9.9)**	1.3	(861.5%)
Net profit	**6.6**	(3.5)	(288.6%)
Of which attributable to Elia Group	***6.5***	*(2.8)*	*(332.1%)*
Adjusted items	***0.2***	*4.3*	*(94.9%)*
Adjusted net profit	**6.4**	*(7.8)*	*(182.0%)*
Total assets	**1,733.5**	1,677.9	3.3%
Total equity	**1,207.5**	1,052.7	14.7%
Net financial debt	**401.6**	507.6	(20.9%)

Non-regulated revenue increased by 48.9% compared to 2018. EGI's revenue rose by €3.0 million to €12.5 million on the back of stronger owner's engineering services and the expansion of international consulting activities. In addition, one-off regulatory compensation linked to the prior year acquisition totalling €3.8 million was recognised.

As an equity-accounted investment, **Nemo Link** contributed €6.5 million to the Group's result in its first year of operation. The interconnection was commissioned in late January 2019. Since then, 5.6 TWh of commercial flows have been exchanged between Belgium and the UK. The interconnector's overall availability was 95.8%, but since Q4 2019, it has been 100%. Despite this high availability, Nemo Link's performance throughout the year was impacted by low spreads of the electricity commodity price, driven by higher CO2 prices in continental Europe and low gas prices in the UK. Higher-than-planned curtailments also affected revenues from Nemo Link during the first half of 2019. Throughout the lifetime of the project, Nemo Link will be exposed to volatility in the market spread of the electricity commodity price.

Adjusted EBIT increased to €3.2 million. The €8.8 million increase in adjusted EBIT compared to last year is mainly due to the contribution of Nemo Link (€6.5 million), a higher operational result for EGI (up €0.6 million) and lower non-regulated costs. Taking into account one-time costs linked to the reorganisation of the corporate structure (down €2.5 million) and a regulatory compensation (up €3.8 million), EBIT totals €4.5 million.

Net finance costs increased to €9.9 million, primarily as a result of a full year of interest charges linked to the €300 million non-regulated senior bond contracted during the second half of 2018 to finance the acquisition of an additional stake in Eurogrid (€4.7 million). The corporate reorganisation of the Group resulted in a one-off consent fee (€4.3 million) paid to noteholders for the aforementioned non-regulated bond and generated other financial costs amounting to €0.2 million. The financing of Nemo Link incurred a net financial cost of €0.5 million due to higher financial costs linked to the €210 million take out financing concluded at the end of 2018 and partly offset by interest income on cash advances to Nemo Link during the construction phase. Following the rights issue at the end of June, these cash advances were reimbursed and Nemo Link became financed in a manner similar to the current regulatory framework in Belgium (33% equity / 66% debt). Finally, the previous year's financial result benefited from adjusted items linked to the aforementioned acquisition, being a one-off financial gain (€9.2 million) linked to the remeasurement to fair value of the Group's initial 60% shareholding in Eurogrid and offset to some extent by costs for the unwinding of the hedge linked to the hybrid bond (€3.2 million).

The **non-regulated and Nemo Link segment**, posted an **adjusted net profi**t of €6.4 million, driven by the commissioning of Nemo Link in 2019 (€6.5 million) and a positive contribution from EGI (€0.1 million). Furthermore, the deductibility of the interest charges linked to the aforementioned acquisition, being a one-off financial gain (€9.2 million) linked to the remeasurement to fair value of the Group's initial 60% shareholding in Eurogrid and offset to some extent by costs for the unwinding of the hedge linked to the hybrid bond (€3.2 million).

Total assets increased by €55.6 million to €1,733.5 million driven by the capital increase of which €107.8 million was allocated to the non-regulated segment to finance Nemo Link and was offset by the contribution of non-regulated activities in the 2018 dividend payment. Consequently, **net financial debt** decreased by €105.9 million to €401.6 million.

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Adjusting items - reconciliation table

(in € million) - Period ended 31 Dec. 2019	Elia Transmission	50Hertz Transmission (100%)	Non-regulated & Nemo Link (100%)	Consolidation entries	Elia Group
Adjusted items					
Regulatory compensation for acquisition	0.0	0.0	3.8	0.0	3.8
Corporate reorganisation	4.7	0.0	(2.5)	0.0	2.2
Adjusted items EBIT	**4.7**	**0.0**	**1.3**	**0.0**	**6.0**
Corporate reorganisation fin. cost	(0.9)	0.0	(4.5)	0.0	(5.4)
Adjusted items before tax	**3.8**	**0.0**	**(3.2)**	**0.0**	**0.6**
Tax impact	(1.1)	0.0	3.4	0.0	2.3
Net profit – Adjusted items	**2.7**	**0.0**	**0.2**	**0.0**	**2.9**

(in € million) - Period ended 31 Dec. 2018	Elia Transmission	50Hertz Transmission (100%)	Non-regulated & Nemo Link (100%)	Consolidation entries	Elia Group
Adjusted items					
Regulatory settlements prior year	0.0	(2.8)	0.0	1.4	(1.4)
Equity consolidation 50Hertz (60% net profit)	0.0	0.0	0.0	(0.6)	(0.6)
Offshore commissioning	0.0	33.3	0.0	0.0	33.3
Energy bonuses	0.0	0.1	0.0	0.0	0.1
Eurogrid acquisition costs	0.0	0.0	(3.3)	0.0	(3.3)
Adjusted items EBIT	**0.0**	**30.6**	**(3.3)**	**0.8**	**28.1**
Financial acquisition cost	0.0	0.0	(3.8)	0.0	(3.8)
Revaluation participation Eurogrid	0.0	0.0	9.2	0.0	9.2
Adjusted items before tax	**0.0**	**30.6**	**2.1**	**0.8**	**33.5**
Impact tax reform on deferred tax	0.0	0.0	0.0	0.0	0.0
Tax impact	0.0	(9.0)	2.2	(0.4)	(7.3)
Net profit – Adjusted items	**0.0**	**21.6**	**4.3**	**0.4**	**26.3**

Adjusted items totalling €2.9 million were recognised in 2019, being mainly related to costs linked to the Group's corporate reorganisation (-€2.2 million) and regulatory compensation linked to the acquisition made the previous year (€5.1 million).

Reporting parameters

Registered office

This report is limited to Elia System Operator and Elia Asset, which operate as a single economic entity under the names Elia and 50Hertz Transmission.

The registered office of Elia System Operator and Elia Asset is located at
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The registered office of Eurogrid International is located at
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Reporting period

This annual report covers the period from 1 January 2019 to 31 December 2019.

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Ce document est également disponible en français.
Dit document is ook beschikbaar in het Nederlands.

We would like to thank everyone who contributed to this annual report.

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Ready to accelerate

Sustainability Report 2019

Contents

About this report 2

1. Elia Group 4

1.1. Introduction 6
1.2. Elia Group Companies 7
1.3. Policies 9

2. Elia in Belgium 14

2.1. Grid 16
2.2. Sustainability Management 18
2.3. Energy – Market and integration of renewables 23
2.4. Grid reliability 26
2.5. Human Resources 27
2.6. Safety 31
2.7. Suppliers, human rights and local added value 33
2.8. Stakeholder Engagement 35
2.9. Environmental aspects 38

3. 50Hertz in Germany 44

3.1. Grid 46
3.2. Sustainability Management 48
3.3. Energy – Market and integration of renewables 53
3.4. Grid reliability 55
3.5. Human Ressources 56
3.6. Safety 60
3.7. Suppliers, human rights and local added value 61
3.8. Stakeholder Engagement 63
3.9. Environmental aspects 66

About this report

Elia Group's Annual Report 2019 consists of three parts: the Activity Report, the Sustainability Report and the Financial Report where we inform our stakeholders about our company, corporate social responsibility, and financial results. You are currently reading the Sustainability Report.

Please visit

www.eliagroup.eu/publications

to consult parts one and three.

2019 Sustainability Report

In this report, Elia Group provides information on the economic, environmental and social impacts caused by its everyday activities. We also give insight into our values and governance model, and demonstrate the link between our strategy and our commitment to a sustainable global economy.

The Sustainability Report concerns regulated information, published on 13 April 2020 after trading hours.

GRI Standards : Core option

This report has been prepared in accordance with the GRI Standards, the first global best practice for reporting publicly on a range of economic, environmental and social impacts.

The applicable GRI-Standards performance indicators are highlighted in the report wherever Elia Group has reported on economic, environmental or social impacts. Consult the GRI Content Index on page 73 for a full overview.

The online references in this report provide more in-depth information on a subject by way of video, brochure or webpage.

1. Elia Group

1.1. INTRODUCTION 6
1.2. ELIA GROUP COMPANIES 7
1.3. POLICIES 9

1.1. Introduction

Elia Group consists, amongst others, of transmission system operators (TSO's) Elia (Belgium), 50Hertz (North & East of Germany) and the joint consultancy company Elia Grid International (worldwide).

Together Elia and 50Hertz operate 19,271 km of high-voltage connections that supply power to 30 million end users. As such, our group is one of Europe's top 5 TSOs. With a reliability level of 99.99%, we provide society with a robust power grid.

Elia Grid International (EGI) provides consultancy services in asset management, power system operations and security, system and market operations, owner's engineering and investment advice to international clients.

More information on Elia Group can be found in the Activity Report 2019 on pages 12-13.

This Sustainability Report provides transparency on Elia Group's Sustainability performance and describes the integration of sustainability in our Elia's Group strategy.

As TSO's, Elia and 50Hertz lead the way in the energy transition. We have a crucial role to play in the decarbonisation of the energy sector and society in general through the integration of increasing volumes of renewable energy in the electricity system.

This report combines information from Elia and 50Hertz and provides integrated data and facts where possible. It thereby continues a path of increasing professionalism and alignment in our sustainability reporting:

50Hertz started in 2016 with the German sustainability codex (DNK) based on GRI standards.

Elia followed in 2017 using the following international sustainability standards to identify a number of relevant topics with the goal of creating a robust sustainability programme:

- Global Reporting Initiative (GRI) - sector supplement Electric Utilities
- Sustainability Accounting Standards Board (SASB) - Infrastructure Standards – Electric Utilities
- ISO 26000 standards

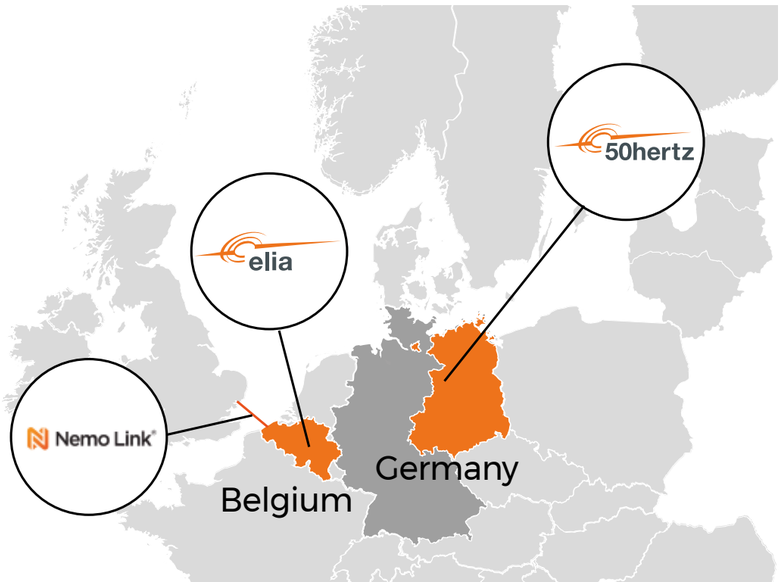
Since 2018, we have evolved in the alignment of reporting methods linking Elia with 50Hertz. The Global Reporting Initiative (GRI) provides the framework and both companies report in accordance with the GRI Core Standard. Efforts to deliver a joint sustainability report in the future will continue. As from this year, we are pleased to say that both the structures and GRI disclosures are similar for both entities. This goes naturally hand in hand with a continuous improvement in sustainability performance.

In addition to this, we are also working towards building up the number of joint initiatives between the two TSO's.

In 2019, Elia and 50Hertz have once again improved their sustainability rating. In the latest edition of the Sustainalytics Environment, Social and Governance rating report, they scored respectively 74 points (Elia) and 79 points (50Hertz) out of 100 earning them 'outperformer' status.

GRI 102-14

> **Our main priority is to make the energy transition a reality. We fully support the European Green Deal's ambitions to make Europe the first climate-neutral continent by 2050. We are trying to accelerate the implementation of our extensive multi-year programme, while keeping within budget and maintaining the required quality. We are also examining our own activities. Without compromising the safety of our workforce and the grid, we are making our processes more sustainable and aim to be completely climate neutral by 2040. As a company providing a service for society, we have a duty to set an example in this regard.**
>
> **Chris Peeters, CEO Elia Group**



1.2. Elia Group Companies

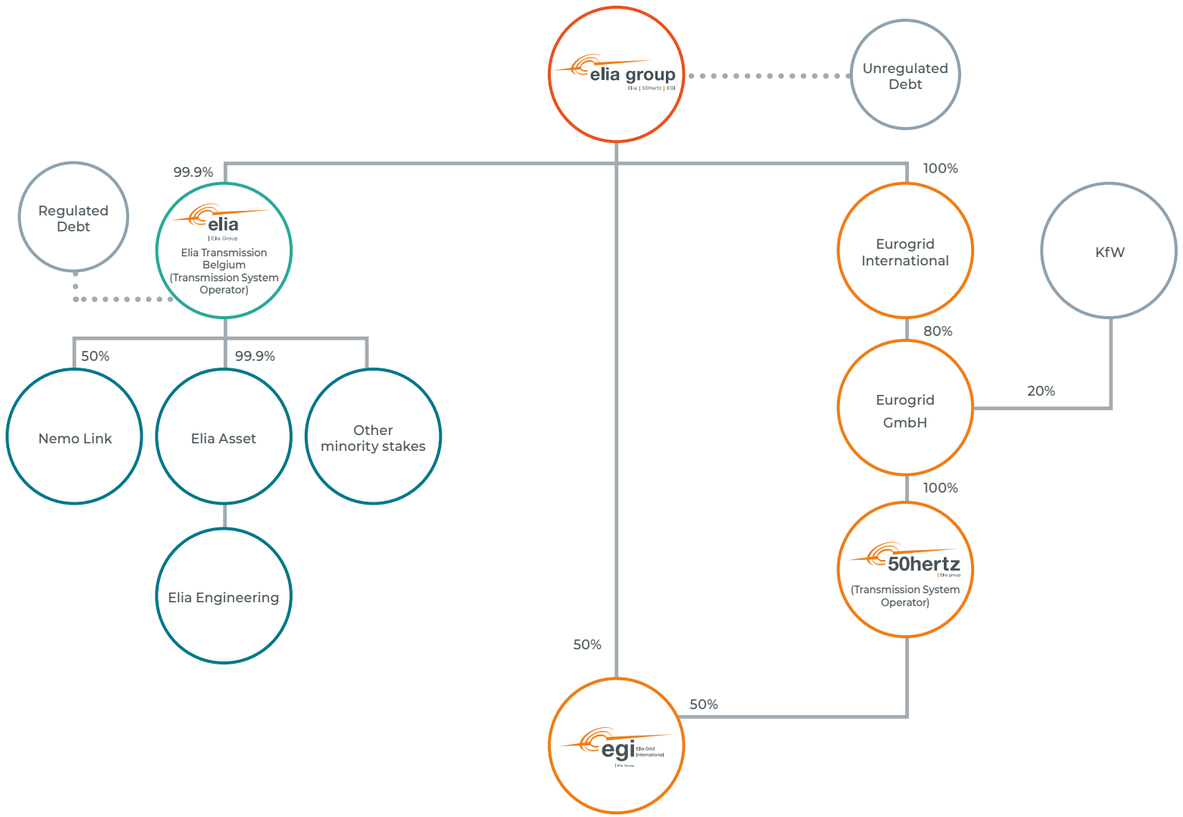
GRI 102-5

Elia Group acts as a holding company owning Elia Transmission Belgium (Belgian TSO), Eurogrid International (comprising the activities of 50Hertz, the German TSO) and Elia Grid International (the Group's international consultancy branch). Its main shareholder is the municipal holding Publi-T. Elia Group (formerly Elia System Operator SA/NV) is listed on the regulated market of Euronext Brussels, since June 2005.

Further information on page 148 of the Activity Report 2019.

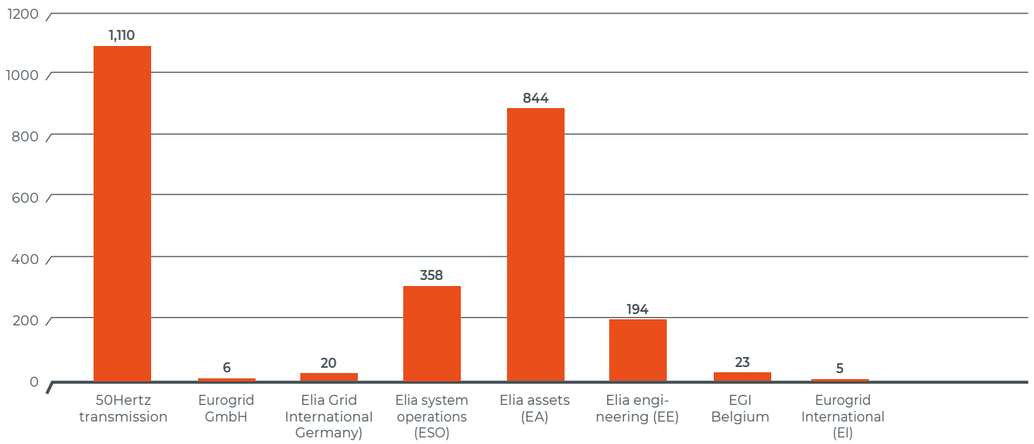
Any reference to **Elia** hereunder includes the following companies: Elia Assets (EA), Elia Transmission Belgium (ETB, formerly Elia System Operator – ESO) and Elia Engineering (EE).

Any reference to **50Hertz** hereunder includes the following companies: 50Hertz Transmission and 50Hertz Offshore.



1.2.1. Breakdown by company and number of employees

GRI 102-1



1.2.2. Composition of the workforce

GRI 102-8, GRI 102-41, GRI 405-1, GRI 102-7

		2017	2018	2019
Belgium	**Total employees Elia Group**	2,385	2,441	**2,560**
	Total employees Elia	1,350	1,366	**1,424**
	by gender			
	– men	1,094	1,105	1,150
	– women	256	261	274
	by responsibility level			
	director	8	8	8
	senior manager	33	29	33
	direct leader	510	540	577
	white collar	799	789	806
	blue collar	0	0	0
Germany	**total employees 50Hertz**	1,035	1,075	**1,136**
	by gender			
	– men	817	833	869
	– women	218	242	267
	by responsibility level			
	director	6	6	4
	senior manager	40	40	43
	direct leader	93	80	81
	white collar	896	949	1,012
	blue collar	0	0	0

Belgium represents 56% of Elia Group workforce while Germany represents 44%.

Overall, 21% of Elia Group's employees are female. For direct leaders and above, 21% of Elia Group's leaders are female.

In 2019, all of German and Belgian employees were covered by collective bargaining agreements.

N.B. All technicians of the group being considered as white-collar workers, there are no blue-collar workers.

1.3. Policies

1.3.1. Values, principles, standards and code of conduct

GRI 102-16, GRI 102-17, GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32GRI 102-33, GRI 205-1

The 6 building blocks and the 6 aspirational values of Elia Group are described in the Activity Report 2019 on pages 92-93. They reflect fundamental principles that are deeply rooted within Elia Group.

Those values are also the basis of our **Code of Ethics**, guidelines and policies underlying all the Elia Group's activities.

Elia Group's integrity and ethics are a crucial aspect of our internal control environment. The Management Committee and management regularly communicate about these principles in order to clarify the mutual rights and obligations of the company and its employees. These rules are disseminated to all new employees, and compliance with them is formally included in employment contracts. The Code of Ethics as well as the guidelines also helps to prevent employees from breaching any legislation on the use of privileged information or market manipulation and suspicious activities. Management consistently ensures that employees comply with internal values and procedures and – where applicable – take any actions deemed necessary, as laid down in the company regulations and employment contracts.

The Code of ethics, guidelines and policies define what Elia Group regards as correct ethical conduct and sets out a number of principles on the avoidance of conflicts of interests. Acting honestly and independently with respect to all stakeholders is a key guiding principle for all of our employees. Elia's Code of Ethics expressly states that the Group prohibits bribery in any form, misuse of prior knowledge and market manipulation. Elia Group and its employees do not use gifts or entertainment to gain competitive advantage. Facilitation payments are not permitted by Elia Group. Disguising gifts or entertainment as charitable donations is also a violation of the Code of Ethics. Moreover, the Code of Ethics prohibits all forms of racism and discrimination, promotes equal opportunities for all employees, and ensures the protection and confidential use of IT systems.

All parties involved in procurement must abide by Elia Group's Supplier Code of Conduct and all associated regulations. Elia Group's **Supplier Code of Conduct** is published internally and externally and is based on four pillars: confidentiality, non-discriminatory treatment of suppliers, transparency, and avoidance of conflicts of interest. The management of the employees involved in the procurement and payment processes regularly provides opportunities for training and awareness-raising on these topics.

By virtue of its legal status as an electricity transmission system operator, Elia and 50Hertz are subject to a large number of statutory and regulatory rules setting out three fundamental principles: non-discriminatory conduct, confidential processing of information, and transparency towards all electricity market players as regards non-confidential market information. With a view to meeting these specific obligations,

Elia has drawn up an Engagement Program, which has been approved by the Corporate Governance Committee. The Compliance Officer reports annually to the relevant regulatory and corporate bodies in this regard.

Any violations of these codes can be reported to the Compliance Officer, who handles them objectively and confidentially. The Compliance Officers of Elia and 50Hertz declare that no such violations were reported by internal employees or external stakeholders in 2019. Internal Audit's annual programme includes a number of actions and verification audits designed to act as specific safeguards against fraud. Any findings are systematically reported to the Audit Committee. In 2019, no relevant findings relating to fraud were reported in the specific audit-reviews of the fraud risks in the financial and purchasing processes.

Moreover, during the reporting year the group did not receive any significant fines or non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area.

GRI 419-1

Moreover, during the reporting year the company did not receive any significant fines or non-monetary sanctions for non-compliance with laws and/or regulations in the social and economic area.

1.3.2. Joint projects

We are convinced that a stronger cooperation between our two TSOs will make all entities more fit-for-future, unlock additional potential, create value, safeguard long-term sustainability and enrich the Group's culture. To realise this common ambition, we are reinforcing the collaboration on different levels and in different activities by establishing Group functions and a new Elia Group Committee.

Elia Group has set up the Elia Group Committee (EGC). Its role is to define and steer the development of Elia Group effectively and efficiently by formulating recommendations to the Executive Committees of the two TSOs in the domains covered by Group functions covered by Group functions such as Reputation.

1.3.3. Sustainability ambitions at group level

GRI 102-15, 102-29

In 2019, we launched internally the **Sustainability initiative** with the aim of better embed sustainability into our strategy and processes.

Sustainability initiative (Ambitions)

The fight against climate change is one of the biggest challenges humanity faces in the 21st century. Elia Group is assisting in the move towards a decarbonised society by facilitating the energy transition. In line with our Vision 'A successful energy transition for a sustainable world', Elia Group is actively building the grid, systems and markets that will enable the **decarbonisation of our society**. We believe that this should be our highest priority, as it will not only help society, but also drive our organic growth now and in the future.

We have to choose our actions and prioritize the allocation of our resources so that we can maximize our impact in facilitating and **accelerating the energy transition**.Where can our expertise make a real difference for the realization of energy transition? By the realization of infrastructure projects integrating renewables definitely but also by acting as facilitator on further electrification (e.g. sector coupling) or by giving the customer direct access to the benefits of the energy transition (e.g. Internet of Energy). Also **digitalization of our business** by integration of blockchain, artificial intelligence, etc. enables us to better anticipate the context of the energy transition and to maintain and even increase the service level to the customer.

In order to make our impact on energy transition (CO_2 reduction) more explicit in the choices we make and the priorities we set, we are developing a methodology to assess impact on our portfolio of projects (capex and corporate).

The company's own corporate sustainability profile needs to be in line with the above mentioned ambition. The Group therefore aims to be among the **top European TSOs** with respect to sustainability performance. As a TSO serving society, our commitment to sustainability and performance is crucial in order to be credible and resilient. For Elia Group, environmental protection and the conservation of resources is an integral part of our culture and strategy.

Therefore Elia Group defined **5 lighthouses projects** integrated into his strategy linked to the most impactful SDGs.

CLIMATE CHANGE

- Reduce CO_2 emission intensity (tCO_2e/GWh transported) by 42% (2°C target)
- Become carbon-neutral on our own operations
- Maintain leading position in SF_6 insulation gas leak rate
- Aspire to an SF_6-free grid

CIRCULAR ECONOMY

- Integrate eco-design and recycling requirements of our assets beyond compliance (pylons, transformers)
- Improve biodiversity towards 100% of our lines in forests
- Regenerate vegetation around substations and under pylons
- Zero tolerance on herbicides in substations

HEALTH & SAFETY

- Safety culture (zero fatalities)

HUMAN RESOURCES

- Be recognized as a company valuing and promoting diversity and inclusion

ETHICS

- Zero tolerance towards ethical breaches

In parallel to this, we launched an analysis to better understand our impact in terms of Sustainable development goals (SDG's). The results are described hereunder.

Sustainable Development Goals

As already in 2018, the Elia Group had decided to widen its view on sustainable business management and to integrate the Sustainable Development Goals (SDG) into a sustainability framework. In a first step, 11 of the 17 internationally valid sustainability goals were identified and clustered from top and high to medium priority.

In order to better understand the risks and opportunities that SDGs present for their own business activities, 50Hertz and Elia launched a quantitative assessment along the value chain in the 2019 reporting year. This allowed the 2018 perspective, which only took into account their own operations, to be fundamentally expanded. The science-based approach of the S&P Global consulting subsidiary Trucost was assigned for the analysis. The internal prioritisation was completely confirmed by the analysis (for the highest priority) and also largely confirmed for the high priority.

What are the Sustainable Development Goals?

In 2015, the international community of states represented by the United Nations has agreed 17 goals for sustainable development.

Within the context of Agenda 2030, these global goals, which apply equally to all states, are intended to reduce inequalities, promote equal opportunities and stimulate sustainable economic growth.

All - governments and companies alike - are called upon to meet this challenge, but also to focus on opportunities and risks and tap the potential of sustainability.

Opportunities

Risks

The Elia Group has a strong, positive influence on SDG 7 "Affordable and Clean Energy" with its business model of increasingly integrating sustainable energies into the grids. At the same time, this also creates positive influences that lead to sustainable cities and communities (SDG 11). The Group contributes to a good employment situation and stable growth in the various regions of its grid areas, thus strengthening SDG 8 "Decent Work and Economic Growth". Overall, Elia Group's business activities and revenues contribute 100% positively to SDGs.

This positive influence is offset by both opportunities and risks, the alignment of which with the corporate strategy is carefully examined. These include, for example, more intensive investigation of the effects of climate change and other related risks on the Group's own business activities and those of the supply chain.

Materiality matrix

GRI 102-15, GRI 102-46, GRI 102-47, GRI 103-1

End 2019, beginning 2020 a survey was launched within 50Hertz and Elia to determine themes material for Elia Group.

The materiality matrix determines the relevant sustainability topics for the Elia management and stakeholders and was prepared with the department heads from Elia Group.

In a subsequent phase, this materiality matrix will be used as a basis for engaging with external stakeholders.

In a comprehensive approach, the respective stakeholder groups, their concerns and relevant/important topics were identified and clustered in a matrix. The so-called materiality matrix determines the relevant topics on which Elia has economic, environmental and social impacts and their influence on our stakeholders.

A survey was conducted within Elia Group, all the senior managers and directors had to answer.

A second survey for our external stakeholders will be launched in 2022.

Business and economic issues

- Cost and process efficiency
- Network availability and reliability
- System and market integration of RE
- Demand-driven grid development
- Sustainable/green financing
- Internationalisation and diversification

Corporate Governance/Operating practices

- Corruption and bribery
- Business ethics
- Customer orientation and satisfaction
- Legal and regulatory environment
- Transparency and openness
- Risk management

Labor practices/Employees

- Human development and training in the workplace
- Conditions of work and social protection
- Social dialogue and employee relations
- Employee health, safety and wellbeing at work
- Diversity and equal opportunities
- Recruitment strategy and talent acquisition

Environment

- Environmental Management System
- Waste and hazardous materials engagement
- Greenhouse gas emissions and adaptation
- Energy consumption and efficiency
- Biodiversity impacts
- Emissions

Community involvement/Stakeholder engagement

- Employment creation and skills development
- Sustainability in the value/supply chain
- Community involvement (incl. education and culture)
- Transparent dialogue
- Technology development and access
- Alliances with stakeholder groups

In the course of harmonizing sustainability reporting at the level of the Elia Group, the main economic, environmental and social topics of 50Hertz and Elia were combined in 2019 and an internal survey was conducted. The aim is to harmonize the different materiality analyses in a comparable way.

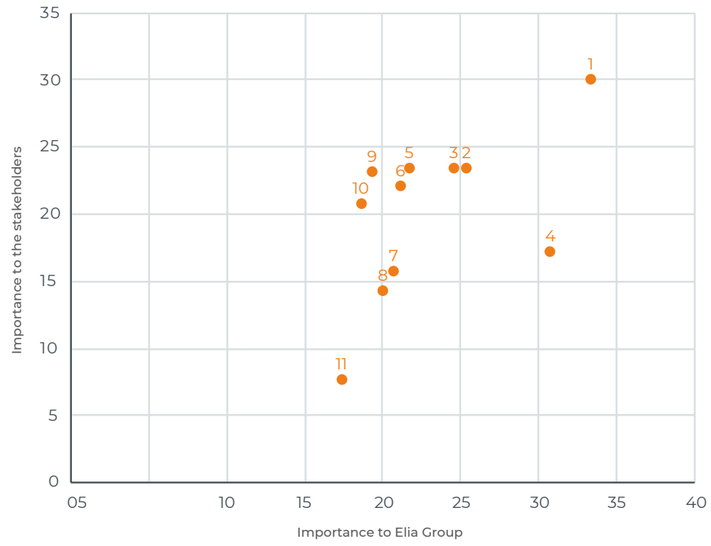
As a result, 19 material topics of high and very high importance were identified, which determine the guidelines for reporting and stakeholder dialogues of Elia Group. For 11 of these 19 topics, a broad correspondence between 50Hertz and Elia Transmission was identified. These topics are shown in the materiality matrix below.

For 8 of the 19 topics of high and very high importance, Elia Transmission and 50Hertz have a different focus on the importance for stakeholders or the own company. This different focus is due to both external and internal factors. The differing environment of infrastructure, regulatory framework and corporate culture in Belgium and Germany lead to a different assessment. This applies to the topics of demand-driven grid development, business ethics, human development and training in the workplace, conditions of work and social protection, social dialogue and employee relations, employee health, safety and wellbeing at work, recruitment strategy and talent acquisition, and alliances with stakeholder groups.

These 8 topics will be subjected to a detailed examination in 2020 and their allocation to the materiality matrix will be reviewed and adjusted if necessary. There are also planned to reconcile the new materiality matrix with the interests of the relevant stakeholders. This group includes shareholders, the public, non-governmental organizations (NGOs), politicians, regulatory bodies, investors, media, customers, suppliers and representatives of the Elia Group. This reconciliation is also planned for 2022.

The above described approaches have shown a convergence of results, confirming the focus of Elia Group on the commonly identified priorities.

Materiality Matrix Elia Group



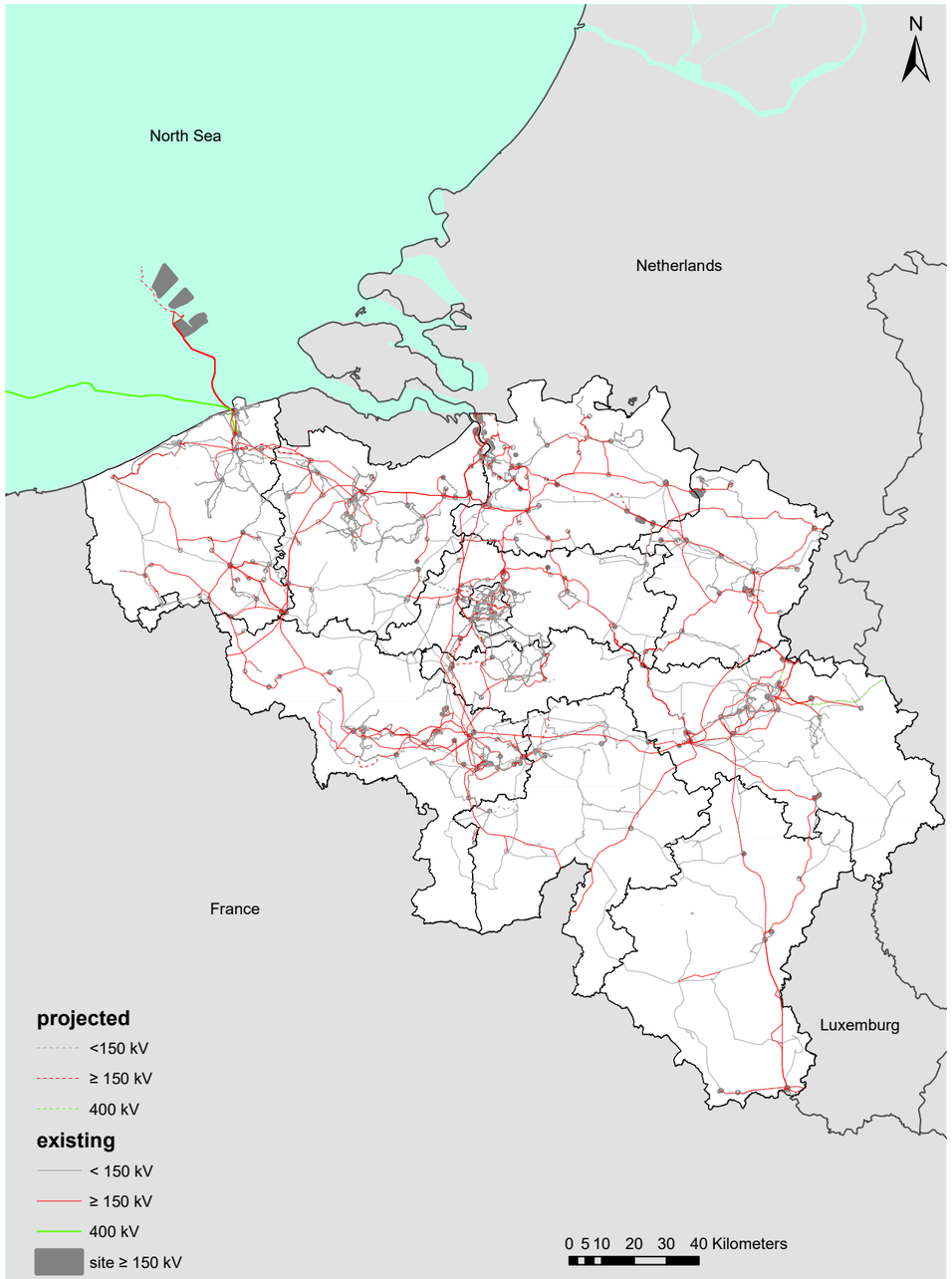
1. Network availability and reliability
2. System and market integration of RE
3. Corruption and bribery
4. Legal and regulatory environment
5. Transparent dialogue
6. Customer orientation and satisfaction
7. Risk management
8. Technology development and access
9. Transparency and openness
10. Cost and process efficiency
11. Employment creation and skills development

2. Elia in Belgium

2.1. GRID 16
2.2. SUSTAINABILITY MANAGEMENT 18
2.3. ENERGY – MARKET AND INTEGRATION OF RENEWABLES 23
2.4. GRID RELIABILITY 26
2. 5. HUMAN RESOURCES 27
2. 6. SAFETY 31
2. 7. SUPPLIERS, HUMAN RIGHTS AND LOCAL ADDED VALUE 33
2. 8. STAKEHOLDER ENGAGEMENT 35
2.9. ENVIRONMENTAL ASPECTS 38

2.1. Grid

2.1.1. Grid map



2.1.2. High-voltage lines

G4-EUS-EU4

	2017		2018		2019	
Voltage	Underground cabling	Overhead lines	Underground/ submarine cabling	Overhead lines	Underground/ submarine cabling	Overhead lines
400 kV (DC)	-	-	9	-	70*	-
380 kV	20	919	40	919	40	918
220 kV	5	301	47	301	135	300
150 kV	514	1,975	573	1,973	628	1,939
110 kV	-	8	-	8	-	8
70 kV	302	2,311	293	2,290	317	2,404
36 kV	1,968	8	1,938	8	1,917	8
30 kV	108	22	84	22	75	22
TOTAL	**2,917**	**5,544**	**2,984**	**5,521**	**3,182**	**5,599**

* The Nemo Link interconnector – total length 140 km – is a joint venture (50/50) between National Grid Interconnector Holdings Limited, a subsidiary company of the UK's National Grid Plc, and Elia.

2.1.3. Substations and converters

	2017	2018	2019
# substations >= 150 kV	298	297	300
# substations < 150 kV	516	516	507
HVDC Converter station	0	1	1
TOTAL	**814**	**814**	**808**

Delivering the necessary grid infrastructure is key for the energy transition to happen. As we integrate more and more variable renewable electricity and as electricity exchanges at European level increase, our investment programme is vitally important to guarantee a reliable, affordable and sustainable energy system in the future. There is globally an increase in the length of underground cables installed and a shift toward higher tension.

Major grid developments in 2019

- The Modular Offshore Grid (MOG) that connects offshore generation units, 4 wind farms in the North Sea, to the mainland was inaugurated in September 2019.
- NemoLink, the first subsea interconnector between Belgium and the UK is commercially operational since end of January 2019. The 140 km of subsea and underground cables electrically connect Belgium and UK providing both countries with improved grid reliability and access to sustainable generation.

2.2. Sustainability Management

2.2.1. Business model

GRI 102-1, GRI 102-2, GRI 102-6, GRI 102-7,.GRI 102-9, SDG9

Elia is Belgium's high-voltage transmission system operator (30 kV to 400 kV), operating 8,781 km of lines and underground cables throughout Belgium and supplying thereby 11 million people with electricity, 24 hours a day, 365 days a year. Elia has also several customers – which are mostly large industrial companies – directly connected to its network.

Elia's main responsibilities are the development and maintenance of the grid, the management of the balance between the consumption and generation of energy and the facilitation of access to the market. Elia also develops innovative solutions in order to better integrate renewables into the system, balance the network and put the consumer really at the centre of the future energy system.

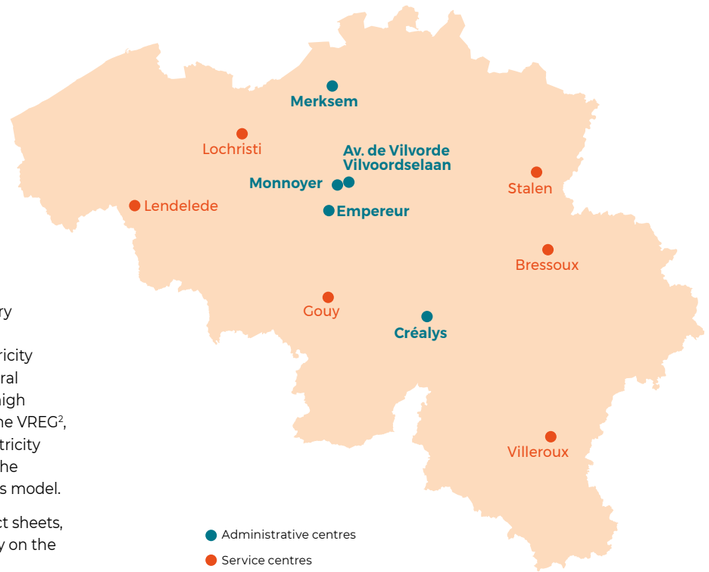
As the only operator of the Belgian high-voltage grid (including the offshore grid), Elia has a "natural monopoly" of the grid, and is therefore subject to regulatory supervision. Its public mission and responsibilities are an integral part of the legislation governing the Belgian electricity market. Furthermore, it's controlled by the CREG[1], the federal regulator for the electricity market with regard to its very high voltage grid (110 kV-400 kV) and tariffs, and regionally by the VREG[2], CWAPE[3] and BRUGEL[4], the regional regulators for the electricity market with regard to its high voltage grid (30 kV-70 kV). The regulatory system has a substantial impact on the business model.

All the products and services are set out in detail in product sheets, which are available online or can be ordered as a hard copy on the 'Product sheets[5]' page.

2.2.2. Locations

GRI 102-3, GRI 102-4

To cover its activities in the entire country, Elia has several administrative centres[6] (control centres) and service centres[7] in Belgium. All the headquarters of Elia are located in Brussels.



1. CREG: Commission for Electricity and Gas Regulation.
2. VREG: Vlaamse Regulator van de Elektriciteits- en Gasmarkt.
3. CWAPE: Commission Wallonne pour l'Energie.
4. BRUGEL: régulateur bruxellois pour les marchés du gaz et de l'électricité/ Brusselse reguleringscommissie voor de gas- en electriciteitsmarkt.
5. www.elia.be/en/products-and-services/product-sheets.
6. Administrative centre: support services and national/regional control centre.
7. Service centre: branch/satellite office.

2.2.3. Memberships

GRI 102-12, GRI 102-13, SDG17

Elia is involved in various societies, associations, and initiatives in the field of renewable energies, climate and environmental protection, human rights and harmonisation of the European electricity market.

	Energy	Climate	Environment	Human rights
WORLD ENERGY COUNCIL	✓			
CIGRE - Conference Internationale des Grands Réseaux Electriques	✓			
Go15 - Reliable and Sustainable Power Grids	✓			
Centre on Regulation in Europe	✓			
ENTSO-E - European Network of Transmission System Operators for Electricity	✓		✓	
Coordination of Electrical System Operators	✓			
RGI - Renewables Grid Initiative	✓	✓	✓	
Energy Web Foundation	✓	✓		
The Shift	✓	✓	✓	✓
UNGC - United Nations Global Compact	✓			
Synergrid	✓			
Osiris	✓			
Conseil des Gestionnaires des Réseaux de Bruxelles	✓			
Vlaamse Raad van Netwerkbeheerders	✓			
Powalco	✓			
BECI - Brussels Enterprises Commerce and Industry	✓			
FEB - Fédération des Entreprises de Belgique	✓			
UWE - Union Wallonne des Entreprises	✓			
VOKA - Vlaams Netwerk van Ondernemingen	✓			
AGORIA	✓			
Communauté Portuaire Bruxelloise	✓			
COGEN Vlaanderen	✓	✓		

2.2.4. Values, principles, standards and code of conduct

GRI 102-16, GRI 102-17, GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32, GRI 102-33

The 6 values are now common within Elia group (see 1.3.1.)

The Code of Ethics oversees that discrimination within the organisation is not tolerated. This applies regardless of race, colour, sex, religion, political opinion, ethnic background, social origin, age, sexual orientation or physical capabilities.

In addition, it aims to ensure that all employees receive equal opportunities through fair judgement. Elia's internal policy on discrimination and equal opportunities builds on the International Labour Organization convention C111 concerning Discrimination.

For Elia, business activity that is successful in the long term is achieved by acting in the best interest of the company as well as in the interest of society. This is reflected in the company vision "A successful energy transition - for a sustainable world".

Elia has expressed its commitment to responsible corporate management by being signatory of the United Nations Global Compact (UNGC) – the leading U.N. initiative for businesses to advance on the Sustainable Development Goals for 2030. Elia is also committed and actively working on topics included in the 10 Principles of the UNGC.

Under the overall responsibility of the Chief Community Relations Officer, the Environment & CSR department has defined a sustainability concept and a roadmap of measures for the continuous expansion of sustainability reporting. All environmental related reporting and sustainable communication to external stakeholders is coordinated by the Community Relations department

In addition, internal management systems based on recognized standards such as environmental management (according to ISO 14001) and early public acceptance are used in Sustainability core areas.

Finally, a network of ambassadors has been developed at the initiative of passionate colleagues, the group shares ideas, tips and tricks, successes and events, and organises workshops within the company through a cooperative process. Ideas are also shared via the intranet, allowing other interested colleagues to participate.

2.2.5. Relevant legal framework

Elia complies with applicable law. The business activities are subject to numerous regional, national and European legal regulations.

Further information on the laws and regulations relevant to our business activities can be found on our website.
https://www.elia.be/en/company/legal-framework

2.2.6. Anti-corruption

GRI 205-1, GRI 205-2

As part of the Code of Ethics, a policy regarding bribery and corruption has been formulated. The Code of Ethics outlines what is considered bribery and corruption. Apart from barring any involvement in a practice (be it direct or indirect via our suppliers) where bribery or corruption has taken place, Elia also focusses on capacity building for our employees. Trainings allow employees to recognize behaviours or incidents where bribery or corruption may be at play, and provides them with a safe, anonymous space to report any such matter.

Since 2018, Elia has a policy in place that regulates the external reporting point for business integrity breaches. In the case, internal staff and external stakeholders anonymously report suspected integrity violations, an internal committee is convened immediately to deal with the case and take further internal action if necessary. The committee reports to the management of Elia annually and on an ad hoc basis as required.

In 2019, the external reporting point did not receive any tip-offs about corruption. In 2019, Internal Audit dealt with one complaint received via an anonymous letter. After internal investigation and discussions with the employee, it was decided to take no further action on this complaint. Elia also regularly provides all employees involved in the procurement process and financial process with training on the basics of procurement, anti-corruption and compliant behaviour.

2.2.7. Risk management

GRI 102-30, GRI 102-11, GRI 201-2

As part of its systematic risk management, Elia regularly surveys and assesses the following risk areas:

- Profit & loss
- Health & safety
- Cash
- Security of supply
- Reputation

Elia aims to avoid risks to the Company's continued existence, to reduce risk positions as much as possible where feasible and to optimize the opportunity/risk profile. Risk guidelines set out how risks are systematically identified, recorded, assessed and monitored each financial quarter.

Risk workshops are held regularly with the risk owners (mostly the department heads). The corporate risk manager converses with the management to discuss the most significant risks and risk-related issues. In the area of sustainability, for example, these are occupational safety and new requirements from environmental legislation. Additionally, the risks assessed and monitored will be extended related to risk based on climate change.

2.2.8. Security

Critical infrastructures

In 2019, the Elia Security department started with the rollout of the new security policy for substations. Due to its importance, the focus on the implementation of a high security concept (i.a. deployment of a redundant detection system) for multiple Critical Infrastructures.

In order to verify the content of the Elia Security Plan for Critical Infrastructures, the ministry of Economy performed multiple inspections in Critical substations. The first feedback of the ministry is positive, detailed reports are to be expected in 2020

In line with the Security policy, the first strategic substations received a full upgrade concerning physical and electronic security measures. In addition, the implementation of the online access control system (to monitor access to high-voltage substations in real time) was started in 2019.

A new Security risk assessment (inventory, analysis, evaluation) was elaborated in 2019. The core Security risks were integrated in the corporate Risk Framework and the Elia Security Maturity could be defined. The aim is to mitigate all the identified risks to an acceptable level.

Elia's special focus on innovation allows it to respond to new (future) security challenges and the new methods adopted by criminals. Due to a close collaboration between the TDI (Transformation, Data & Information) Department and Security, Elia was able to obtain a first derogation for flights with drones that can patrol high-voltage lines beyond the visual line of sight. Two separate high voltage lines in both Wallonia and in Flanders were overflown. This providing Elia the opportunity to determine if the usage of drones is efficient for supervising the Grid. The outcome of the first flights is expected in 2020.

Emergency and restoration

G4-EUS-DMA Disaster/ Emergency Planning and Response

Should an electricity crisis occur, as a result of natural disasters – such as extreme weather conditions –, malicious attacks or a fuel shortage, Elia has set up a crisis management which consists in 3 main plans:

- The **emergency plan** describing the internal crisis organization and related procedures following the Standardized Emergency Preparedness Plan (SEPP) methodology developed by Crisis & Emergency Management Centre (CEMAC)[8]
- The **system defense plan**: automatic and manual measures aiming to prevent a blackout at any cost, to limit the extension of disturbances and to stabilize the electric power system when in Emergency State, in order to return to Normal or Alert State as soon as possible with minimal impact on grid users
  In accordance with the system defense plan, Elia has established a load shedding plan containing an amount of demands to be manually or automatically disconnected, when necessary to prevent the propagation or worsening of an electricity crisis.
- The **restoration plan**: set of actions that can be used after a disturbance with large scale consequences (e.g. blackout) to bring the electricity system back to the normal state

Elia regularly trains its crisis teams by means of simulated exercises, e.g. the system operators are prepared for crisis situations by means of theoretical and practical trainings on a real time simulator.

IT

The further reinforcement of the robustness, security and protection of our IT and network systems is a key recurring component in preserving the confidentiality of critical data.

Best practices and information are exchanged at a national level in the utility sector (Synergrid), as well as on a European level (ENTSO-E). We evaluate the threat landscape and evolutions to be able to put the right risk mitigation measures into action.

A number of concrete measures from 2019 in this field are listed below:

- Monthly external scanning of Elia's external perimeter (Elia's public IP addresses) in order to assess the potential vulnerabilities of Internet applications with regard to possible cyber risks.
- In 2019, there was an external maturity assessment with regard to IT risks and the maturity of the organisation with regard to IT Security.

As from 2020, this topic will be handled at group level and joint actions will be launched in Elia Belgium and 50Hertz at the same time.

8. CEMAC is a Belgian centre of expertise active in the field of emergency planning, crisis & emergency management and crisis communications. It also describes the interfaces with the external stakeholders who are involved in an electricity crisis.

2.2.9. Political influence

GRI 102-16, GRI 415-1

This is the responsibility of the Public & Regulatory Affairs and External Relations department.

The different governments at federal and regional level give us our license to operate and the regional government are also competent for giving the authorization to build the infrastructure. With this regulated monopoly, we have a duty to accomplish our tasks in the interest of society complying with all regulations pertaining to the operation of the transmission system. Besides, thanks to our wide portfolio of activities, we are the only player at national level with a global view on the electricity system but also including a regional and local approaches. This puts us in a unique position to provide analysis, advice and recommendations to public authorities, so that informed decisions can be taken.

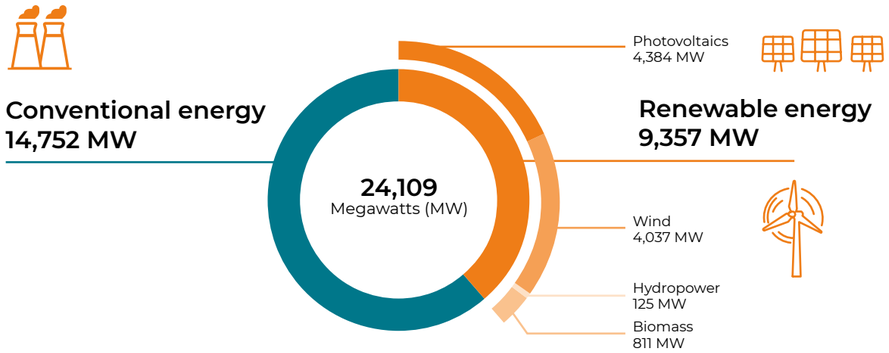
Elia Group aims to involve political stakeholders and regulators as early as possible. This gives all parties a chance to outline their point of view, improves the information flow and builds up trust.

Elia ensures that employees who are active in terms of social and energy policy are guided in their communications and their actions by clearly defined principles. In this respect, a Corporate Reputation Committee has been set up the coordinate the different contacts with (political) stakeholders. Furthermore, Elia is registered in the EU Transparency Register and is committed to its Code of Conduct.

2.3. Energy – Market and integration of renewables[9]

2.3.1. Installed capacity

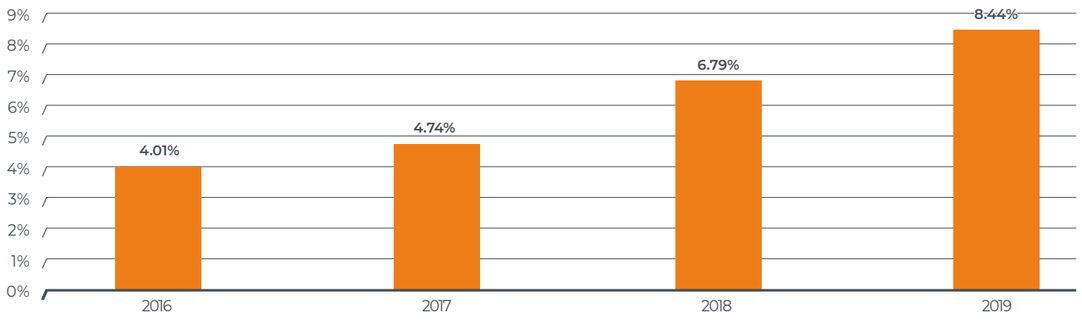
GRI 302-2, SDG7



The installed capacity in Belgium is mainly natural gas and nuclear energy but the share of renewables sources is steadily increasing.

2.3.2. Evolution

DEVELOPMENT OF THE RE SHARE IN ELECTRIC SUPPLY IN ELIA GRID AREA



The Modular Offshore Grid (MOG), inaugurated in September 2019, connects offshore generation units, 4 wind farms in the North Sea to the mainland.

9. Sources: statbel, febeg

2.3.3. Energy import & export

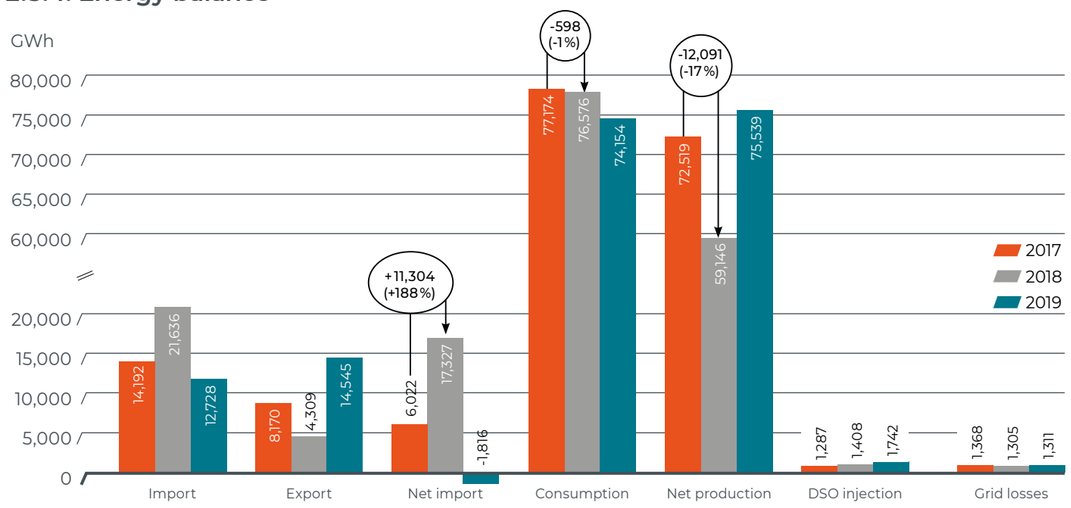
GRI 102-6, GRI 302-2

Since 2019, there is a new interconnection, between Belgium and the United Kingdom via the Nemo Link connection.

The first interconnector with Germany (project ALEGrO) is currently under construction.

Belgium exported more electricity in 2019 than it imported. This in contrast to 2018, which stood out with a significant level of electricity imports due to the unavailability of some nuclear reactors. This level of exports must be addressed globally and in the context of an increasingly European market logic. It is mainly explained by the good availability of the electricity generation facilities in Belgium (in particular the nuclear power units). The development of interconnections (i.e. connections with neighbouring countries) also plays a role in the circulation of these electricity flows.

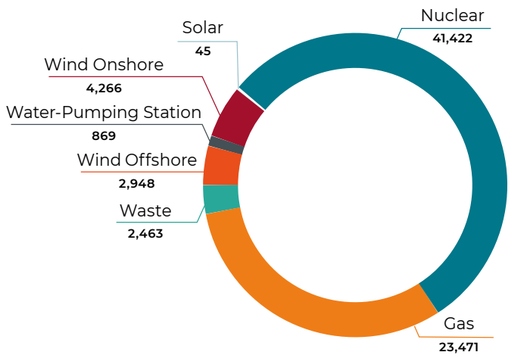
2.3.4. Energy balance



Consumption in Belgium increases during the winter months. This stresses the importance of international interconnections and reliable and sufficient domestic production.

Performance of production sources (energy mix)

ENERGY MIX 2019 [TWh]



In 2019, 54.9% of the energy produced in Belgium came from nuclear production units. The production values from nuclear power are significantly higher than those of 2018 (46%), which was marked by the significant unavailability of several reactors, especially during the last months of the year. This figure is in line with the figures for 2017 (50%).

Renewable energy production (offshore/onshore wind and solar only) increased by 38% in absolute terms compared to 2018 (5.46 TWh in 2019 compared to 3.95 TWh in 2018). Relatively high solar generation in the summer months and higher wind generation in the winter months constitute the main part of renewable generation.

2.3.5. Grid losses

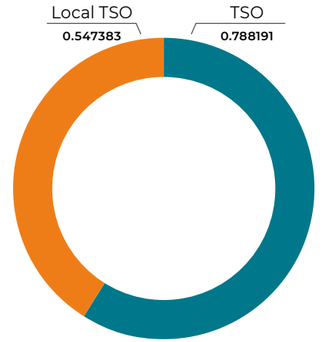
Grid losses are the difference between the amount of electricity entering the Elia grid and the amount of electricity supplied. They are unavoidable when transmitting electricity and dependent on i.a. voltage and length. They occur in the form of current heat losses in transmission lines, in transformers and other system elements as well as leak and corona losses.

In Belgium, there is a distinction between two categories of grid losses:

- Losses on the grid monitored on the federal level (> 150 kV) compensated following the federal legislation;
- Losses on the grid monitored on the regional level (< 150 kV) compensated following an approach specific to each region

GRID LOSSES (TWh)

G4-EUS-EU12



Grid losses federal level (from 150 kV): TSO
Grid losses regional level (less than 150 kV): Local TSO

The high-voltage direct current (HVDC) technology is more suitable than conventional three-phase alternative current technology for transmitting large quantities of electricity with low grid losses and optimal control over long distances.

Nemo Link, the interconnector with UK uses this technology as well as our ALEGrO project that will provide interconnection between Elia's grid and the German grid. Elia and 50Hertz are considering an evaluation project together, the aim of which is to compensate grid losses with renewable energies in order to reduce the CO_2 footprint in Scope 2 (see 2.9.5.).

2.4. Grid reliability

G4 EUS Security of Supply

In order to meet electricity demand at all times, Elia must ensure the reliability of its grid to its customers[10]. As a transmission system operator (TSO), Elia provides an infrastructure with adequate electricity interconnections for well-functioning markets and systems which forms the best guarantee of security of supply. However, even where markets and systems function well and are interconnected, the risk of an electricity failure exists.

The set of actions set up to cope with a large-scale electricity failure caused by an exceptional event[11] is described in section 2.2.8. Security – Emergency plan and restoration.

The following section covers the grid interruptions caused by less serious incidents.

2.4.1. Grid availability and interruptions

Grid interruptions

In order to assess the grid availability on one year, we record the number of incidents leading to at least one customer interruption that lasted more than 3 minutes (international standard) and for which Elia is responsible. Any interruption caused by customer errors, thunderstorms, third parties, birds, etc. are not considered here.

GRID INTERRUPTIONS (NUMBER INCIDENT)

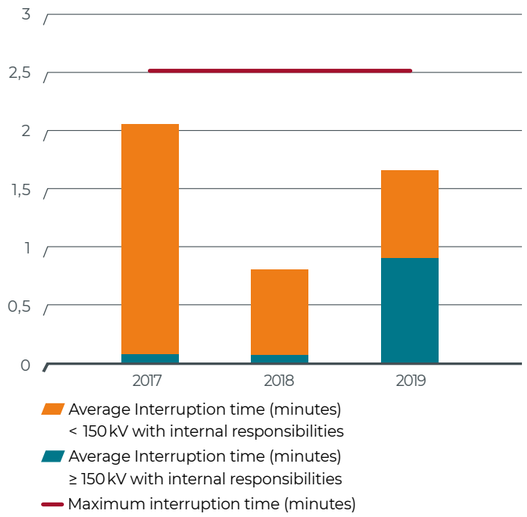
No exceptional event occurred in 2019.

The majority of interruptions take place on the local transmission network (< 150 kV) as most customers are connected to the local (regional) transmission grid rather than the federal transmission grid.

When discussing grid interruptions, the **average interruption time** (AIT)[12] is also considered. It represents the equivalent interruption time if all the customers connected to the grid had been interrupted the same way (i.e. during the same time) during the observation and is calculated as Energy Not Supplied / Yearly Average Power.

The **Maximum interruption** time is the reference value used for calculating the Average Interruption Time (AIT)[13] incentive relating to continuity of supply by the Belgian federal regulator, the CREG. For the period 2016-2019, its value was 2.55 minutes.

AVERAGE INTERRUPTION TIME (MINUTES)

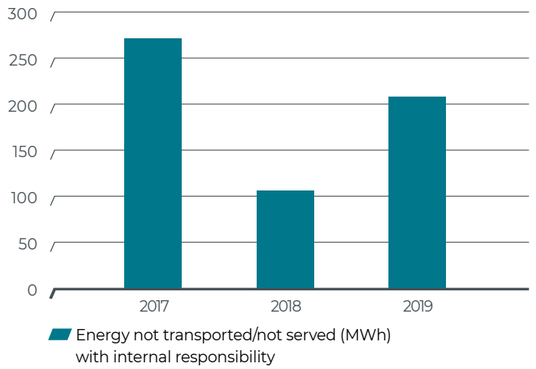


The average interruption time on the Belgium grid, (i.e. the sum of the AIT on the regional and federal grids) has remained below this reference value over the last three years.

Energy not supplied (ENS) refers to all energy not supplied to our customers during outages of more than three minutes caused by Elia's internal problems. However, it does not take into account the impact of major events.

10. Direct customers, distribution system operators, grid operators and all those having an access contract.
11. Exceptional events represent the number of natural disasters, storms or other climatological circumstances, nuclear or chemical accidents, explosions, and so on resulting in an interruption that lasted more than three minutes. No exceptional event occurred in 2019.
12. AIT is mostly calculated and communicated because it is a normalized and commonly used indicator very useful for benchmarking as it allows assessing the performance of the grid regardless i.a. the size of the grid or the number of customers connected.
13. Based on a seven-year average, this value was introduced in 2015 and validated by CREG for four years. This reference value has been reviewed during 2019, the new reference (2,1 minutes) will be used as from 2020.

ENERGY NOT TRANSPORTED/NOT SERVED (MWH)



The ENS score achieved is higher than last year due to several technical failures i. a. as consequences of the heat waves on our utilities.

Grid availability

Onshore availability represents the availability of the interface points between the Elia grid and the customer's grid. It takes into account all the interruptions caused by intrinsic risks (weather, third parties, animals outside building, etc.) or by internal Elia problems (e.g. material failure, human error) which lasted more than three minutes, but excludes interruptions directly caused by Elia's customers.

CALCULATION METHOD:

$$\text{Onshore availibility} = 1 - \frac{\text{AIT (intern Elia + intrisic rik)}}{\text{(\# minutes in the year)}}$$

	2017	2018	2019
Onshore grid availability at connection points	0.99999580	0.99999039	**0.99999671**

In 2019, the onshore availability in Belgium remained at a very high level (above 0.99999).

2.5. Human Resources

GRI 102-7, GRI 102-8, GRI 401-2, GRI 401-3, GRI 405-1

2.5.1. Management approach

GRI 102-41

Elia owes its success entirely to the success of its employees. It is the responsibility of the Company to help them develop their skills, foster their health and commitment, involve them in decisions and guarantee equal opportunities for all.

Elia complies with international guidelines beyond the reach of its collective agreements and company agreements, such as the core labour standards of the International Labour Organisation (ILO: C87, C98 and C135) and the worker's rights in the UN Global Compact.

There were no cases of discrimination in 2019.

In 2019, Elia received the **Top employer** certification[14] for the second time in a row.

2.5.2. Head Count

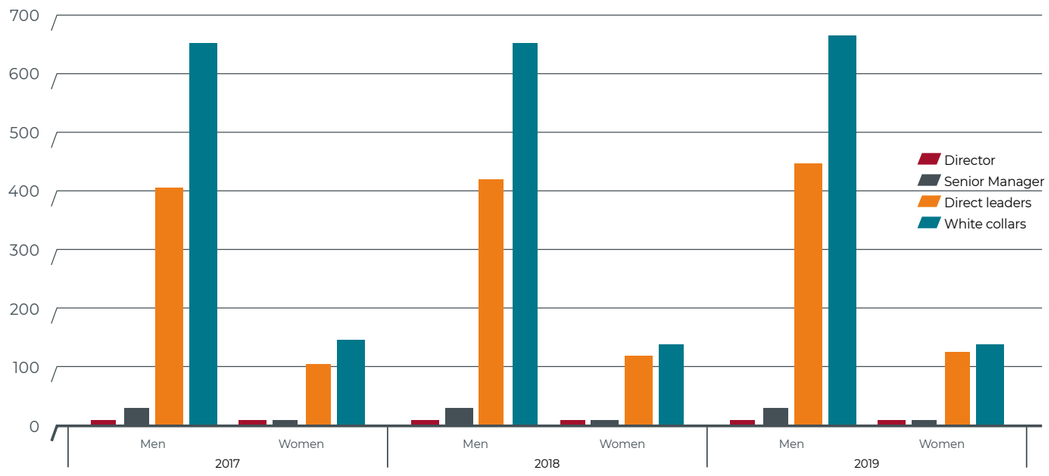
GRI 405-1

The composition of the workforce of Elia Group is detailed in section 1.2.2. on page 8.

		2017	2018	2019
Belgium	**Total employees Elia**	**1,350**	**1,366**	**1,424**
	by type of employement			
	- full-time	1,220	1,237	**1,295**
	- part-time	130	129	**129**
	by gender			
	- men	1,094	1,105	**1,150**
	- women	256	261	**274**
	by age			**128**
	- below 30 years	208	196	**211**
	- between 30 and 50 years	786	809	**828**
	- over 50 years	356	361	**385**

14. The Top Employer certification is awarded in more than 115 countries to companies that are providing an excellent working environment and consider this a top priority. Over the past year, Elia has invested heavily in internationalisation and training. The award is an important accolade and an additional advantage when it comes to attracting new talent in an increasingly competitive labour market

BREAKDOWN BY RESPONSIBILITY LEVEL AND GENDER



	2017		2018		2019	
	Men	Women	Men	Women	Men	Women
Director	5	3	5	3	5	3
Senior Manager	28	5	25	4	28	5
Direct leaders	405	105	423	117	449	128
White collars	656	143	652	137	668	138

N.B. All technicians of the group being considered as white-collar workers, there are no blue-collar workers.

Women are well represented both at director and direct leader levels. To counter the underrepresentation of women in Senior Manager roles, two main actions have been put in place:

- The inclusion of selection criteria on leadership and soft skills in addition to technical skills
- Internal transfers from less to more technical areas.

The existing cultural change programme (MAD programme) will act as a catalyst.

2.5.3. Workability

GRI 401-1, GRI 401-2

Employees of Elia benefit from a family-friendly work environment and the opportunity to find a work-life balance.

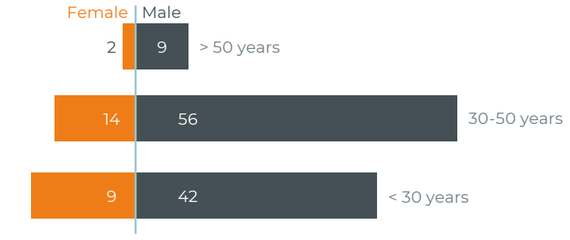
The early recognition and prevention of work-related illnesses and the ability to remain employable are also integral parts of occupational health and safety at Elia. In order to achieve these goals, Elia guarantees sufficient occupational medical precautions, the focus of which is on individual protection and individual prevention of health risks.

In addition, Elia regularly provides company medical consultations, vaccinations and advice on workplace ergonomics for all employees. A qualified counselling service is available to employees at all times in confidence in the event of individual stress, conflicts or problems of addiction. Employees can also take part in various public sporting events, such as the "20km of Brussels", inter-TSOs football league and cycling tour of Elia.

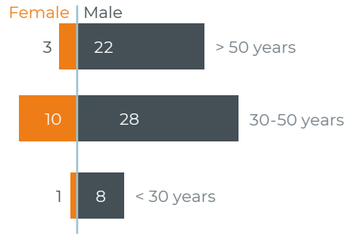
Calculation method

- The new hires include all new employees within the planned budget and all the employees that were recruited as additions to the original budget.
  Changes in positions are not included.
- The number of leavers is determined based on all employees leaving the company as a result of dismissal or resignation from 1 January to 31 December of the year concerned. Retiring employees are excluded from the scope.

NEW HIRES PER AGE AND GENDER



EMPLOYEE TURNOVER BY AGE AND GENDER



Turnover rate = # employees who left / (#employees begin of year+#employees end of year)/2

After an historical low number of leavers, Elia moves towards the Belgian private sector average.

There is always an exit interview for leavers.

Our recruitment team has a bit modified its recruitment method in order to recruit more efficiently by conducting more attitude- and behavior-oriented interviews.

Potential job applicants are invited to use an online “match tool” in order to evaluate if Elia's company culture matches theirs, hence ensuring that they will work for an employer that suits them well.

Parental leave

GRI 401-3

In Belgium, every worker has the right to take parental leave. In order to take care of his child, the worker may for a period of four months, completely suspend the execution of his employment contract (full-time parental leave); the four-month period may, at the worker's choice, be divided by month and be taken part-time.

N.B. It is not possible to report on the total number of employees within Elia who are entitled to this type of leave as they may have already taken this leave while working at another company.

In 2019, 112 employees took parental leave.

		2017		2018		2019	
		Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
TOTAL	Men	56	67%	57	66%	75	67%
	Women	28	33%	30	34%	37	33%
Full time parental leave (>=1 month)	Men	33	-	31	-	39	-
	Women	16	-	16	-	21	-
	Total	49	58%	47	54%	60	54%
Parental leave as a deduction of full time employment	Men	23	-	26	-	36	-
	Women	12	-	14	-	16	-
	Total	35	42%	40	46%	52	46%

RETIREMENT

G4-EUS-EU15

Percentage of employees eligible to retire in the next 5 and 10 years (With an assumed retirement age of 65 for exempts and 63 for not exempts)

	5 years	10 years
Exempts	2.86%	8.75%
Non exempts	10.12%	24.71%

N.B.: Data calculated for calendar year 2018, to be updated in the next year report

2.5.4. Employee survey

An Employee survey, the Sonar Survey, has been conducted within Elia in 2019, the results will be analysed and used in the coming years to improve our HR policy and also in Health and Safety to target issues related to employee wellbeing.

The next employee survey will take place in 2020.

2.5.5. Training

GRI 404-1

The Company can only reach its corporate goals if the staff is highly qualified and thoroughly informed about current developments. Employees are therefore offered individually tailored education and training opportunities and relevant additional qualifications. Within Elia, the Talent team is responsible for the proper development and deployment of talent.

The training offer within Elia can be categorized in 3 main subcategories:

- Technical competences and Safety competences which are required to perform tasks specific to our core business (training specifically focused on safety is detailed in 2.6.2.)
- Soft skills

Programs for upgrading employee skills and career transition assistance programs (i.e. innovation, "intrapreunership", leading the change, external education programs).

All of the employees receive regular performance and career development reviews.

AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE

	2017	2018	2019
men	59	58	**43**
women	48	40	**18**

Most of the training offered being the mandatory technical and safety competences for our technical employees on-field – where the women ratio is low – it is logical that the women's training rate is low.

N.B. we spotted an error in our 2018 Sustainability report on the p. 24 chart; the men and women chart bars for 2016 and 2018 were inverted.

2.5.6. Remuneration policies

GRI 102-35 – GRI 102-38, GRI 405-2

Elia remuneration policy in Belgium is mainly focused on attracting and retaining our best talents, rewarding performance and supporting the culture of feed-back and continuous development when possible. The remuneration systems are refined according to the need to ensure that the Company remains an attractive employer for our staff in the future. For non-exempt[15] population, together with the Energy sector, Elia negotiates our collective agreements. For exempt population, our remuneration practice is based on internal equity combined with market competitiveness, maturity in the role, respect of the company values & safety leadership and performance regardless of gender. The total cash is completed by a competitive company benefits, health insurances and the offer of a company pension scheme. In addition, employees have the opportunity, to participate in the success of the previous financial year within the framework of an Employee Share purchase plan allowing all employees to purchase shares at a reduced price. Elia in Belgium transparently releases, as requested by the Belgian corporate Governance code, the total earnings of the management team in the consolidated financial statements in detail, listing the fixed and variable overall remuneration, as well as corporate pensions and any other benefits to Elia management team in Belgium. The features of the remuneration systems are explained with disclosures in the corporate governance declaration.

Elia is willing to disclose its annual total compensation ratio[16] (as done by 50Hertz); we are working internally on the calculation method and making every effort in order to achieve this soon.

2.5.7. Incentive systems

The remuneration system includes success and performance based elements, which offer an incentive for achieving common corporate goals and corresponding individual goals.

A number of goals relate to sustainable corporate management such as compliance with occupational health and safety guidelines.

2.5.8. Social Consultation and Dialogue

GRI 402-1

The social consultation at Elia foresees in the information, dialogue and negotiation through the legal consultative bodies like the works council, the committee for prevention and protection at work and the trade union delegation. These bodies consist of a representation of the employee and of the employer. Each body has an advisory mission relating to certain matters and a decision-making mission relating to certain matters. A group-wide exchange takes place in the European Works Council of Elia Group with representatives of Elia and 50 Hertz.

Besides these legal bodies, we involve our social partners in a social consultation and dialogue outside these legal bodies via the participation in workgroups to prepare together the realization of our strategy and so to be involved in the future of our organization.

15. (non)-exempt refers to the right to be paid overtime; non-exempts are the white-collars employees, non-exempts are the direct leaders, senior managers and directors

16 Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.

2.6. Safety

GRI 403-1, GRI 403-2, GRI 403-3

2.6.1. Management approach

Elia operates facilities where accidents, asset failure or external attacks may cause harm to people. The safety and welfare of individuals (both Elia's staff, the staff of the relevant affiliates and third parties) is a key priority and a daily preoccupation for the Group and the relevant affiliates. The Group and its relevant affiliates have put a Health and Safety policy in place and they undertake safety analyses and promote a safety culture.

As part of our commitment to safety, Elia Group is continuously working towards a zero accident rate for all types of work-related accidents and not only electrical risks.

Every employee is instructed on how to be conscious of hazards, report them immediately and submit suggestions for promoting safe and healthy working conditions. In 2019, occupational health and safety was once again one of the key projects in Elia's business plan.

Therefore, occupational health and safety and injury and illness prevention are integrated into our corporate strategy. Elia Group applies the highest safety standards for our own employees, our contractors and everyone coming into contact with our infrastructure.

In Belgium, the GO FOR ZERO safety programme (begun in 2015 and planned until end 2019) aimed to embed the safety culture within Elia and with contractors and includes all projects.

After addressing training, tools and procedures, our main objectives in 2019 were the anchoring of the progress already made via the actions on operational dialogue and continuous improvement.

Supported by our culture change programme, Make a difference, we continuously underline the importance of three key behaviours: "Give and receive feedback", "Have impact" and "One Voice".

With our "Keep your distance" campaign, we also aim to protect the general public and some target audiences such as the building sector and populations living near to our installations with signs, leaflets and other information campaigns.

Besides the sector-specific risks, we also address the risks related to the wellbeing of our employees with the Care4Energy programme that ensures their wellbeing by targeting mental, physical, emotional and personal development.

We have also signed a 2 year-partnership with VIAS, the Belgian road safety Institute, in order to promote road safety among our employees and raising their awareness of the risks, but also of good practices as road users (motorists, cyclists and pedestrians) in our professional and private travels).

Wellbeing Survey

The survey was conducted in November to measure the evolution we made with our programma CARE4Energy and to start new initiatives in order to continue our progress.

Safety Weeks

Elia organises bi-annually Safety Weeks for its staff in an effort to raise awareness about the importance of safety. The programme included various communications, training sessions and team exercises, designed to ensure that everyone got involved and took the messages on board. In May 2019, the spotlight was on wellbeing. In September, we focused on "Safety leadership" i.e. behaviours that we no longer wish to see in the company (safety share).

2.6.2. Trainings (and information)

Elia continuously trains its staff. There is a compulsory training path for all field employees, which is periodically updated. Elia also provides training material, training and tests to contractors.

A Safety information newsletter is sent 6 times per year to our contractants.

Safety flashes are also sent out on an ad hoc basis when Elia identifies specific risks associated to working with specific tools or reminders of our good practices.

2.6.3. Inspections

Occupational health and safety is not limited to our own employees. The stringent Elia standards also apply to contracted companies working on Elia construction sites. During the contracting process and later, it is ensured that suppliers comply with Elia strict safety requirements.

Both the safety team as the management carry out inspections on a regular basis.

#SAFETY INSPECTIONS

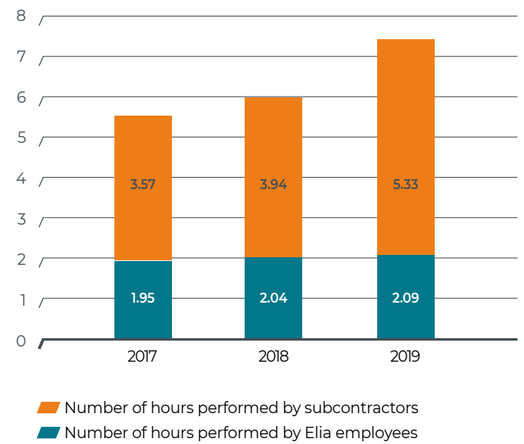
	2017	2018	2019
by Safety	153	153	**384**
by Management	1,444	1,151	**940**

2.6.4. Accidents (occupational injuries)

It is worth noting that due to big infrastructure projects (i.e. grid enhancement in the Port of Antwerp), the number hours of work performed by our contractants has increased significantly in 2019.

Safety is always Elia's number-one priority. Our goal is zero accidents, not only for our own employees, but also for our contractors, the distribution system operators and anyone else in the vicinity of our facilities. Therefore we provided figures for both employees and contractors.

WORK PERFORMED (MILLION HOURS)



No fatal accident has been recorded in 2019.

			2017	2018	2019
Employees	#employees injured with at least 1 missed workday	Men	6	4	**4**
		Women	1	2	**0**
	#work related fatalities	Men	0	0	**0**
		Women	0	0	**0**
	Accident rate [1]		3.6	2.9	**1.9**
	Total recordable injury (TRI) rate [2]		7.7	7.3	**5.7**
	Accident severity [3]		0.10	0.11	**0.05**
	Fatal accidents	Nr.	0	0	**0**
Contractors	#accidents (with & without lost time)	Total	51	44	**41**
	Accident rate [1]		9.8	5.6	**3.4**
	Total recordable injury rate (TRI) [2]		15.1	11.1	**7.7**
	Fatal accidents	Nr.	1	1	**0**

(1) Number of work related accidents with missed time (>1day) x 1,000,000/number of hours worked
(2) Number of work related accidents x 1,000,.000/number of hours worked
(3) Number of missed days due to work-related accidents in calendar days x 1,000 / number of hours worked

Third parties

Elia must be notified of all works in the vicinity of high-voltage facilities so that the Contact Centre (see "2.8.3. Stakeholders Dialogues") can inform the relevant parties of the risks involved and the safety distances to respect. Third parties working in the vicinity of high-voltage facilities are indeed not always aware of the dangers of such installations; just entering the danger zone around high-voltage conductors can trigger a fatal electric arc, even without direct contact being made.

Despite extensive awareness-raising campaigns rolled out in recent years, works are however still being performed without being reported to Elia in advance. Elia is expanding its campaigns and is also working on more preventive measures.

No fatal accident has been recorded in 2019.

2.7. Suppliers, human rights and local added value

2.7.1. Suppliers and amount of spendings in EURO-Zone

SDG 12, GRI 102-9, GRI 204-1

2.7.1.1. Supply chain management

GRI 308-1, GRI 308-2, GRI 414-1

Elia has to comply with the European tendering rules. The application of these rules and other internal guidelines ensure that every supplier receives the same non-discriminatory and transparent treatment and that the information sent is treated confidentially. The selection process of suppliers and signing of new contracts are based on an evaluation of multiple criteria. The exposure to social or environmental risks is mitigated by the fact that every purchase is performed by a multifunctional team, including specific representatives from environmental and/ or safety. Depending on the purchase, the selection and awarding criteria are adapted to ensure that the selected supplier is fully aware of and therefore compliant with Elia's objectives and values.

Elements relating to Sustainability are integrated in the tendering contract, as well as within the general purchasing conditions, which are signed by the suppliers.

Elia is committed to translate its strong ethical principles to the procurement process, and to have a positive impact on its wider environment via the purchases performed, also avoiding risks flowing from non-compliance with certain rules and norms within the supply chain.

In 2018, Elia has elaborated a Supplier Code of Conduct, containing internationally recognised principles regarding ethical conduct, health and safety, environmental and social aspects. This code makes now systematically part of the documents for European purchasing procedures.

In order to instrument this set of principles as a lever for a positive supply chain impact, we set up a risk-based approach. For all purchasing categories we assess risks based on traditional supply chain risks and supply chain sustainability risks. A matrix is drawn up to prioritise supplier engagement activities.

To rationalise resource and impact management we aim to focus on the suppliers, who are most relevant from that risk perspective. In 2019, besides having suppliers electronically confirm that they accept the terms of the Supplier Code of Conduct, we are planning to roll out an in-house, Sustainability Supplier Self-Assessment questionnaire to high-risk suppliers and some hand-picked, medium-risk suppliers to receive detailed information on where improvements are needed.

2.7.1.2. Number of suppliers– EURO zone vs non-EURO zone

This data refers to the following Elia group companies: ESO, EA, EE, EI and EGI[17] Belgium.

	2017	2018	2019
# EURO-zone suppliers	2,374	2,305	**2,271**
# Non EURO-zone suppliers	92	116	**109**
# non-EURO countries within Elia suppliers	12	19	**16**

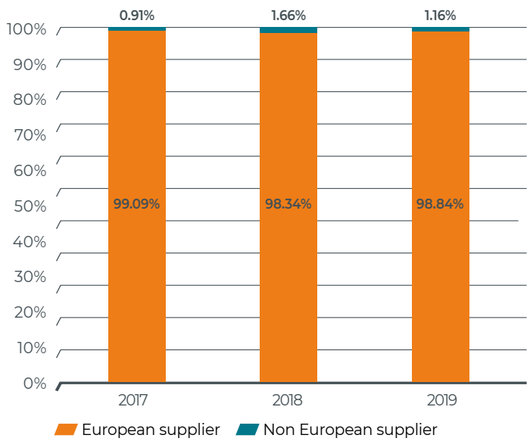
The number of suppliers outside the EURO-zone increases and is getting more diverse but it is still limited to 5%.

17. ESO: Elia System Operator, EA: Elia Asset, EE: Elia Engineering, EI: Eurogrid International, EGI: Elia Grid International

2.7.1.3. Split of yearly spend – EURO zone vs non-EURO zone

GRI 204-1

SPLIT YEARLY SPEND EURO VS NON-EURO



There was a strong increase in the total spend (+ 39%) in the last 3 years due to the new offshore activities.

Spending outside the EURO-zone is still limited to 1.2 % of the total amount. On top of that, it is concentrated in the same three countries of the previous year, albeit in a different order: the UK (67%) is still ahead but the USA (12%) took the second position and Switzerland (less than 1%) came in third.

Procurement outside the EURO-zone countries is very limited today and the environmental impact is also considered in the awarding criteria. Therefore, Elia complies with the high EU or Belgian standards in terms of environment, social responsibility and worker wellbeing.

A specific evaluation of the safety aspects is carried out separately since it is crucial for Elia to have suppliers on board that share the same values when it comes to the importance of safety.

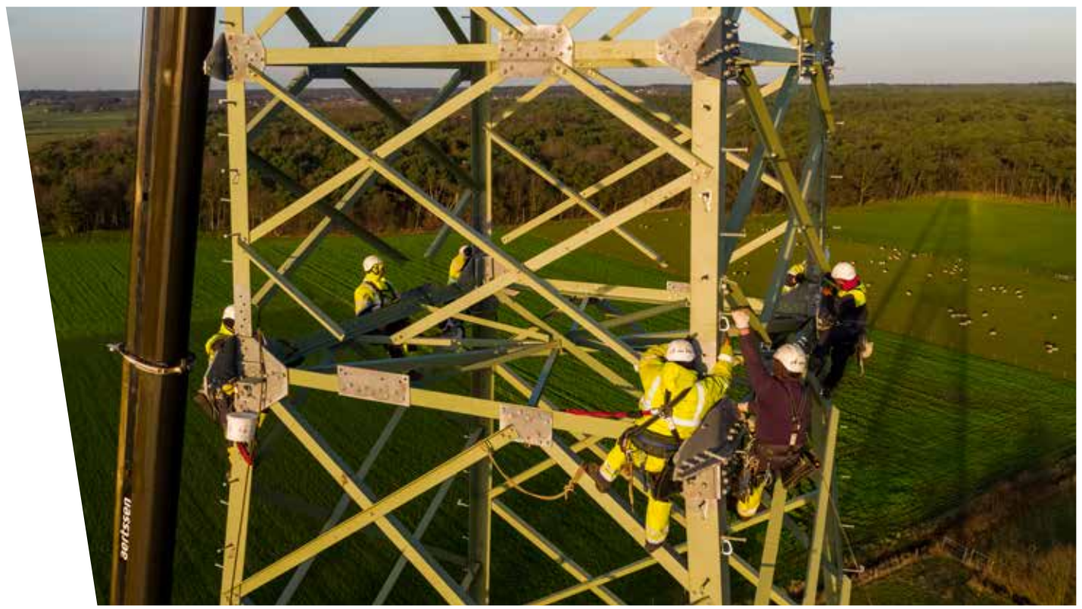
2.7.2. Human rights

GRI 414-1

Elia is committed to its responsibility to protect human rights and naturally respects the right to privacy, personal safety, freedom of opinion and property rights of employees, residents and customers. Elia also assumes responsibility for compliance with social standards in the supply chain. For this reason, Elia is not only a member of the United Nations Global Compact, but is also committed to the core labour standards of the International Labour Organization (ILO).

There is only limited impact on human rights violation for Elia as Elia's activities are mainly based within Europe. The large majority of purchases outside Europe are IT and consultancy related.

It is also reflected in one of the lighthouse projects of the Sustainability Initiative related to compliance and ethics (s"see 1.3.3. Sustainability Ambitions").



2.8. Stakeholder Engagement

2.8.1. Management approach

GRI 102-40

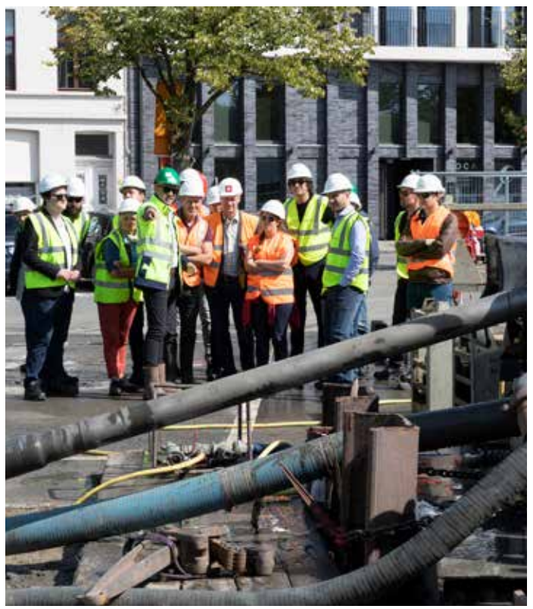
Stakeholder involvement helps accelerate infrastructure processes to the benefit of society. Elia regularly contacts and exchanges information with various stakeholder groups. As part of the materiality analysis process, Elia's stakeholder environment was analysed and defined. Depending on the specific strategic topics, Elia has contacts with public authorities and administrations, political parties, local citizens, civil society (associations representing environmental, economic, agricultural or other interests) or clients directly connected to its network.

GRI 102-42, GRI 413-1

Within the company, a Corporate Reputation Committee has been created, presided over by the Chief External Relations Officer in order to follow up, for selected issues, on the different stakeholder contacts organized by the concerned departments within Elia.

Elia has many stakeholders' initiatives. The method and frequency of engagement per stakeholder group and the link to the material topics are summarized in the table hereunder:

Stakeholder group	Mode of Engagement	Frequency	Main topics / expectations
Employees	– Performance management – Intranet – Donations	– Regular	– Employees - Human development – Employees - Wellbeing – Community involvement
Customers	– Customer satisfaction survey – Users' Group / Working Groups – Elia extranet – Annual	– 4 to 6 times a Year	– Transmission services – Environment – Fair operating practices
Society	– Social events – Engagement via own employees	– Regular	– Community involvement
Shareholders	– Shareholder meeting	– Regular	– General corporate performance incl. the contribution to society
Regulators	– Reports – Communication	– Regular	– Fair operating practices



2.8.2. Public acceptance

GRI 102-29, GRI 102-43, GRI 102-44,
G4 EUS Stakeholder Participation

Elia is convinced that an early involvement with all stakeholders is vital for the success of the energy transition and for the huge projects needed in order to achieve a sustainable grid expansion. The approach is to give all parties a chance to outline their point of view, improves the information flow and builds up trust.

A transparent and consistent approach aimed at meeting societal requirements and community expectations as far as possible will significantly improve the acceptance of projects. Furthermore, this approach has to be clearly communicated to the various stakeholders from the outset of the projects so that many concerns and anxieties can be addressed quickly.

To achieve this objective, the Community Relations department developed an integrated communication and public acceptance methodology, integrating stakeholders and communication actions in a systematic way in the grid development in order not only to control the risk of costs and timing but also to be able to realize the best project in the interest of the society.

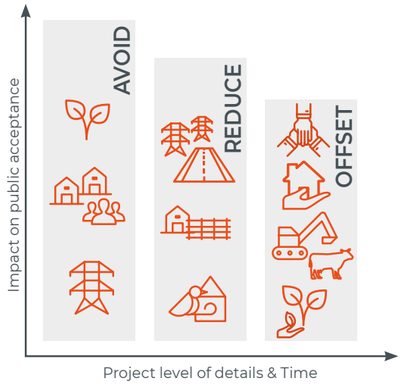
As early as in the concept phase of our projects, we are already working closely with all stakeholders such as local communities, associations, NGOs and various government organizations. With this approach, we build sustainable relations with them and we are having more interactions, understanding, supports and buy-in.

For the two most important projects in Wallonia and Flanders, Elia started also an early participation process with the stakeholders that represent the civil society and some regional experts. The objective was to define the best project and collect their opinion based on their different expertises.

For some topics like technology, we also started a participative work with academics to discuss the best technology's choices for both projects.

Elia also communicates and cooperates transparently throughout the entire development process. In addition to the legally required public information meetings in the context of the development of this type of project, we organize a series of "info-markets", which are information sessions for local residents.

We furthermore developed a public reference framework to mitigate the impact of the realisation of new infrastructure projects and to compensate for the remaining impacts.



Avoid – We systematically favour the scenario that has no impact on the public, landscape or natural environment. When developing the grid, Elia always seeks to use the existing corridors by upgrading the existing grid or building the new one practically on the same location than the old one.

Reduce – Impacts that are unavoidable are limited in intensity/size and/or restored. Where the construction of new infrastructure is necessary, Elia seeks, as soon as possible, to limit the potential impact by moving as far away as possible from inhabited or protected (nature, landscape, heritage) areas and by aligning on the existing infrastructure. Independant external offices and Elia's internal experts weigh out different alternatives scenarios and identify reduction measures.

Offset – Residual impacts that cannot be avoided, reduced or repaired are, as far as possible, compensated/mitigated. This in order to at least have a positive impact on another location.

Several initiatives were set up together with governors and mayors who are indispensable when it comes to bringing all the interested parties together.

2.8.3. Stakeholders Dialogues

GRI 102-21

Elia's Users' Group

Elia regularly organizes Users' Group meetings and working groups. The Users' Group provides a platform that allows Elia to maintain an ongoing dialogue with its main customers and partners. Every year, about four Users' Group plenary meetings are scheduled to inform the market participants and stakeholders about important and strategic topics related to our business. In support of these plenary meetings, there are three working groups which usually meet four times per year (more if necessary). They consist of the following:

- **System Operation and European Market Design Working Group:** This working group mainly addresses topics related to the operation of the high-voltage grid and capacity calculation, as well as initiatives and developments linked to the European integration of the electricity markets.
- **Belgian Grid Working Group:** This working group addresses issues associated with the Elia grid and related mechanisms, products and services that are of interest to Elia's customers.
- **Balancing Working Group:** This working group mainly addresses operational, technical and market-related issues in order to prepare for the challenges Elia's balancing market will face in the coming years.
  Under the WG Balancing and WG Belgian Grid there are four task forces. The task forces are set up on an ad hoc basis to handle specific issues when necessary. Currently, two task forces are active:
- **Implementation of Strategic Reserves Task Force:** This task force is aimed at informing and consulting market players and stakeholders about all relevant issues linked to the implementation of strategic reserves.
- **CIPU Redesign (iCAROS) Task Force:** This task force aims to discuss topics related to future asset coordination procedures with the relevant stakeholders.

User' Group	Session
Plenary meetings	14.02.2019 - Tariff proposal 2020-23: public consultation
	09.04.2019 - Clean Energy Package
	06.05.2019 – Internet of Energy (IoE)
	28.06.2019 - Adequacy and Flexibility study
	19.09.2019 - Clean Energy Package - 70% rule
	03.12.2019 - Future-proofing the EU Energy System towards 2030

Customer Satisfaction survey

Every two years, Elia measures the customer satisfaction level among its key stakeholders (distribution system operators, grid users, producers, access responsible parties, Users' Group, etc.). The main objectives of this survey are to provide an overview of the Key Performance Indicators (KPI's) related to service quality and their evolution over time.

The latest surveys were conducted in 2018 with 250 stakeholders. The KPIs measured by the Elia Satisfaction Index, reflect how stakeholders evaluate the products and services of Elia in general, the Customer Effort Score, reflecting the ease of doing business with Elia, the customer satisfaction regarding account management and image etc. The overall aim is to identify our strengths and weaknesses among the different stakeholders in order to further optimise the customer relationship.

With regards to the Elia Satisfaction Index, Elia scored 66%, reflecting the high quality of products and services. The majority of the stakeholders still describe collaboration with Elia as "easy". Compared to 2016, there is a status quo on the evaluation of Elia's Key Account Managers. Regarding image, there were stable results for Elia's expertise and communication with a significant increase in the extent to which Elia innovates.

The survey highlighted the strengths that need to be maintained and priorities were set to further improve stakeholder satisfaction.

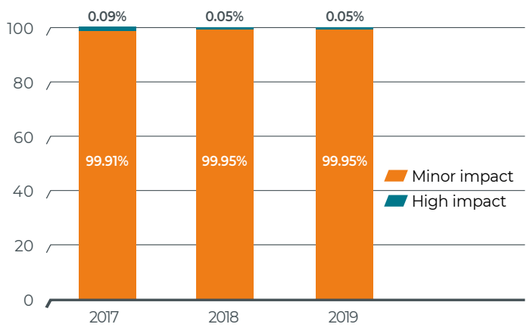
The next survey will take place in 2020.

Contact centres

The two Elia Contact Centres receive and handle requests for information from various sources; local residents, contractors, engineering firms, public authorities, utilities and project developers, to name a few. Because of the specific risks involved in working near a high-voltage facility, anybody wishing to carry out work close to high-voltage lines, high-voltage pylons, underground electricity cables or high-voltage substations is required to report these works to Elia. We can then provide them with maps of the relevant facilities and instructions about the safety measures to take while working near them.

There are statutory timeframes within which Elia has to answer the requests (7 working days from receipt).

% OF REQUEST HANDLED BY OUR CONTACT CENTRE



In 2019, our contact centres received 70,881 requests, 99,95% of these were answered within the set times.

Upon request via the Contact Centre or any communication channel, Elia offers information and free electromagnetic field measurements to the owners of land and buildings located near Elia facilities. In 2019, we performed 108 measurements.

2.8.4. Cooperations

SDG 11, GRI 203-2

LOCAL ADDED VALUE / SUPPORTING LOCAL INITIATIVES

For the past three years, Elia has established a structural partnership with the public utility foundation Be Planet[18] to develop and support ecological transition initiatives by citizens in municipalities where Elia infrastructure projects are underway. Elia supported 22 projects during those 3 years.

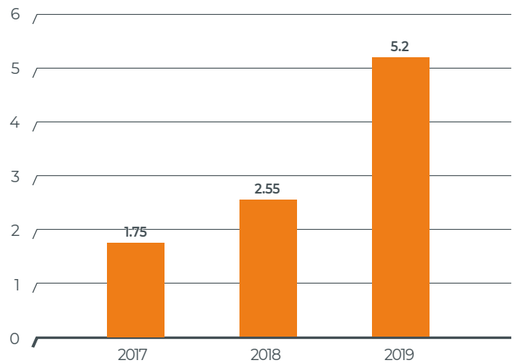
In 2020, Elia renewed the collaboration with Be Planet. Through this collaboration we are setting up a fund and methodology (call for citizen projects) to compensate municipalities for the impact of an overhead line.

WE GOT HEART

Any Elia employee involved in a community or charity-run project can request a contribution from Elia. Elia donated a total of EUR 10,000 € to 2 of these projects in 2019. In addition to this, Elia donated almost EUR 12,000 to various initiatives such as financial support for third world charities and sporting events, amongst others.

As we did in 2017 and 2018, 5.2 ton of our hardware (laptops, docking stations, printers, screens and carrying cases) received a second life, they were mostly donated to schools.

HARDWARE DONATED (TON)



18. https://www.beplanet.org/

2.9. Environmental aspects

2.9.1. Management approach

GRI 102-11

Sustainability, as well as a clear commitment to environmental and climate protection and the conservation of resources, are all integral components of the corporate strategy of Elia.

When developing and building our grid, we always strive to find socially responsible, economically efficient solutions. To this end, we try to limit the construction of new infrastructure, preferring to optimise and upgrade the existing infrastructure wherever possible.

Our goal is to keep the impact of our corporate and construction sites and other activities towards people and natural habitats to an absolute minimum. Elia respects flora, fauna and biodiversity, uses natural resources conservatively and keeps the energy consumption and emissions of our activities at the lowest level possible.

The challenge faced with the energy transition is to adapt our infrastructure while maintaining a sustainable approach in terms of environmental impacts.

We developed the avoid-reduce-offset approach described in 2.8.2. with the least impact on environment in mind.

We adopt the precautionary principle to reduce and avoid possible negative impacts by conducting/carrying out studies (e.g. studies in EMF), by calculating our carbon assessment and by bringing climate risks into the regular risk management.

An environmental impact assessment is legally required and conducted in the early stages of any project's development in order to identify, predict, and analyse impacts on the physical environment, as well as social, cultural, and health impacts.

The Department Community Relations is responsible for the appropriate handling and implementation of all tasks relating to environmental and nature conservation issues, quality management and the management of related tasks. Within this department, the team Environment & CSR advises in terms of process control and ensures the stringent implementation of the environmental and quality strategy and legal compliance.

Elia's supplier code of conduct which is binding for all suppliers contains additional principles on environmental protection and resource conservation.

Although Elia's core activities are not the origin of soil pollution, it has been established that a significant part of the Belgian soils is historically polluted as a direct result of nearby or in situ (prior use) industrial activities or backfilling with polluted soil.

Several remediation actions have been launched on our sites. The soil legislation has since been enforced in the three Belgian regions. Elia has developed a plan to map the soil condition on its own land in order to schedule the intervention priorities in keeping with existing and new soil legislation.

In 2019, EUR 1,370,000 has been paid for surveys, follow up and the realization of remediation works.

Budget (million EUR)	2017	2018	2019
TOTAL	**1.1**	**1.2**	**1.4**

The site with substantial soil pollution detected in 2018 (as reported in last year report) will undergo a remediation in 2020 based on an action plan validated in 2019 by the Brussels regional authorities.

2.9.2. Biodiversity and landscape integration

SDG 14
GRI 304-1 – GRI 304-2 – GRI 304-3
G4-EUS-EN12

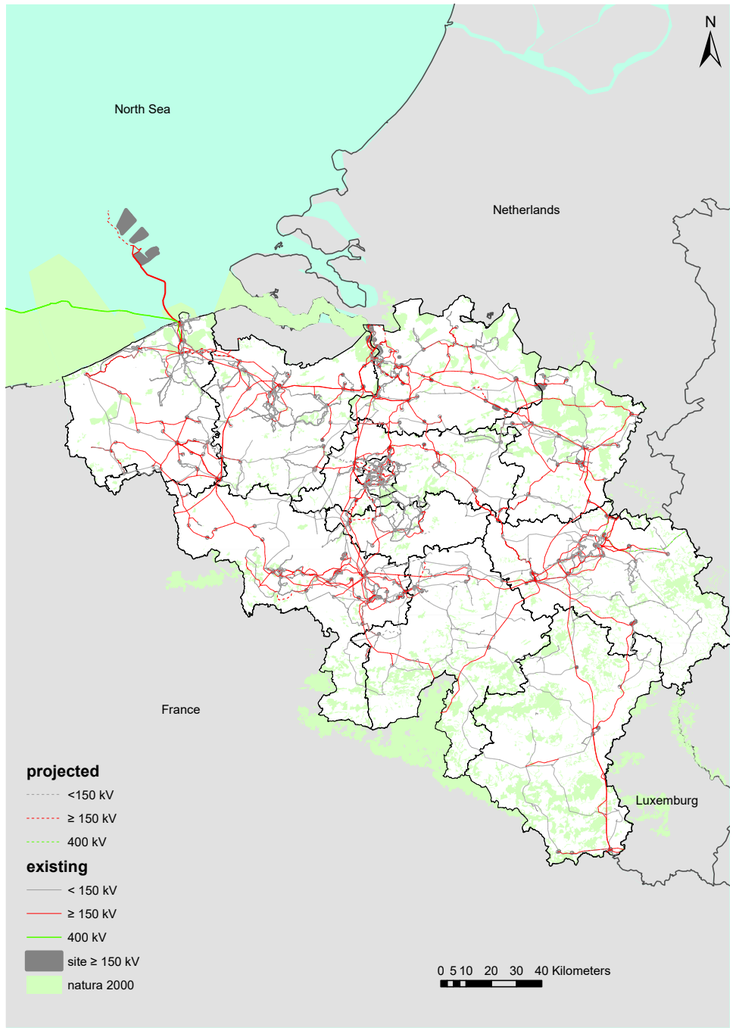
Elia's land-use can be divided into the following categories:

- areas under overhead lines (mostly on private land);
- areas over underground lines (mostly on public domain, such as roads) + marine territory in the North Sea;
- areas under the pylons (sometimes Elia owns the small plot of land where the pylon is);
- areas needed to build and maintain substations (the gravel must be kept free of weed for safety reasons).

The total length of our utilities located in Natura 2000 areas (on land and sea) is 665 km.

The modular approach of the MOG design made it possible to limit the number of submarine cables, thereby reducing not only the cost for society but also reducing the impact on the marine environment.

Elia signed the Marine Grid Declaration of the Renewables Grid Initiative (RGI) in 2019, which lays down standards for the early involvement of stakeholders and for nature and species conservation in the development of the offshore grid beyond the legal requirements.



Source:
http://natura2000.eea.europa.eu/#

2.9.2.1. Compensation/Mitigation measures

Elia has some parts of land it owns that are managed for nature protection nearby protected areas, such as a marsh with ponds in (Merelbeke Flora, Ville-sur-Haine) where Elia encouraged amphibians to settle there by creating and maintaining ponds.

Other mitigation measures aim at minimising the landscape impacts, by planting trees and shrubs. "Green screen" plantations are also used to enhance the landscape integration of Elia's installations. This approach was used in the context of the Stevin Project (in West and East Flanders) from 2015 to 2018 by planting more than 26 km. Similar measures will be set up in 2020 in the context of our project Boucle de l'est (in the east of the Province of Liège).

2.9.2.2. Ecological aisles management

For safety reasons (to prevent falls and short circuits), no trees are allowed to grow close to high-voltage overhead lines. Up until recently, the standard maintenance policy for overhead lines involved ensuring that a corridor of approximately 50 meters wide below the lines was kept clear of all vegetation with a rotary slasher every eight years. This obligation can indirectly be beneficial to specific ecosystems with great ecological value, for example the moors (present in the High Fens nature reserve, in the eastern part of Belgium) are better protected in the corridors under the overhead lines crossing them, because the rest of the moors were planted with trees for wood production and by draining these areas. Besides, Elia was from 2012 a forerunner in the implementation of a seven-year LIFE project completed in 2017 (see Activity Report 2019, p. 84).

This Europe-wide project aimed to transform 130 km of forest corridors into fully-fledged 'ecological corridors'. Instead of using rotary slashers, Elia restored more stable natural environments below the lines (using peat bogs, bushes and grasslands managed by grazing). Given the success of the project, Elia decided in 2018 to pursue this action for another five years without subsidies under the name "Life2" in order to further monitoring the evolution of these areas and their maintenance while special attention is given to the control and removal of invasive plants.

Elia – as 110 companies and organisations – signed the "Green Deal Bedrijven en Biodiversiteit", an initiative of the Flemish Department of the Environment. It consists of agreements, on a voluntary basis, between the Flemish government and private partners that commit to increasing biodiversity on their sites over the next three years. By 2021, 1250 hectares of industrial land in this region will be developed to promote biodiversity. As a participating party, Elia undertook to implement/organise various actions in the years 2018-2021.

2.9.2.3. Bird protection

There is a risk of collision and sometimes the electrocution of birds in areas with overhead lines and in substations (where the lines go down). Therefore, Elia is installing markers and nests to reduce the impact and to protect some endangered species. With the help of Belgium's leading environmental associations, Elia has identified the 130 sections of its network that pose the greatest hazard to birdlife. Measuring 200 km in total, they are gradually being fitted with bird anti-collision devices over a 10 year-period (starting from 2016). If a project is due to take place on these sections, markers will be installed immediately. For sections without projects, we will take advantage of scheduled interventions to fit markers on conductors or earth connections.

Bird markers	2017	2018	2019
Total of HV Lines equipped (km)	13.62	26.24	37.59

Since 2016, Elia has installed bird markers on 37.6 km of lines.

Firefly

In 2019, Elia hung a new type of bird markers named Firefly on her power lines to make them more visible to birds.

The markers are placed on the high-voltage line in Noordschote (West Flanders, one of the most dangerous high-voltage lines for birds in Belgium) over a distance of 3 kilometres.

Natuurpunt and Elia have been working together since 2012 to solve the problem of birds falling victim to power lines.

Firefly markers are 11 to 15 cm long plates with 2 reflectors on each side. They are fixed every 30 metres. In total, more than 500 Fireflies will be suspended.

The Firefly markers are fixed on the high-voltage lines with a clip and move in the wind. The reflectors reflect the light, making the line more visible to the birds. They are especially useful at dusk and dawn, when the birds are most active .

19. Flemish independent volunteer association that ensures the protection of vulnerable and threatened nature.

2.9.3. Water protection

GRI 306-5

Elia is committed to effective water protection. As the business activities of Elia do not result in significant water usage, its responsibility in this regard is not so much to reduce water consumption, but to consider water resources in the ground during grid and substation projects and to avoid water and soil pollution with hazardous materials. Containment systems equipped with coalescence filters are installed beneath transformers in substations to prevent drips from entering the soil. These systems are inspected regularly by maintenance technicians and refurbished or replaced when needed. Waste water is only discharged with appropriate permission from water authorities.

In the context of her offshore projects, Elia contributes to making the North Sea safe for humans and the environment. Every preparation includes the removal of i.a. explosive remnants of war (UXO - UneXploded Ordnances) from previous world wars.

2.9.4. Energy Consumption

GRI 302-1, SDG7, SDG13

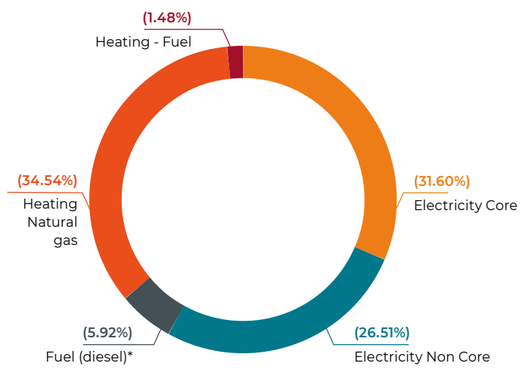
Elia consumes several energy sources for its core and non-core activities.

The two most recently built administrative centres of Elia, Monnoyer in Brussels and Crealys in Wallonia are BREEAM[20] certified (the latter having been certified in 2019). As required by the Belgian regional regulations, energy audits were conducted on some or our administrative buildings.

The electricity consumption of Elia can be subdivided in two categories:

- **Core:** energy used by all the infrastructure directly related to its business model i.e. all the substations and al.
- **Non-core:** energy used by the support services, administrative centres.

ELECTRICITY CONSUMPTION WITHIN THE ORGANISATION



The impact of the energy consumption of our activities is further assessed in the next section.

Note: In the previous report (Sustainability Report 2018), the unit of the electricity consumptions disclosed was megawatt-hour (MWh) and not kilowatt-hour (kWh).

2.9.5. Emissions

SDG 13, SDG7 , GRI 201-2, GRI 305-1 – GRI 305-2 – GRI 305-3

Greenhouse gas emissions – Carbon assessment

Elia supports the objectives of the EU and the Federal Government to reduce CO_2 emissions, in particularly by expanding the grid, which allows an increase in the share of carbon-neutral energy sources.

In order to assess its own greenhouse gas emissions, Elia has been conducting a carbon assessment since 2010 to identify direct and indirect emissions from its activities in Belgium and is taking steps to control and reduce greenhouse gas emissions from its activities.

Since 2017, Elia has participated in the CDP, an international, non-profit organization providing a global system for companies, investors and cities. This organization measures, discloses, manages and shares environmental information. When it comes to climate change, a company's score is based on two factors:

- the level of detail and the comprehensiveness of its responses, and
- its awareness of climate issues, management methods and its progress on acting on climate change.

The scope of the carbon assessment conducted within Elia is the emissions of Elia System Operator (now Elia Transmission Belgium), Elia Assets and Elia Engineering.

The total 2018 emissions amount to 282.219 tCO_2eq.

Elia has obtained a rating of B- from the CDP in 2019 for the year 2018.

N.B.: We announced in the previous sustainability report that the scope of the carbon assessment would be reviewed in order to include the emissions of Germany. This has not happened yet but we will strive to the expansion of the scope of this assessment in our next report.

20. Building Research Establishment Environmental Assessment Method - the British standard for sustainable buildings.

Calculation method: In order to assess the carbon footprint of the emissions of a company, its emissions are broken down in three categories ("scopes"):

Scope 1: direct emissions of greenhouse gases from owned or controlled sources

They are mainly due to SF_6 gas leakage from our installations (see below) and natural gas consumption for heating.

Scope 2: indirect emissions of greenhouse gases resulting from the generation of purchased or acquired energy consumed by the organization

They are mainly due to grid losses that are unavoidable when transmitting electricity and on which Elia has not a direct influence.

Scope 3: all other indirect emissions of greenhouse gases (not included in scope 2) that occur in the value chain (outside our company), including both upstream and downstream emissions (by buying goods and services, employee commuting, business travels et al)

These are mainly generated by the construction and dismantling of our assets and network.

GHG emissions 2019

Greenhouse gas emissions in 2019 in t CO_2 equivalent*		
DIRECT (SCOPE 1)		
SF_6 losses	5,875.00	1.89%
Heating (natural gas and fuel)	782.00	0.25%
Fuel vehicles	4,165.00	1.34%
Other	118.00	0.04%
Total SCOPE 1	**10,940.00**	**3.51%**
Indirect (scope 2)		
Electricity consumption	1,467.00	0.47%
Grid losses	257,766.00	82.73%
Total SCOPE 2	**259,233.00**	**83.20%**
Other indirect (scope 3)		
Assets	35,744.00	11.47%
Other	5,669.00	1.82%
Total SCOPE 3	**41,413.00**	**13.29%**
TOTAL	**311,586.00**	**100.00%**

*Emission factors: ADEME and IPCC 5th Assessment (AR5)

The calculated figure in the carbon footprint corresponds to 219 tonnes of CO_2 equivalents per person including grid losses and 38 tonnes of CO_2 equivalents per person excluding grid losses (basis, headcount 2019: 1424 employees).

Focus on SF_6 (Scope 1)

Sulphur hexafluoride (SF_6) gas has been used for over 30 years as an electrical insulator in high-voltage devices, including gas-insulated switchgear (GIS). Both its chemical and physical properties (i.a. inert, non-flammable) make this gas particularly well suited for its use in high-voltage electrical equipment. GIS is often used in densely populated areas because it is much more compact when compared to traditional switchgear which uses air as an insulator (AIS).

It has however a very high global warming potential (GWP rapprox. 23.000 t CO_2 eq). For this reason, SF_6 is used in switchgear in a closed circuit, i.e. emissions to the environment are virtually eliminated. The pressure chambers are permanently monitored technically for possible leaks. However, despite all these protective measures, natural leakage cannot be 100 percent avoided due to the sealing technology and the necessary gas handling.

Elia has developed an investment and maintenance policy to minimize the risk of SF_6 leakage. Manufacturers are obligated to guarantee a very stringent maximum percentage of SF_6 loss throughout the lifetime of the facilities. The maintenance policy aims to maintain operations involving compartments filled with SF_6 to a minimum.

The volume of SF_6 gas installed on the Elia grid (36 kV to 380 kV inclusive, excluding the NEMO substation) is 119 tons. Consumption of SF_6 gas (as a replacement and as a top-up in the event of a leak) is closely monitored using a system that tracks each cylinder of SF_6. The SF_6 leak rate for all Elia facilities was "< 0.25%" in 2019.

2.9.6. "Electric and Magnetic fields (EMF)

SDG 3, GRI 416-1

The electrical transmission and distribution systems in Europe are mainly operated with alternating voltage at a frequency of 50 Hz. Hence, they create electric and magnetic fields (EMFs) of Extremely Low Frequency, as is also the case for all applications of electricity, including domestic appliances.

Although no causal link can be established between magnetic field exposure from electricity transmission infrastructures and human health, Elia takes this issue very seriously; both for each project on the electricity grid and with scientific studies that improve the knowledge on the subject.

Elia has continued to contribute, yearly EUR 370,000, into broadening scientific knowledge for many years. It also supports several research centres and universities within the Belgian BioElectroMagnetics Group (BBEMG) whose scientific independence is enshrined in a cooperation agreement.

At an international level, Elia has also concluded a research contract with the Electric Power Research Institute (EPRI - a non-profit organization that conducts research in energy and the environment), an agreement granting Elia access to the results of international research studies in this field.

To communicate transparently on the subject, Elia provides various tools: a dedicated website, information sheets, a brochure, newsletters, information sessions (with the possible presence of an independent expert) and, at the request of local residents, carries out free measurements of electric and magnetic fields via its Contact Center, see further information in 2.8.3. Stakeholders Dialogues.

The study of magnetic fields is also one of the criteria analysed for each project developed by Elia. In accordance with the precautionary policy established in Flanders and Brussels, Elia assesses future exposure to magnetic fields by means of specific calculations (modelling) and mitigation/reduction measures are applied where necessary.

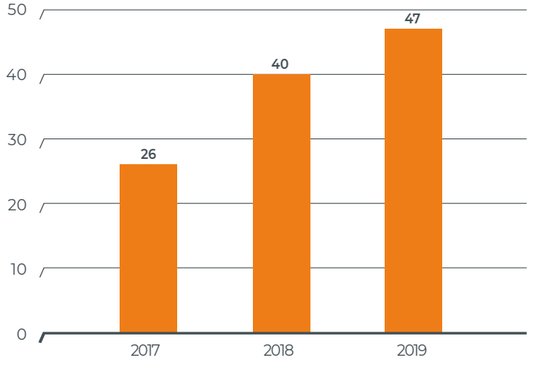
2.9.7. Noise

SDG 3

Elia's facilities cannot generate any noise pollution. This matter is governed by acoustic standards, varying from region to region; these must be respected in order to avoid any noise pollution near Elia's facilities. Noise can be caused, e.g., by transformers in high-voltage substations, high-voltage lines, and pylons. Underground lines do not cause any noise.

Elia always carries out soundscape studies prior to the realization of its infrastructure projects to ensure that the acoustic standards are not exceeded. Furthermore, Elia conducts noise studies in the event of complaints (see also Contact Centres).

SOUNDSCAPE STUDIES



These are the soundscape studies carried out in 2019 in the context of projects.

There were 8 acoustic measures done on request in 2019.

2.9.8. Waste

GRI 306-2

Elia produces different waste streams related to its activities, including some recyclable and hazardous waste.

This waste is generated during maintenance work or infrastructure projects and in the administrative and service centres.

Elia has set up a waste management policy to collect, sort and handle its waste.

At our technical sites, all types of waste generated on-site – including hazardous materials – are stored in so-called container parks, guaranteeing optimal storage in dedicated locations. They are eventually removed periodically or upon request by authorized collectors specialised in the collection, transport and recycling of hazardous and non-hazardous waste. On our construction sites, the contractors must comply with environmental legislation as well and organize the sorting of the construction site waste they produce during the execution of their contract.

Total weight (ton)	Non-hazardous waste	Hazardous waste
Recycled	2434.13	23.02
Disposed of	0.00	15.46
Total	**2434.13**	**38.47**

N.B.: all the data related to the weight of waste produced on our construction sites might not have been gathered as this waste is under the responsibility of our external contractors

The sorting rules and procedures are identical, regardless of the site even if the regulations can slightly differ in function of the region where this site is located.

Hazardous waste is determined on the base of its waste code from the European List of Waste.

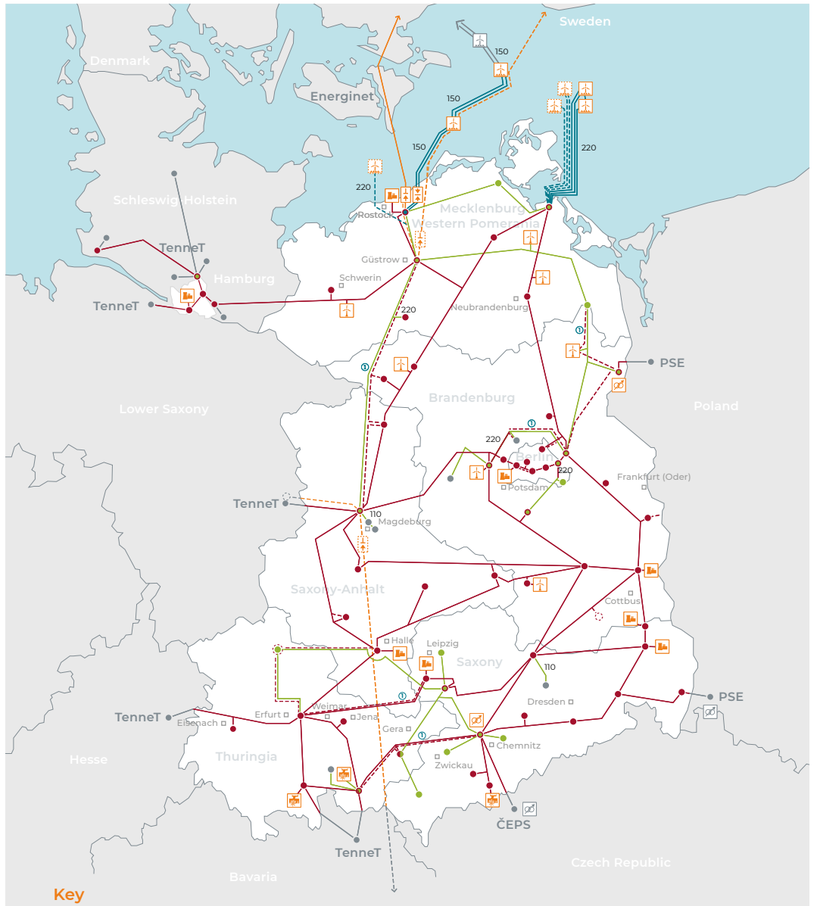
The waste disposal contractor provides Elia with information on the waste disposal method (and attests) as legally required in Belgium.

3. 50Hertz in Germany

3.1. GRID 46
3.2. SUSTAINABILITY MANAGEMENT 48
3.3. ENERGY – MARKET AND INTEGRATION OF RENEWABLES 52
3.4. GRID RELIABILITY 54
3. 5. HUMAN RESOURCES 55
3. 6. SAFETY 59
3. 7. SUPPLIERS, HUMAN RIGHTS AND LOCAL ADDED VALUE 60
3. 8. STAKEHOLDER ENGAGEMENT 62
3.9. ENVIRONMENTAL ASPECTS 65

3.1. Grid

3.1.1. Grid map



Key

Switchgear (mostly at transition points between the 50Hertz grid and distribution system operators' grids)

- 380 kV
- 220 kV
- Transformation 380/220 kV
- Transformation 380/150 kV
- Planned/under construction
- Other companies
- 110 Operating voltage kV

ⓘ New construction, mainly along existing route

Line	380 kV
Line planned/under construction	380 kV
Line	220 kV
HVDC/direct-current connection	400 kV
HVDC/direct-current connection planned/under construction	300/320/525 kV
Other companies	380/220 kV
HDVC/back-to-back converter	380/150 kV
HVDC/converter	400 kV
HVDC/converter planned/under construction	300/320/525 kV
Offshore grid connection	150/220 kV
Offshore grid connection planned/under construction	150/220 kV

Grid users:
Our customers are regional distribution system operators and power stations, pumped storage plants, wind farms and large industrial facilities that are connected to the transmission system.

- Conventional power station
- Pumped storage plant
- Phase-shifting transformers
- Onshore wind farm/Offshore wind farm
- Onshore wind farm planned/under construction
  Offshore wind farm planned/under construction

Situation at: December 2019

27 February 2020

3.1.2. High-voltage lines

G4-EUS-EU4

	Underground cabling (km)	Difference	Overhead lines (km)	Difference
400 kV (DC)	15 km	0	0 km	0
380 kV	55 km	0	7,250 km	0
220 kV	293 km	+100 km	2,607 km	0
150 kV	270 km	0	0 km	0
Total	**633 km**		**9,857 km**	

3.1.3. Substations, converters and switching stations

	2017	2018	2019	Difference
Substations	65	65	65	0
Switching stations	7	8	9	+1
Total	**72**	**73**	**74**	

3.2. Sustainability Management

3.2.1. Business model

GRI 102-1, GRI 102-2, GRI 102-6, GRI 102-7,.GRI 102-9, SDG9

50Hertz operates one of the most modern electricity transmission grids in Europe in northern and eastern Germany. Thereby the supply of electricity to 18 million people is secured around the clock. Across 10 locations, 50Hertz acts as an interface between energy producers and distribution grid operators and large-scale consumers. With a team of 1,120 employees, 50Hertz ensures that electricity operates continuously. 50Hertz manages the distribution of 10,490 kilometers of lines. It coordinates the electricity market players in the grid area as well as managing and coordinating the electricity market players, manages and coordinates balancing groups and puts electricity from renewable energies that is not directly sold onto the electricity exchange. To ensure successful energy transition, 50Hertz develops innovative solutions for the system and market integration of intermittent renewable energies.

50Hertz has a so-called "natural monopoly" with the transmission grid in its grid area, i.e. in the area in the northern and eastern Germany, the company is the sole operator of the extra-high voltage grid and is therefore subject to regulatory supervision by the national regulatory authority - the Federal Network Agency (BNetzA). The regulatory system has a substantial impact on the business model. The BNetzA is also responsible for the revenue cap to calculate the grid fees for 50Hertz.

3.2.2. Locations

GRI 102-3, GRI 102-4

3.2.3. Memberships

GRI 102-12, GRI 102-13, SDG17

50Hertz is proud to be involved in various societies, associations, and initiatives. Of course, specifically directing their attention to the fields of renewable energies, climate and environmental protection, human rights and the harmonisation of the European electricity market. For example:

	Energy	Climate	Environment	Human Rights
AVEU Arbeitgeberverband Energie- und Versorgungswirtschaftlicher Unternehmen e.V. [employers' association of energy and utility companies]	✓			✓
BDEW – Federal Association of the Energy and Water Industry	✓			
German committee of CIGRE Conseil International des Grands Réseaux Électriques	✓			
ENTSO-E – European Network of Transmission System Operators for Electricity	✓		✓	
Go15 – Reliable and Sustainable Power Grids (indirect through Elia)	✓		✓	
RGI – Renewables Grid Initiative	✓	✓	✓	
UN Global Compact		✓	✓	✓
VDE-Elektrotechnischer Verein e.V. [electrotechnical association]	✓			
World Energy Council	✓			
Diversity Charter				✓

3.2.4. Values, principles, standards and code of conduct

GRI 102-16, GRI 102-17, GRI 102-19, GRI 102-20, GRI 102-26, GRI 102-32, GRI 102-33

For 50Hertz, a business activity that is successful in the long run, is achieved by acting in the best interest of the company as well as in the interest of society. This is reflected in the company vision "A successful energy transition - for a sustainable world". 50Hertz has made it its mission to make the energy transition possible. The company has set itself five strategic goals in order to fulfill this task to the highest possible standard. It is for this reason that 50Hertz wants to stabalise security of supply at its peak, running in parallel with expanding the transmission grid in line with demand, achieving a competitive and sustainable result, further improving the efficiency, and adopting a value-based corporate culture with a strong focus on occupational safety.

The sometimes opposing objectives and interests of 50Hertz and its stakeholders are to be reconciled as much as possible. We aim for the maximum possible transparency, which is has been embodied in this report.

50Hertz has expressed its commitment to responsible corporate management in its sustainability principles and corporate charter. These state that the company acts as per the ten principles of the UN Global Compact in the areas of human rights, labor standards, environmental protection and, anti-corruption. In April 2017, 50Hertz intergrated themselves into this global coalition of values and has been involved in the German Global Compact network ever since. Employees also have access to corporate documentation that includes all applicable directives, guidelines and manuals, work instructions, process manuals and, work agreements. The company charter and guidelines specify what is meant by and expected within correct business conduct and make it clear that all employees comply with the law. These principles result in organizational measures that are contractual, and apply to all staff across the board.

Under the overall responsibility of the Managing Director Finance, the Corporate Development department has defined a sustainability concept and a roadmap of measures for the continuous expansion of sustainability reporting. The Communication & Policy department continues to define the reporting processes.

The importance of the continuous expansion of sustainability management is illustrated by the inclusion in the annual business plan, which is valid for five years. As part of the sustainability strategy, targets, indicators and, measures are systematically developed and reviewed and consequently secured in the corporate strategy. A company-wide committee at senior management level (CSR Board) oversees this from

the development of measures to reporting, and is later officiated by the Chief Financial Officer and the Chief Human Resources Officer. The CSR Board convenes twice a year to agree on targets and processes.

The implementation of individual measures and the recording of key figures is the responsibility of various departments, unit and, teams within company. The CSR core team meets every three months to deliberate this. Those responsible for data provide key figures on the central transparency management platform in a comprehensible manner throughout the company. Sustainability risks are discussed and evaluated with the management in the quarterly updated risk analysis and, at an annual risk conference. Additionally, certified management systems such as ISO 45001 in the field of health and safety at work and ISO 27001 in information security management, or internal management systems based on recognized standards such as environmental management (according to ISO 14001) and early public acceptance (according to VDI 7000) are used in CSR core areas.

3.2.5. Relevant legal framework

50Hertz is always up to date and remains compliant with applicable law. The business activities are subject to numerous national and European legal regulations. In the future, the Climate Protection Act passed in October 2019 will have a further influence on business activities. Further information on the laws and regulations relevant to our business activities can be found on our website. CSR.50Hertz.com

3.2.6. Anti-corruption

GRI 205-2

The company charter and guidelines on preventing corruption set out 50Hertz's understanding of correct ethical conduct and make it clear that the company complies with the law and does not tolerate corruption. These principles flow into organisational measures that are binding throughout company.

In 2019, corporate governance was strengthened by taking on board a managerial position for compliance and internal control systems. Guidelines and internal control systems were further approved by the management team. The guideline sets out the objectives and binding standards for the effective and compliant design of internal control systems. Since 2010, 50Hertz has adopted these guidelines that regulate the whistleblower system and prescribes the establishment of an internal compliance committee and an external ombudsman. The Compliance Committee comprises one member from the Legal and Human Resources departments and the Compliance Coordinator. Once a year, the ombudsman informs the Compliance Committee in a written report about his use and the number of potential risks received. If the ombudsman passes on a justified tip to 50Hertz, the Compliance Committee is immediately summoned to deal with the case in hand and, if necessary, seek to take further internal action. The committee reports to the 50Hertz management annually, and on an ad hoc basis if required. 50Hertz is currently evaluating whether the existing system can be applied to other areas such as anti-discrimination and human rights due diligence. In 2019, the ombudsman received no indication of corruption. In the financial year 2019, no significant fines were imposed on 50Hertz with legal effect in connection with general business activities or with power line construction projects or operations. The reporting threshold for administrative offenses was set at 25,000 euros. On top of that, 50Hertz provides up to date training for all employees involved in the purchasing process on the topics of procurement basics, anti-corruption, and compliant behaviour. Since 2016, 23 training courses for 250 employees have been held across the company in various locations. For employees at management level, purchasing and project management, the training courses in the area of compliance and anti-corruption were completed in 2019. Further training courses are held if and when required, for example for new staff.

3.2.7. Risk management

GRI 102-30, GRI 102-11

As part of systematic risk management, 50Hertz regularly surveys and assesses the following risk areas:

- Protection of life and limb
- Profit & loss
- Liquidity
- Reputation
- Security of supply.

50Hertz evidently aims to avoid risks to the company's continued existence, to reduce risk positions as much as possible - where feasible - and to optimise the risk/opportunity profile. A risk guideline sets out how risks are systematically identified, recorded, evaluated and monitored every quarter. A risk conference is held annually whereby all head of departments (second management level) as risk owners and the risk manager together with the management, discuss the most significant risks and risk-related issues. In the context of sustainability, various risks are assigned to the Environmental, Social and Governance (ESG) areas. These include risks relating to occupational safety, environmental protection and data security and transparency. 50Hertz is persistently developing its management of ESG risks. For example, the risk conference due to be held in February 2020 will for the first time address a separate cluster of these risks. 50Hertz plans to work with key areas of the company to assess possible climate impacts on its business activities based on long-term scenario guidelines. At the project management level, an integrated process for the integrated planning of schedule, budget and risk management was installed.

3.2.8. Security

G4-EUS-DMA Desaster/Emergency Planning and Response

As an operator of critical infrastructure, 50Hertz is obligated to ensure information security by the IT-SiG (IT-Sicherheitsgesetz/IT Security Act). Information must be processed, stored and communicated in such a way that the availability, confidentiality and integrity of the information and the systems are effectively ensured.

The information security management system according to ISO 27001 was recertified in 2019. IT risks are systematically identified and administered using the established security process. In the year under review, there were no identified cyber attacks recorded at 50Hertz or damage caused by information security incidents.

Within the framework of the Basic Data Protection Regulation (DSGVO) and also with a view to future digitisation projects, the data protection management system (DSMS) was revised and the position of data protection manager was created. Together with the external data protection officer, they form the data protection team at 50Hertz and continuously work to develop the management system. This also included a training and awareness program for all internal and external employees. Direct contact persons in the departments responsible for data protection were given seperate, more robust training.

For 50Hertz, safety goes beyond the corporate boundaries. For example, crisis management and crisis communication with internal and external stakeholders are trained in regular crisis team exercises. Not only are the existing structures, processes and reporting channels reviewed and continuously improved, but also the skills of the crisis management team members and employees are intensively trained to effectively manage unforseen events under particular pressure and to make snap and effective decisions for crisis management. These and other measures are designed to continuously and holistically increase the resilience of 50Hertz. In addition to the training concept for all members of the crisis team, this also includes the review of the property protection concepts and further development of the general corporate security.

3.2.9. Political influence

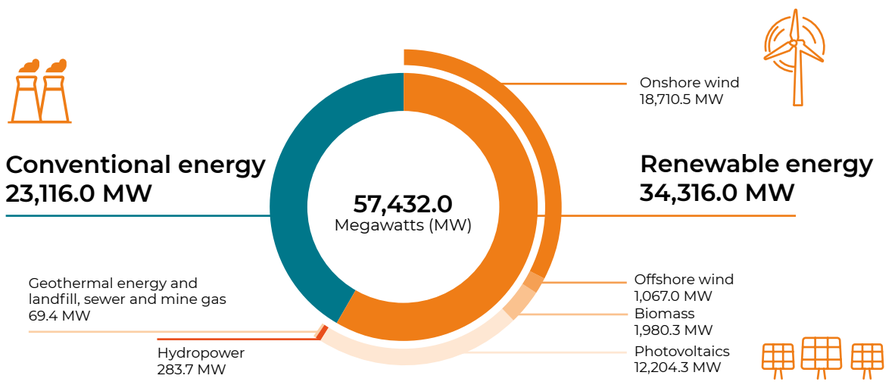
GRI 102-16, GRI 415-1

Because legislative or regulatory activities have a major impact on 50Hertz's business activities, the company presents its positions transparently and publicly in the political process. The responsibility for this lays with the Communication & Policy department.This political communication is carried out responsibly and is exempt from donations to political parties. Ethical principles for the political petitioning were established. This guideline, which is binding throughout the company and has been approved by the management, regulates the procedures in the political environment. It sets out that 50Hertz does not make any donations to politicians, political parties or political institutions and when sponsoring, focusses its attention on appropriate consideration and balance. Responsibility for donations to party-related foundations and associations is rooted centrally in the Communication & Politics department. Coupled with specific training programmes, 50Hertz ensures that employees who are active in social and energy policy are guided by clearly defined principles in their communications and actions. What's more, 50Hertz is registered in the EU Transparency Register and is bound by its Code of Conduct. In 2019, 50Hertz made no donations to politicians or political parties.

3.3. Energy – Market and integration of renewables

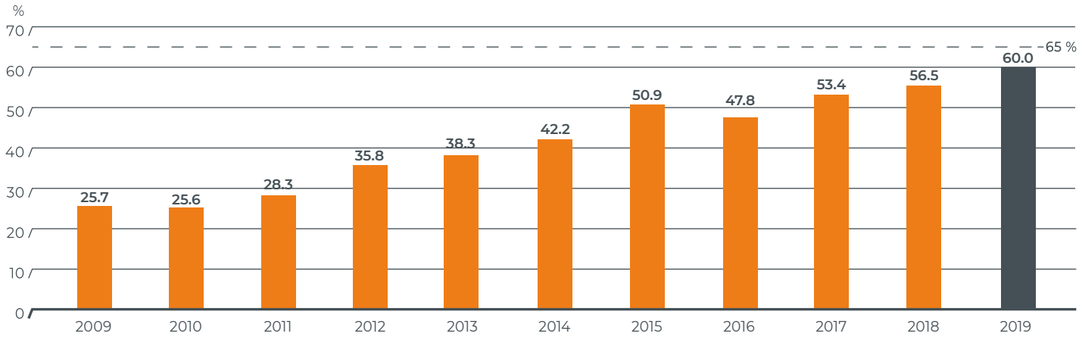
3.3.1. Installed capacity

SDG7, GRI 302-2



3.3.2. Evolution

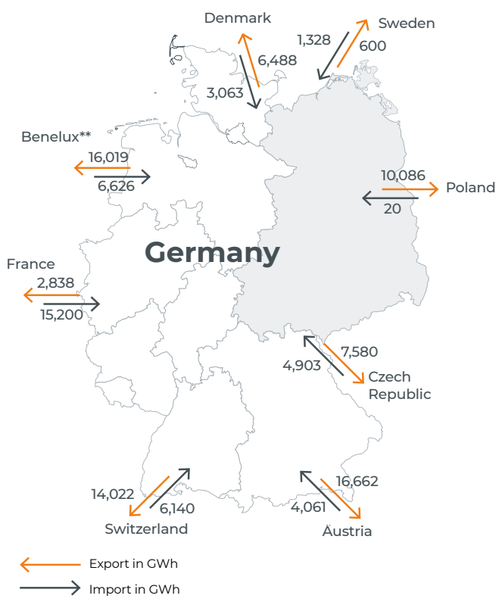
CHANGE IN THE SHARE OF RENEWABLE ENERGY IN ELECTRICITY CONSUMPTION



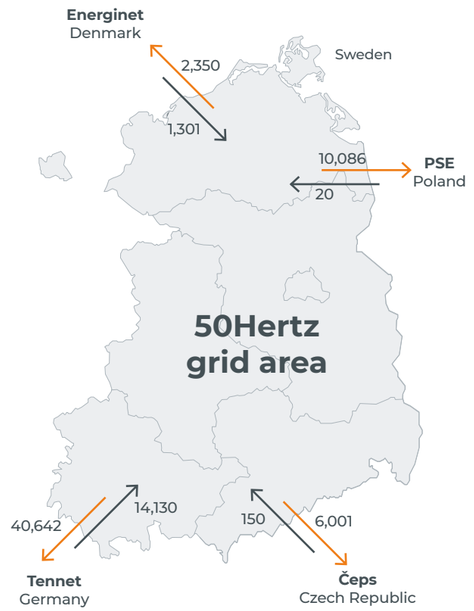
On average, 60 percent of the electricity consumed in the 50Hertz grid area has already been generated from renewable energies by 2019. 50Hertz is prepared to make additional efforts to achieve the political renewable expansion target of 65 percent in 2030 in Germany. This requires a reliable and sustainable regulatory framework.

3.3.3. Energy import & export

GRI 102-6, GRI 302-2

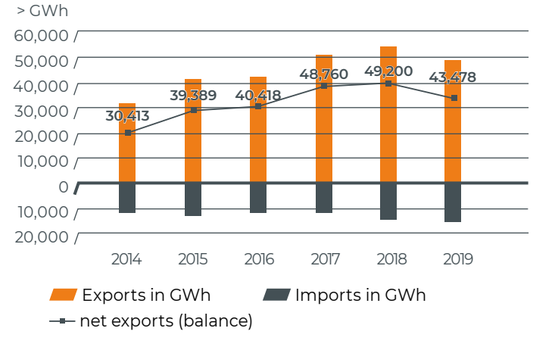


** The interconnector with Belgium is currently under construction and is due for completion in 2020.

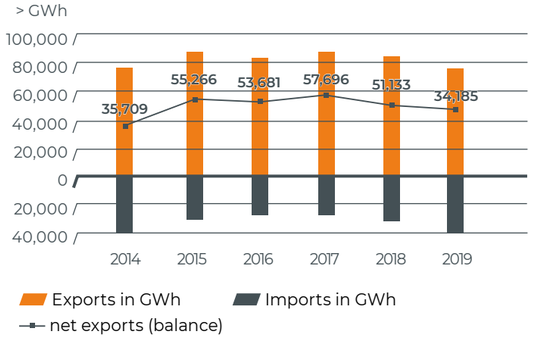


Total exports in 2019:	59,079 GWh
Total imports in 2019:	15,602 GWh
Net exports in 2019:	**43,478 GWh**

CHANGE IN EXPORTS AND IMPORTS IN THE 50HERTZ CONTROL AREA



CHANGE IN EXPORTS AND IMPORTS AT GERMANY'S NATIONAL BORDERS



3.3.4. Energy consumption

In the grid area of 50Hertz, electricity consumption is stable over the year at 99 TWh in 2019 (96.8 TWh in 2018 and 96 TWh in 2017 and 2016).

3.3.5. Grid losses

G4-EUS-EU12

When electricity is transmitted, energy losses are inevitable. They present themselves in the form of current heat losses in transmission lines, in transformers and other system elements as well as as as leak and corona losses. In 2019 the grid losses of 50Hertz totalled 2.3 TWh. The grid losses of the extra-high voltage level were 1.9 TWh, and those of the transformation level 0.4 TWh. 50Hertz has already premeditated the South-East Link between Saxony-Anhalt and Bavaria, the first 525 kV high-voltage direct current (HVDC) transmission line in its grid area. This technology is more suitable than conventional three-phase AC technology for transmitting large quantities of electricity with low grid losses and optimal control over long distances. To be able to better predict the losses more precisely and to be able to purchase electrical energy for balancing more cost-effectively on the electricity market, 50Hertz has developed a new forecasting model based on artificial intelligence (AI). 50Hertz has developed the grid loss model in cooperation with the Fraunhofer Institute for Optronics, Systems Engineering and Image Analysis (IOSB) in Ilmenau. Additionally, 50Hertz is considering an evaluation project in corporation with Elia, the aim of which is to counteract grid losses with renewable energies in order to reduce the CO_2 footprint in Scope 2.

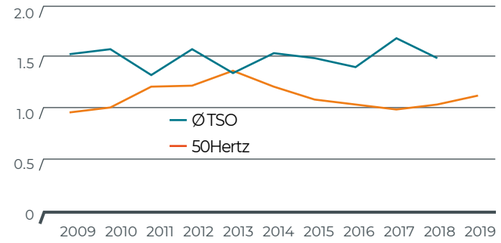
3.4 Grid reliability

G4 EUS Security of Supply

3.4.1. Grid availability and interruptions

50Hertz had a better realibility of the grid in 2019 in Germany, compared to the other TSOs based on the number of disr uptions.

DISRUPTIONS / 100 KM LENGTH OF LINE



3.5. Human Resources

3.5.1. Management approach

GRI 102-8, GRI 103-2, GRI 103-3, GRI 402, GRI 405-1, GRI 405-2, SDG5, SDG8

50Hertz owes its success entirely to its employees. It is the responsibility of the Company to aid in developing skills, foster their health and commitment, involve them in decision-making and guarantee equal opportunities for all. The maintenance and development of the value-based corporate culture is one of the Company's fundamental goals and the strategic foundation for all personnel decisions. As part of the management team, the Chief Human Resources Officer is responsible for all personnel strategy issues.

An annual updated five-year business plan serves as a framework for qualitative and quantitative personnel planning. 50Hertz complies with international guidelines beyond the reach of its collective agreements and company agreements, such as the core labour standards of the International Labour Organisation (ILO: C87, C98 and C135) and workers' rights in the UN Global Compact.

At 43.1, the average age of employees at 50Hertz marginally untouched compared to the previous year.

At 50Hertz, health and safety is the highest priority. This is also emphasised in the guidelines on health and occupational safety, which is mandatory for all employees. In 2019 the previous management system according to OHSAS 18001 was changed to ISO 45001 and the initial certification was granted. The change strengthened governance and dialogue formats and merged company health management with occupational safety.

As a reflection of its convictions and in compliance with the ILO convention 111, 50Hertz is committed to promoting diversity and strictly condemns any discriminatory conduct in all aspects of professional life. All of our employees enjoy equal rights regardless of their ethnic origin, age and gender, their sexual orientation, religious affiliation, political views, national or social origin, or any known differences.

50Hertz is committed to valuing all employees and their abilities in the same way - regardless of their individuality.

To further emphasize this commitment, 50Hertz is a member of the Diversity Charter, a corporate initiative to promote diversity in companies and institutions. In the year under review, 50Hertz participated in the nationwide Diversity Day for the first time with a program to better inform and educate employees.

The goal of equal opportunities for men and women is enshrined in the IG BCE's "Charter of Equality" signed by 50Hertz.

The company's in-house initiative "50:50 - the women's network" has set itself the goal of promoting the further development of personal and professional skills as well as the presence and influence of women at 50Hertz. In 2017, 50Hertz submitted the first report on equality and equal pay in the annex to the management report. The share of women on the Supervisory Board of 50Hertz Transmission remains unchanged from the previous year at 17 percent. In the extended management board, the share of women rose from 0 percent on 31 December 2018 to 17 percent one year later.

On 7 August 2017, the Management Board of 50Hertz Transmission decided that the share of women in the first and second management levels (divisional and departmental managers) below the Management Board should reach 10 per cent and 16 per cent in the third management level below (departmental managers) by 30th June 2022. As of December 31, 2019, the target of 10 percent at the first and second management levels below the management level was easily exceeded with just under 11 percent, while the target of 16 percent at the third management level was optimally achieved.

The continuous recruitment and promotion of female managers is an important part of the 50Hertz human resources strategy. In the medium term, 50Hertz Transmission therefore aims to achieve or exceed a so-called "fair share" concerning the talent market, i.e. a representative representation of the proportion of women outside the company in the occupations that occur at 50Hertz.

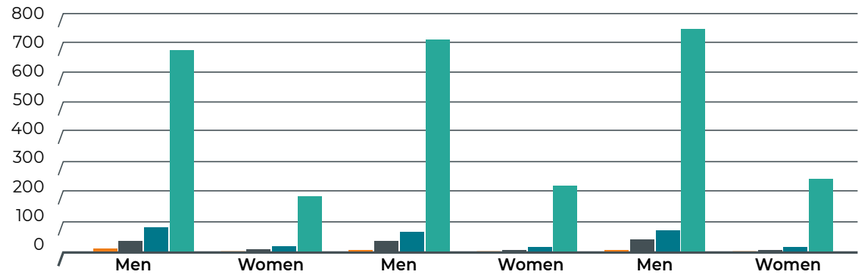
At 50Hertz, adopting diversity and equal opportunity also means giving people with health-related disabilities the same opportunities as those without. We concluded an inclusion agreement in 2013 with the Works Council, the Spokesmen's Committee, and the representative body for disabled employees at 50Hertz, which contains measures aimed at supporting people with disabilities in their working life. An internal inclusion team is charged with implementing and monitoring the agreement. During the financial year, the proportion of severely disabled and equivalent employees was 2.3%. In total, 10 employees with restrictions were employed by 50Hertz in the reporting year. This proportion will continue to be gradually increased in accordance with workplace-specific requirements in commercial and technical departments. In line with this, a cooperation with the Annedore-Leber-Berufsbildungswerk has been established to better facilitate young people with disabilities to enter the job market. In the year under review, the first trainee was taken on as a permanent apprentice and another started her internship. Furthermore, a cooperation with AfB gGmbH for the disposal of IT client hardware is continued. As a recognised inclusion company, AfB gGmbH offers disabled people a job as well as contributing to the avoidance of additional CO_2 emissions by refurbishing and selling used IT equipment.

There were no cases of discrimination recorded in 2019.

3.5.2. Head Count

GRI 401-1, GRI 401-2

Total number of employees



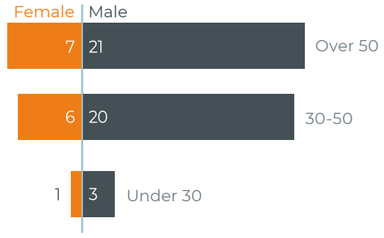
	2017 Men	2017 Women	2018 Men	2018 Women	2019 Men	2019 Women
Directors	4	0	4	0	4	0
Senior managers	32	5	35	4	38	5
Line managers	76	15	65	14	68	13
Employees	674	187	706	217	749	243
Total	786	207	810	235	859	261

3.5.3. Workability

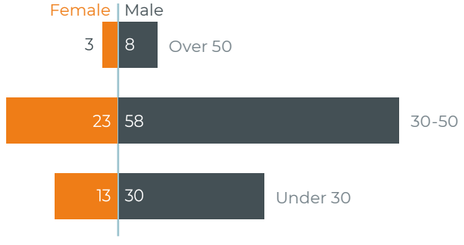
Employees of 50Hertz benefit from a family-friendly working environment and the opportunity to find a better work-life balance. To be able to give parents the necessary flexibility for managing childcare, there is a company agreement promoting the compatibility of work and family. The agreement regulates questions of parental leave, support services, flexible work hours, special leave and sabbaticals, as well as professional well-being and emotional support. In the 50Hertz Netzquartier building, daycare is also available for the children of our employees, which also offers spaces for children within the surrounding neighbourhood. Beyond that, we have established a parent-child office to cater for short-term childcare needs.

The early recognition and prevention of work-related illnesses and the ability to remain employable are also integral parts of occupational health and safety at 50 Hertz. If these goals are to be achievable, 50Hertz guarantees sufficient occupational medical precautions, the focus of which is on individual protection and individual prevention of health risks. On top of this, 50Hertz regularly provides company medical consultations, vaccinations and advice on workplace ergonomics for all employees. A qualified external confidential counselling service is readily available to employees in the event of individual stress, conflicts or problems of addiction. Employees can also take part in various public sporting events, such as the "Berlin Team Relay Race", the "Rennsteig Autumn Race" in Thuringia or the Diehrhagen Team Run in the Mecklenburg-Western Pomerania region to further promote individual wellbeing.

NUMBER OF DEPARTURES BY AGE AND GENDER



NUMBER OF NEW HIRES BY AGE AND GENDER



Together with the General Works Council and the IG BCE, an agreement was established on developing and maintaining the employability of our staff. This agreement provides a basis for personnel policies that will help us tackle the effects of demographic change. Our objective is for employees to be able to carry out their work activities without any limitations until they reach their foreseen retirement age.

In 2019, the company agreement on maintaining the ability to work was extended by a further five years.

AVERAGE AGE

AGE	YEARS
Employees covered by collective agreements	42.6
Employees not covered by collective agreements	48.3
Executives	51.7
Management	52

RETIREMENTS

G4 EUS 15

PERCENTAGE OF WORKFORCE EXPECTED TO RETIRE IN THE NEXT FIVE YEARS	M	F
Total for 50Hertz Transmission	6.1%	1.5%
Directors	0%	0%
Senior managers	14.29%	0%
Line managers	6.17%	1%
Employees	5.78%	1.62%

PARENTAL LEAVE

PARENTAL LEAVE	
Number of employees on parental and caregiver leave	13
Male	0
Female	12
Number of employees on parental leave 1 January 2019 — 31 December 2019	74
Male	50
Female	24

3.5.4. Employee survey

Various formats are available for the regular exchange of information with employees (see section on stakeholder participation), and in particular the regular employee survey. The next employee survey will take place in 2020.

3.5.5. Training

GRI 404-1, GRI 404-2

The Company can only reach its corporate goals if the staff are highly qualified and continuously kept in the loop about ongoing and current developments. Employees are therefore offered individually tailored education and training opportunities and relevant the chance to achieve additional qualifications. Systematic succession planning guarantees that a sufficient number of potentially suitable employees are available for all management positions and that we can fill vacancies from within the company if and when the time arises. To that end, we identify and develop talent , through programmes such as "Young Professionals" designed and offered in cooperation with Elia Group. 50Hertz obtains qualified new talent through our internal apprenticeship programme, a 24-month trainee programme and by hosting internships and supervising doctoral, bachelor's, and master's theses in cooperation with universities and colleges. In 2018, a total of 73 student employees and 6 trainees worked for 50Hertz. Currently, 28 young men and women are underway with their industrial or business apprenticeships, which corresponds to a trainee rate of 2.4 %. On average, each employee received 16.29 hours of training in the reporting year, excluding regular safety training. What's more, management staff are also offered 50Hertz-specific training modules for developing individual leadership skills.

3.5.6. Remuneration policies

GRI 102-38, GRI 102-41

Fair pay for employees and attractive benefits are a matter of course at 50Hertz. The remuneration systems are refined according to the need to ensure the Company remains an attractive employer for our staff in the future. IG BCE (the Union for the Mining, Chemical and Energy Industries), together with the Employers' Association of Energy and Supply Companies (Arbeitgeberverband Energie- und versorgungswirtschaftlicher Unternehmen e.V. – AVEU), assigns our collective agreements. Fair remuneration based on requirements and performance regardless of gender is supplemented by comprehensive company benefits along with the offer of a company pension scheme. In addition, employees have the opportunity to involve themselves in the success of the previous financial year within the framework of an Elia Group stock program. For the seventh time in 2019, every employee was offered shares within the company at a reduced price. 50Hertz transparently and voluntarily releases the total earnings of the management team in the consolidated financial statements in detail, listing the fixed and variable overall remuneration, as well as corporate pensions and any other benefits to 50Hertz's management. The features of the remuneration systems are further explained with disclosures in the corporate governance declaration.

The factor of compensation of the highest-paid employee to the average annual total compensation for all employees is 6.8.

3.5.7. Incentive systems

The remuneration system includes success- and performance-based elements, which offer an incentive for achieving common corporate goals and corresponding individual goals. A number of goals related to sustainable corporate management, such as compliance with occupational health and safety guidelines or successful social dialogue.

3.5.8. Codetermination

GRI 102-41, GRI 402

50Hertz is not only committed to the freedom of association, collective industrial agreements and the protection of employees' representatives but also values the trusting and persistent cooperation with all codetermination bodies. The Supervisory Board of 50Hertz comprises six members and is above the equal representation of employee and employer interests as contractually guaranteed by legal requirements. In 5 supervisory board meetings in 2019, through written reports, and in verbal presentations conducted by management, the Supervisory Board was updated, and discussed the current status of our business, our economic situation and the status and development of risks. A Spokesmen's Committee with information and consultation rights represents the interests of our executives. Our Works Council is responsible for representing all employees who are protected by collective agreements and all non-pay scale employees at 50Hertz. A group-wide exchange takes place in the European Works Council of Elia Group. During joint activities like the Industrial Group Committee of the Electricity Industry and the Work Group of Network Operators, we actively cultivate employee interests in the infrastructure networks' sector. Furthermore, we regularly send guest speakers and lecturers to educational events hosted by IG BCE to further boost knowledge on both sides. In order to support our employees' union commitment, we offer orientation and information events such as our "Schnupperkurse Mitbestimmung" (trial courses on codetermination). The youth and trainee representation (Jugend- und Auszubildendenvertretung – JAV), which was first established and elected for a two-year term in December 2016, represents the interests of our young employees across the board. JAV operates closely with the other codetermination bodies.

3.6. Safety

3.6.1. Management approach

GRI 403-1

Occupational health and safety and injury and illness prevention are integrated into our corporate strategy and performed by all employees as they go about their daily business. Every employee is instructed on how to be mindful of hazards, report them immediately and submit suggestions for promoting ongoing health and safety working conditions. In the financial year, occupational health and safety were once again one of the key projects in 50Hertz's business plan.

The "gib8" campaign launched in 2018 was continued in order to further sensitize employees and suppliers of 50Hertz to occupational health and safety issues. As part of the campaign, objectives were expanded and a set of measures with rules of conduct for a safety culture was implemented. Once a year, an occupational safety competition is also held to further brief and motivate the workforce. This takes into account the accident figures of the individual sites from the previous year, and prior knowledge of occupational safety is reviewed and anchored from a practical perspective that varies each year.

The personal protective equipment (PPE) worn by workers is always updated and new PPE is wear-tested and the catalogue is amended in line with the respective requirements.

3.6.2. Trainings

Employees in the technical areas receive training six times per year, while those in the engineering and commercial areas receive training once a year. The existing instructions have been extended to other areas, for example, a specific tailored height training for transformers.

3.6.3. Inspections

GRI 403-2

Occupational health and safety is not only contraint to our own employees. The stringent 50Hertz standards also apply to contracted companies working on 50Hertz construction sites outside of the company. During the contracting process and later via IT-supported construction monitoring by specially trained 50Hertz employees, it is ensured that suppliers comply with 50Hertz's strict safety requirements as any other contractual employee. This is transparently and bindingly regulated by a special code of practice to ensure occupational safety when using external companies within the 50Hertz transmission grid area. The process for dealing with incidents relating to occupational safety and environmental protection in connection with external orders was enhanced as part of the implementation of ISO 45001. Part of this is an escalation model for the development of the supplier affected and the upgrading of avoidance measures. The agreement on quality assurance on construction sites at 50Hertz is subject to the agreement for new contracts. This includes an unhindered right to carry out inspections by 50 Hertz. In the year under review, 1,260 inspections were administered. (1,159 construction site inspections carried out in 2018).

3.6.4. Accidents

GRI 403-2

In the 2019 reporting period, five reported accidents occurred at 50Hertz, which were commuting accidents. There were no on-site work-related accidents. The goals set for the accident rate and accident severity were accomplished in 2019. In an effort to prevent future accidents at work, every accident was intensively evaluated and occupational safety measures were put in place. With a total of 18 accidents at third-party contractors, the number of accidents increased compared with the previous year (11 accidents). 16 accidents involved minor injuries (cuts, tripping, and falls). There were no fatal accidents in the year under review.

ACCIDENT STATISTICS

	31.12.2017	31.12.2018	31.12.2019
Work-related accidents at 50Hertz (with at least two days of downtime)	6	3	**0**
Frequency rate[1]	4.5	2.0	**0.6**
Severity rate[2]	0.23	0.02	**0.00**
Number of accidents in contracted companies	**16**	**11**	**13**

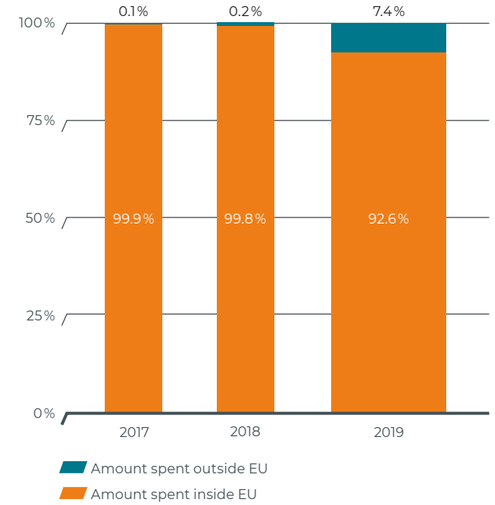
[1] Number of work-related accidents resulting in downtime (at least one day) x 1,000,000 ÷number of hours actually worked.

[2] Number of calendar days of downtime due to work-related accidents x 1,000 ÷ number of hours actually worked.

3.7. Suppliers, human rights and local added value

3.7.1 . Suppliers and amount of spendings in EURO-Zone

GRI 102-9, GRI 204-1



3.7.2. Human rights

GRI 205-1, GRI 308-1, GRI 308-2, GRI 414-1

50Hertz is committed to its responsibility to protect human rights and naturally respects the right to privacy, personal safety, freedom of speech and property rights of employees, residents, and customers. 50Hertz also undertakes responsibility for compliance with social standards in the supply chain. For this reason, 50Hertz is not only a member of the United Nations Global Compact but is also committed to the core labour standards of the International Labour Organization (ILO).

In order to ensure that business partners also comply with internationally valid regulations on human rights, (such as the banning of forced and child labour) sustainability and ethics are essential components of the supplier and service provider assessment. Since 2019, a joint Code of Conduct for suppliers of the Elia Group has been an integral part of all supplier contracts of 50 Hertz. In the periodic supplier meetings 50Hertz informs employees on sustainable action and therefore communicates the understanding for compliance with ethical principles and guidelines of sustainable development. All orders are placed centrally. In this respect, all 50Hertz business locations are cross-referenced and monitoired for human rights diligence issues and anti corruption.

The successive expansion of supply chain management to include sustainability issues will continue for years to come. Following an initial risk assessment of the 20 largest suppliers on sustainability issues and the human rights in 2018, a more in-depth analysis of possible human rights risks in the direct and indirect supply chain was carried out in the year under an intense review. The analysis was based on the human rights due to diligence requirements set out in the German National Action Plan (NAP). As a result, four human rights risks at 50Hz and in the supply chain were acknowledged and prioritised.

- Health and safety in the workplace
- Environmental protection and health
- Employment and working conditions
- Freedom of assembly and expression

The risks identified will be analysed in greater depth in the coming reporting year and appropriate measures will be undertaken.

3.7.3. Local added value

TAX POLICY AND ADDED VALUE

GRI 203-1, GRI 203-2, GRI 204-1, GRI 201-1, GRI 413-1

50Hertz and its subsidiaries are evidently subject to tax. Taxes are used to finance measures and current expenses of regional administration bodies. The various regional administration bodies are then entitled to the revenue generated from the different tax brackets. As an employer, 50Hertz pays the wage tax for its employees directly to the tax authorities. This wage tax is recorded under personnel expenses. The federal government primarily imposes income and corporate income tax as well as VAT. Through a complicated financial equalisation scheme between the regional administration bodies, which is laid out in the financial constitution of German basic law, these taxes partially go indirectly to the regional administration bodies of federal states and communities in 50Hertz's grid area. In 2019, 50Hertz paid out EUR 64.7m (prior year: EUR 40.9m) in corporate income tax. Additionally, EUR 1,050.9m (prior year: EUR 1,158.3m) VAT and EUR1,029.9m (prior year: EUR 1,053.0m) input VAT were incurred. There were no legal disputes on tax issues in the year under review. In addition to these federal taxes, the municipalities also levy real estate tax and trade tax. These taxes go directly to the municipalities. In layman's terms, this part of 50Hertz's added value can be directly used in the municipalities of 50Hertz's grid area via their households to finance their expenses. During the financial year, the 50Hertz paid EUR 0.4m (prior year: EUR 0.4m) in real estate tax and EUR 60.8 (prior year: 47.9m) in trade tax. In its regulations adopted by management, 50Hertz has implemented a non-agressive tax policy and to pay its taxes on time and in accordance with the law. By making this voluntary commitment in the areas it can influence, 50Hertz has created a framework for sustainably distributing the added value generated. The main beneficiaries of this are predominantly weaker regions, located in 50Hertz's grid area. In 2019, 50Hertz secured goods and services totalling EUR 707.5m from companies headquartered in Germany. Out of this amount, EUR 346.9m went to companies based in 50Hertz's grid area. This is equivalent to a share of around 49 percent.

CORPORATE CITIZENSHIP AND LOCAL ADDED VALUE

50Hertz supports numerous projects in its grid area, primarily relating to cultural, energy and environmental education, as well as youth and social affairs. Clear management and organizational structures have been established for the implementation of our many social activities. Our Communications & Policies department is responsible for our engagement in such causes. The Department coordinates with management to set the goals, coordinate the activities and examines - together with the Legal Department and the Compliance Committee - requests for projects worthy of support. Our guideline for donations and sponsoring defines our general support principles, assessment criteria, and the organizational process, and is required for all employees. When granting donations and sponsoring support, it is always agreed that the cause coincides with our corporate values, is geared towards sustainability, offers true added value for our society and the public and follows the well-defined process.

In the surroundings of the headquarters, the 50Hertz Netzquartier sees itself as a respected corporate citizen, which actively contributes to making the new residential and working district "Europacity" attractive to its surrounding residents. The daycare facility "Energiebündel" welcomes not only children of 50Hertz employees but also from the neighbourhood. Since summer 2017, the "Rundgang 50Hertz" exhibition has been held annually in the Netzquartier building. Together with the Hamburger Bahnhof Museum for Contemporary Art in Berlin, outstanding work by graduates of various art academies in the grid area were exhibited.This presented talented young artists with a platform for entering the world of the professional art market, making valuable connections and further pursuing their career.

Specifically educating children and adolescents about the energy transition is of great importance to the company. An interactive exhibit called "Energie gemeinsam wenden" (Changing energy together), developed by 50Hertz and the Independent Institute for Environmental Issues (Unabhängiges Institut für Umweltfragen e.V.), lightheartedly, albeit educational, teaches students about different aspects of the energy transition. In the 2019 reporting year, a total of 890 students visited the exhibit.

50Hertz also supports selected projects in its grid area that substitutes a multi-faceted cultural landscape. As part of the renowned Artist in Residence programme at the Konzerthaus Berlin, the pianist Wíkingur Ólafsson was supported. We also supported the Musikfestspiele Mecklenburg-Vorpommern once again.

In 2019, 50Hertz was once again involved in numerous initiatives, associations and organisations throughout the entire grid area. These included the Rennsteig Herbstlauf in the Thuringian Forest, the Heinz Sielmann Foundation and the German Maritime Search and Rescue Association.

3.8. Stakeholder Engagement

3.8.1. Management approach

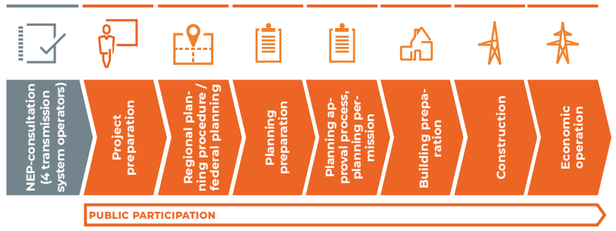
As part of the materiality analysis process, the 50Hertz stakeholder environment was analysed and defined. The company regularly contacts and exchanges information with these stakeholder groups. Internal project-related guidelines define the timelines and interactions between project planning, approval, public participation, and stakeholder management. This includes comprehensive lessons through learned processes, which enable the company to unceasingly develop the standardised “tool kit” for public participation at 50Hertz. Moreover, 50Hertz participates in the debate on the quality of public participation, for example, in the Alliance for a Diverse Democracy of the Bertelsmann Foundation and as a member of the Dialog-Gesellschaft e.V.

3.8.2. Public acceptance

GRI 102-29, GRI 102-43, GRI 102-44, GRI 413-1, G4 EUS Stakeholder Participation

When planning and implementing the grid expansion, 50Hertz takes a comprehensive dialogue and participation approach. The involvement of relevant stakeholder groups plays a vital role when it comes to sustainable grid expansion. Firstly, regional and local stakeholder groups are carefully analysed and issues, questions, and concerns of those living locally are addressed. For this, 50Hertz follows the VDI 7000 standards. This allows 50Hertz to develop and implement a participation plan together with the region, based on both the standards of early public participation that were deemed successful, and the project specifications of each individual project. In the regions in which existing capacities are being increased or new transmission substations and lines are being built, the need to inform and involve citizens varies. 50Hertz wants to align itself to the specific needs and engage in dialogue locally. This is the only way to further improve plans, integrate common knowledge that is only available locally and involves those affected.

Liasion with relevant stakeholder groups begins very early in the planning phase of projects. This includes consultations on grid development plans as well as grid enhancement and expansion projects. Discussions with the affected parties is conducted according to clearly defined requirements, in set formats and by means of a standardised “tool kit”.



Target groups								
Policy and administration	✓	✓	✓	✓		✓	✓	✓
Citizens' initiatives	✓			✓	✓			
Residents		✓	✓	✓	✓	✓	✓	✓
Public interest bodies	✓		✓		✓		✓	
NGOs	✓		✓	✓				✓

Participation								
World Café								
Group conferences			✓		✓			
Planning panels		✓		✓				
Dialogue mobile		✓	✓	✓	✓	✓		
1:1 discussions	✓	✓		✓				
Advisory board		✓	✓	✓	✓	✓	✓	

Dialogue								
Work groups (across all Federal states)		✓	✓	✓	✓	✓	✓	
Information market	✓*	✓	✓		✓			
Press talks			✓		✓			
Hotline		✓	✓	✓	✓	✓	✓	✓
Launches								✓
Regional events		✓	✓	✓	✓			
Project presentation	✓	✓	✓	✓	✓			

Information								
Public relations	✓		✓	✓	✓	✓	✓	✓
Newsletter			✓	✓	✓	✓	✓	✓
Printed material		✓	✓	✓	✓	✓	✓	✓
Website	✓	✓	✓	✓	✓	✓	✓	✓

* As part of the consultation on NEP, the 4 transmission system operators are holding information and dialogue events, where selected procedures, methods and used data will be presented for the 1st draft of the NEP. Subsequent to this, opinions about it can be given.

3.8.3. Stakeholder dialogues

GRI 102-21, GRI 102-40

	FINANCIAL SECTOR			ENVIRONMENT/SOCIETY										MARKET				
DIALOGUE	Shareholders	Investors	Rating agencies	German Federal Network Agency	Political decision-makers	Non-governmental organisations	Citizens' initiatives	Trade unions	Public	Media	Employees	Research and education	Suppliers	Generators	Distribution system operators	Major consumers	Transmission system operators
OWN FORMATS																	
Reports	✓	✓	✓	✓	✓	✓						✓					
Press conferences		✓								✓							
Telephone conferences		✓	✓														
Co-determination								✓			✓						
Information sessions		✓									✓		✓				
Conventions/conferences														✓	✓	✓	✓
Scientific advisory committee												✓					
Partnerships with higher education institutes												✓					
Research work												✓					
Network meetings for visitor groups					✓												
Visitor groups					✓							✓			✓		✓
Cultural events									✓		✓						
Learning activities for children and teenagers									✓								
Media relations work									✓	✓	✓						
Outreach activities					✓		✓		✓								
Publications							✓		✓		✓						
FOREIGN FORMATS																	
Guest lectures								✓				✓					
Committees					✓			✓									
Work and network meetings						✓		✓							✓		✓

Personal and digital: 50Hertz on information tour

50Hertz wants to replace its 220 kV line from Bad Lauchstädt in Saxony-Anhalt via Wolkramshausen to Vieselbach in Thuringia with a more powerful 380 kV line. The project, called "Grid Connection South Harz", was presented and discussed publicly for the first time at seven information events in the region. For the southern section alone, the planning team visited seven locations in five days and provided interested citizens with information. What will change in concrete terms? When will details be available? The citizens have many questions. The point of these info-markets is to present information and educate the public. The extensive reporting in the regional media and the support in the social media are fundamentally helpful in this respect.

3.8.4. Cooperations

Active leadership of associations and participation in research and development projects is an integral part of innovation management at 50Hertz. In various cooperations with academic as well as industrial partners, activities in the areas of new technologies, energy markets, and system security, the integration of renewable energies and the necessary development of the electrical system are key elements. Overall, around EUR 2m (prior year: around EUR 2m) was spent on research and development projects in 2019. This was compensated by EUR 0.25m (prior year: around EUR 0.15m) that 50Hertz received in public non-repayable subsidies.

Furthermore, 50Hertz is the lead coordinator of the WindNODE joint project, in which more than 70 partners in the northeast German model region are currently underway in joint solutions to integrate even larger amounts of renewable energy into the power grids as efficiently as possible. In addition to energy suppliers, grid operators, and high-tech specialists, companies from the automotive industry, supply and disposal industry, housing industry, and retail trade, as well as several universities and research institutes from the region are on board.

In the "Connect+" project, the four transmission and 16 distribution system operators have joined forces to cooperatively face the challenges of implementing the Network Expansion Acceleration Act (NABEG). The legislator has hereby determined that in the future, all plants for the generation or storage of electrical energy with a nominal output of 100 kilowatts or more can be used to prevent foreseeable bottlenecks in the electricity grid from occurring from the outset.

The Scientific Council was established for the purpose of regular exchanges between science and practice. The voluntary committee currently consists of 16 professors from the fields of energy technology, economics, law, and politics. The council meets once or twice a year to discuss and evaluate current topics and future issues in relation to 50Hertz. In 2019 the focus of the two meetings was on the subjects "Consequences of the coal phase-out for grid development", "Active grid management" and "Assistance systems for system management" as well as "Use of AI".

Additionally, 50Hertz has been collaborating with a number of universities in the grid area for a number of years. The topics of joint studies relate, for example, to the quality of extra-high voltage grids, the operation of three-phase and direct current on a single pylon, the determination of critical conditions in the 50Hertz grid or the implications of the energy transition for the economy, politics, and society. Moreover, we regularly share our expertise within universities and research institutes through a series of practice-oriented lectures and workshops.

Collectively with various European environmental associations and other transmission system operators, 50Hertz is a founding member of the "Renewables Grid Initiative" (RGI), which promotes grid expansion throughout Europe for the effective integration of renewable energies and promotes the distribution of innovative participation practices (further selected memberships on page 49).

Cooperation with universities and partners

In the project "GreenHydroChem Central German Chemical Triangle" the material use of hydrogen plays a crucial role. To this end, water at the Leuna site is to be split into hydrogen and oxygen in a 50-megawatt electrolyser using renewable electricity. The hydrogen will then be converted into basic materials such as methanol in local chemical plants, for example. The real-world laboratory concept "Reference Power Plant Lausitz" goes one step further: Here, hydrogen is to be produced with green electricity in an electrolyser, made available for transport and industry and, if necessary, converted back into electricity using the heat generated. A hydrogen storage tank as well as a battery and a supercapacitor for storing electricity will enhance the plant. Both projects are designed to contribute to system and supply security in the grid. 50Hertz expects the projects to make progress in the development of Power-to-X technologies, which will play an important role in the energy transition.

3.9. Environmental aspects

3.9.1. Management approach

GRI 102-11, GRI 102-26, GRI 308-1, GRI 308-2, G4-EUS-DMA Biodiversity

Environmental and social sustainability, as well as a clear commitment to environmental protection and the conservation of resources, are all integral components of the corporate strategy. 50Hertz is a frontrunner in the integration of renewable energies into the entire electrical system: In 2019, around 60% of gross electricity consumption in the 50Hertz balancing zone was derived from wind or photovoltaic power as well as biomass, hydropower and other renewable energies. The development of the extra-high-voltage grid is necessary for transporting gradually increasing amounts of renewable energies over long distances and to ensure the security of the electricity supply and an effective electricity market. Our main goal is to sustain the impact of 50Hertz's plants and activities on people and natural habitats to an absolute minimum. Therefore, compliance with the NOVA principle is a matter of course for 50Hertz. NOVA states, grid optimisation (Netz-Optimierung) before reinforcement (Verstärkung) before expansion (Ausbau). Simply put, 50Hertz only builds new lines when all other options for increasing grid capacity have been exhausted.

The planning, operation, maintenance, and environmentally friendly conversion and expansion of our transmission grid in the northern and eastern parts of Germany follow national and European frameworks and regulations. This operational implementation of environmental requirements is controlled by means of company guidelines and process instructions, which are continually updated and adapted. In our environmental protection organisation guideline, 50Hertz has set out tangible obligations and tasks. Principally, the management team is responsible for environmental protection. It defines the goals and organization of the Company's environmental protection efforts. Within management, the Chief Technical Officer assumes the function of the environmental officer. The management also directs the hazardous materials, waste and water protection officers, who advise the entire organisation on environmental issues.

Since October 2019, the new Department of Environment/Quality Management/Business Unit Control has been responsible for the appropriate handling and implementation of all tasks relating to environmental and nature conservation issues, quality management and the management of related tasks. The department advises the head office functions (staff functions) at the various company locations in respect to process control and ensures the stringent implementation of the environmental and quality strategy and legal compliance.

50Hertz ensures the availability of any relevant information and all required resources for fulfilling the strategic and operative objectives relating to energy efficiency and environmental protection. Environmental protection activities are documented internally via annual environmental reports. The Environmental Report for the 2019 reporting year is due to be published in March 2020. For this reason, some of the figures mentioned are based on calculated estimates and have therefore been marked.

50Hertz consistently and actively works on continuously improving its environmental performance, energy-related performance and management system. To progressively further develop operational environmental protection and energy management, you also need to raise awareness of and actively involve employees, which are motivated to act in an environmentally friendly and energy-efficient way. In doing so, the legal requirements for training are consequently met. As the law requires water protection and waste officers to attend a two-day training every two years, at 50Hertz employees receive one day of training every year. The training for employees and hazardous materials officers involved in the hazardous materials process is provided every five years. Individual company departments, such as the Procurement/ Facility Management Department and the project units, are given training as and when required.

The "Agreement on Quality Assurance on Construction Sites" is an essential part of new contracts. Suppliers and contains, among other things, are concerns of the precautionary principle in environmental protection. Compliance with this principle is frequently checked by means of IT-supported construction inspections. In the year under review, 1,260 construction site inspections were carried out. The common code of conduct for suppliers of Elia Group is assumed for 50Hertz and contractual for all suppliers. The code of conduct enlists additional principles on environmental protection and resource conservation.

3.9.2. Biodiversity

GRI 304-1, GRI 304-2, GRI 304-3, G4-EUS-DMA, Biodiversity, G4-EUS-EN12, SDG12

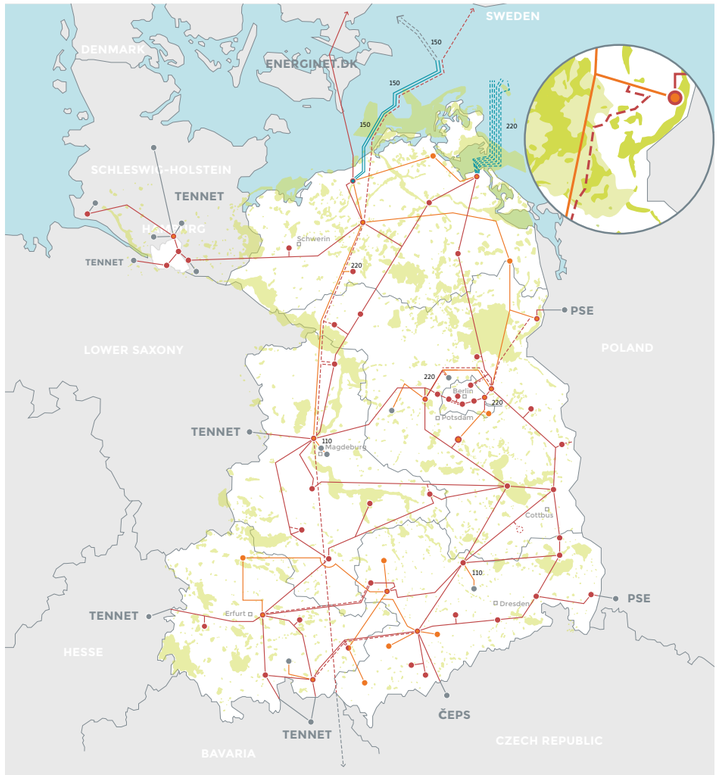
3.9.2.1. COMPENSATION MEASURES

GRI 304-2

It is the policy of 50Hertz to keep its impact on nature and the restriction of biodiversity to a minimum. During permit approval procedures for project planning, not only do we consider the economy, needs of residents and technological concerns, but also keeping in mind the protection of plant and animal life. In the preliminary stages of such procedures, environmental impact assessments are launched to minimise any nature conservation conflicts at the early stages. Then, an appropriate route is identified in which, in a subsequent step, the exact route of the line through that corridor is mapped and a list of necessary protective, compensatory and replacement measures is initiated. All the examinations are conducted together with external environmental planners, routing experts and, if necessary, other scientific and nature conservation specialists. Only once the entire process is completed can the construction project commence – under external ecological construction supervision. Site preparation and construction schedules are implemented in ways that minimise even the slightest impact on natural features, take conservation periods and requirements into consideration from the get-go and compel companies subcontracting for 50Hertz to consider the environmental aspects of their operations. Following this, a final assessment is underway.

According to the BNatSchG , companies are obligated to avoid causing preventable damage to nature and the landscape or to otherwise keep it to a bare minimum. Whenever possible and reasonable, lines are bundled with existing overhead lines and infrastructures such as railway beds and highways. Line routes are modified to the local natural features so as to impact the integrity of the landscape no more than necessary. Where interference is unavoidable, 50Hertz takes compensatory and replacement measures. These can be divided into six categories: planting measures, forestry measures, water measures, species protection, dismantling measures and other measures. When planning and implementing compensatory and replacement measures, 50Hertz liases with the affected communities, conservation agencies, interested citizens and NGOs at the early stage of the process. 50Hertz works with them as partners to develop suitable plans early on and suggests these to the authorities as part of our approval planning. For this purpose, regional eco pools are being used on a regular basis. Eco pools are contributions to projects of other organisations, as well as compensation payments, which enable more comprehensive measures than planting individual replacement plants and are therefore more effective, efficient and sustainable. In 2017, 50Hertz adopted guidelines for targeted compensation management. They define the action areas necessary for successful approval and implementation of the measures. The internal assessment commission meets every two months to debate on these measures. The preferred measures are recorded in a real estate cadastre. There are currently 202 compensatory and replacement measures in progress in the 50Hertz grid area and 566 being implemented, maintained or were completed. Therefore, the total number of compensatory and replacement measures has increased from 710 in 2017 to 768 in the reporting year.

A further step towards consequently reducing the impact on the environment is the development of the "compactLine" pylon design. Lowering mast heights, narrowing routes and a solid wall mast with a smaller circumference are the hallmarks of this innovative research and development project. In the future, it should make it possible to reduce the impact of overhead lines on the landscape and nature in endangered areas. The compact design offers an ideal opportunity to integrate a new 380 kV line into sections of existing 220 kV lines. Following the one-year test operation, which commenced in August 2018, the evaluation began in the year under review we are awaiting the results in the second quarter of 2020.

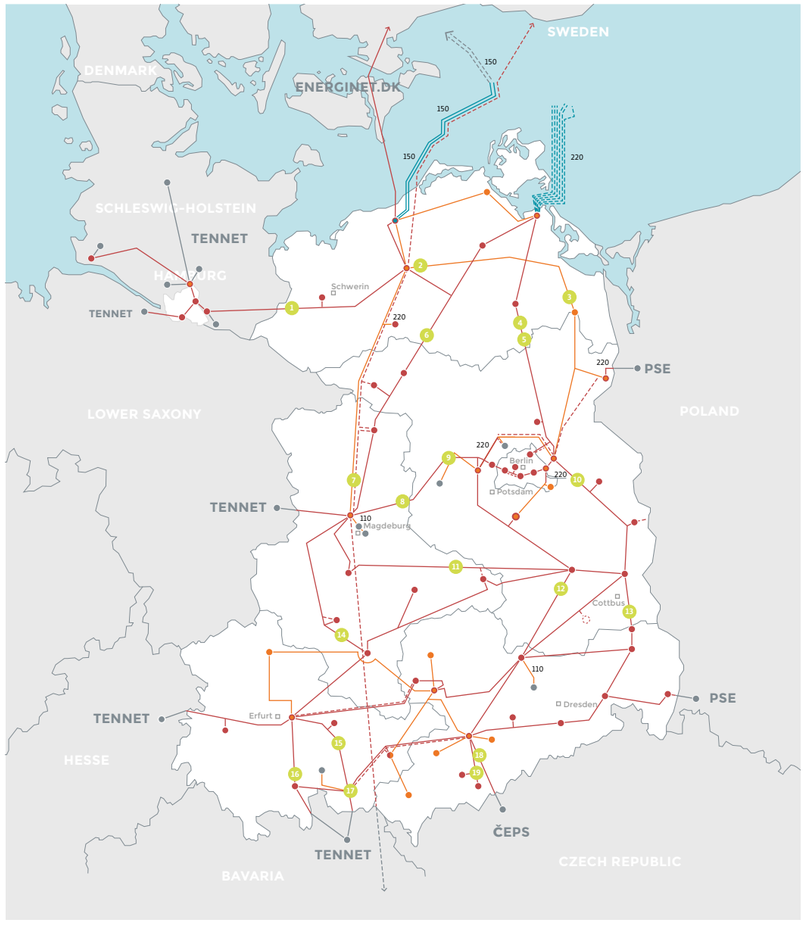


There are many different protection zones in the 50Hertz grid area, which are recorded in a cadastre. The FFH protection zones, national parks and biosphere reserves are displayed in the picture. Among other things, the grid area contains many bird sanctuaries, which 50Hertz makes sure to protect when building new lines.

3.9.2.2. ECOLOGICAL AISLES MANAGEMENT

GRI 304-3

In order to build an overhead line in forested areas, we generally have to establish aisles. In accordance with the necessary safety distances, the lines need sufficient room to move to the sides and to the ground. Trees must, therefore, be removed from the aisles in sections and at regular intervals. However, trees and shrubs provide natural habitats for countless animals and plants. The objective of 50Hertz is therefore to impact these natural areas as little as possible in the long term and to increase the biodiversity under the lines. With the "Ecological Aisle Management" (EAM), which was already signed-off in 2010 in cooperation with the University of Applied Sciences Erfurt, a forward-looking, intervention-minimising and ecologically compatible route planning and management is being pursued. The path under an overhead line is designed in such a way that natural habitats are created there again, taking into account safe operation. During the course of the project, a biologically diverse and valuable pathway is accordingly developed. 50Hertz is applied by the EAM on a mandatory basis for new lines and on a voluntary basis for existing lines. In the year under review, the various EAM projects that had already been launched were intensively examined for their biodiversity benefits. The aim of the review is to detect the most efficient measures and implement them accordingly in the future.



Ecological Aisle Management (EAM)

	Measures	Area in hectares
1	Edge of forest, Kölziner Tannen	1.8 ha
2	Eco-account, Suckower Tannen	14 ha
3	Gameland, Bienenweide Schönwalde	5.6 ha
4	Biotope management NABU area	1.9 ha
5	Edge of forest eco-account, Hohenzieritz	2.5 ha
6	Edge of forest structuring, Satow meadow orchard	9.8 ha
7	Grazing, Mahlpfuhler Fenn	6 ha
8	Hohenbellin hedges	6 ha
9	NABU project, Marzahner Fenn	1.8 ha
10	Biotope management, Altlandsberg municipal forest	25 ha
11	Wild flower meadow, Külsoer Mühle	0.4 ha
12	Edge of forest pond, Rochhauer Heide	13 ha
13	Edges of forest, Döbbener Heide	12.6 ha
14	Biotope management, Harz conservation area	3.2 ha
15	Pilot line, Hummelshain	9.1 ha
16	Pilot line, Oberweißbach	1.8 ha
17	Biotope structuring, Ruppersdorf	1 ha
18	Slope planting, Burkhardtsdorf	0.3 ha
19	Grassland seed test area	0.5 ha
		~ 116.3 ha

3.9.2.3. BIRD PROTECTION

G4 EUS EN12

Extra-high voltage power lines naturally affect the birdlife. For this reason, 50Hertz is also going to great lengths to help minimize negative effects on bird life. In the year under review, the results of a study carried out in association with the Brandenburg State Environmental Agency were evaluated. Video monitoring of a section of an overhead power line equipped with bird protection markers recorded only four accidents out of over 100,000 fly-bys. These results already show the effectiveness of bird protection markers, however, further investigations are still necessary to secure information on the installation and location of the markers. For this reason, the data material was handed over to the experts of the Renewables Grid Initiative (RGI) and the German Nature Conservation Union (NABU), who coincide to operate a bird finding portal, for further evaluation. Bird protection markers are currently installed on around 300 kilometres of an overhead line. 50Hertz plans to supply further overhead lines in 2020.

3.9.3. Water protection

GRI 306-5, SDG14

50Hertz is committed to effective water protection. As the business activities of 50Hertz are not subject to significant water usage, its responsibility in this regard is not so much to reduce water consumption, but to consider water resources in the ground during grid and substation projects as well as avoiding water and soil pollution with hazardous materials. To give an example, 50Hertz has installed special safety features in oil-containing systems. To protect the natural environment, elaborate constructions are installed beneath transformers in substations to prevent water droplets from entering the soil. The safety systems are inspected regularly by maintenance technicians and refurbished or replaced when needed. Wastewater is only discharged with appropriate permission from water authorities and if it were regularly tested for hazardous substances. With regard to water protection, the WHG “Wasserhaushaltsgesetz”: Water Resources Act and state-specific systems regulations (VAwS) are of specific importance to 50Hertz. Employees are trained in the environmentally friendly operation of our systems and water protection officers are continuously updated on all new developments. In the grid area, the requirements of the WHG and VAwS are especially relevant for the coastal regions of Mecklenburg-Western Pomerania.

The three submarine cables of the grid connection project Ostwind 1, for example, run from the Cluster Westlich Adlergrund in a southerly direction past the island of Rügen through the Greifswalder Bodden to the landing at Lubmin. In the landing zone, sensitive nature conservation areas and valuable biotopes must be crossed. By using the environmentally friendly, trenchless horizontal directional drilling method (HDD method), 50Hertz significantly reduces the impact on flora and fauna in the dune landscape. Furthermore, 50Hertz makes a significant contribution in making the Baltic Sea safe for humans as well as the environment. Every preparation includes the removal of contaminated sites on the bottom of the Baltic Sea, for example, explosive remnants of war from previous world wars. For the Ostwind 2 project, whose two offshore wind farms are expected to generate around 725 megawatts in the future, the first clearings and ground surveys began in 2019 in the shallow water area of the Baltic Sea and on land. The idea of an artificial reef is currently being examined as compensation for unavoidable interventions in the Baltic Sea. In this way, an area of 17 hectares and a water depth of up to 40 metres could contribute to the diverse sealife in the Baltic Sea. In the year under review, 50Hertz signed the Marine Grid Declaration of the Renewables Grid Initiative (RGI), which lays down standards for the early involvement of stakeholders and for nature and species conservation in the development of the offshore grid beyond the legal requirements.

3.9.4. Energy Consumption

GRI 302-1, GRI 302-4, SDG7, SDG13

50Hertz fiercely supports the objectives of the EU and the Federal Government to reduce CO_2 emissions, in particular by expanding the grid, which allows an increase in the share of carbon-neutral energy sources, in addition to optimizing the company-wide CO_2 footprint. The second external energy audit, following the DIN EN 16247-1 was administered on a scheduled basis in the year under review in order to systematically record the energy consumption of our systems and administrative buildings. The energy consumption from 2018 was used as a base, and for the first time the new corporate headquarters, the 50Hertz Netzquartier in Berlin Mitte was included in the consumption figures. The planning and construction of the corporate headquarters were designed for sustainability in terms of energy efficiency, ecology, usage possibilities, and accessibility. The 50Hertz Netzquartier has been awarded the internationally recognised Gold Standard of the German Sustainable Building Council (DGNB) and the American LEED Standard (Leadership in Energy and Environmental Design). When it comes to new buildings, aspects of sustainable energy construction are already taken into account at the planning stage and implemented wherever possible.

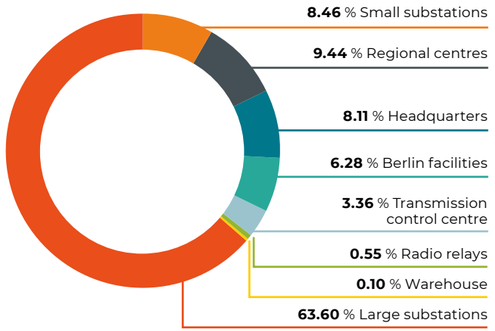
ENERGY CONSUMPTION

	2019		
	MWH	**%**	**t co_2-EQ**
Electricity	63,627.87	89.82	34,168
District heating	1,182.55	1.67	331
Fuel (petrol)	808.28	1.14	163
Fuel (diesel)	0.16	0.00	0.04
Natural gas	5,219.39	7.37	1,388
Total energy consumption	**70,838.25**	**100.00**	**36,050.04**

Data source: External energy audit carried out in line with DIN EN 16247-1 in 2019.

The breakdown of total CO_2 emissions indicates the clear dominance of electricity with a share of almost 95 percent. A noticeable reduction in the CO_2 footprint can only be achieved in this segment. The largest share of electricity consumption, 55,497.65 MWh, is accounted for by the 50Hertz substations. All switch gear together, in which only electrical energy is required, account for a total share of almost 79 percent. The locations with administrative and control tasks, such as the headquarters, the regional centers and the control center, which also require thermal energy and fuels, account for a total share of almost 21 percent. The warehouse and radio relay stations do not have a significant share of consumption. Total energy consumption relating to the amount of electricity transmitted has decreased somewhat overall from 0.0629% in 2014 to 0.0605% in 2018.

DISTRIBUTION OF TOTAL ENERGY CONSUMPTION IN 2018



The energy audit has revealed optimization potential throughout the company, the feasibility of which has been carefully examined in terms of economic efficiency and sustainability. This included, for example, insulation work in the technical areas of the 50Hertz Netzquartier and the Teufelsbruch substation, as well as temperature adjustments to the air conditioning units from 21 degrees to 26 degrees in the technical rooms at the Röhrsdorf administration location. An energy-related refurbishment at the Bad Lauchstädt administrative location is also being examined.

3.9.5. Emissions

GRI 305-1, GRI 305-2, SDG7, SDG13

In addition to electricity consumption, the fleet vehicles have an indefinite influence on the CO_2 footprint. They are essential for fully covering the extensive grid area and fast access to the facilities. Since 2019, a new location concept with ten instead of seven locations has been supporting the reduction of the necessary travel distances and thus contributing to the reduction of greenhouse gas (GHG) emissions. In addition, a further eight diesel vehicles have been replaced by electric vehicles as part of fleet management. A further two hybrid vehicles were ordered. Large-scale use of electric vehicles is not yet planned for reasons of range. As part of the replacement procurement process, the fleet is being continuously adapted to endure the advancement of technological standards and efficiency. These measures are reflected in the reduced CO_2 emissions of the vehicle fleet. In 2019, these vehicles emitted 1,521 tons of CO_2. Compared to the previous year (previous year's value 1,758 tons CO_2), 237 tons of CO_2 were not released.

Today, sulphur hexafluoride (SF_6) is used as an insulating and switching gas in gas-insulated high-voltage switchgear. It has very good electrical properties, is non-toxic and chemically very stable. However, SF_6 has a global warming potential per unit of a substance that is approximately 23,000 times higher than CO_2. For this reason, SF_6 is used in switchgear in a closed circuit, i.e. emissions to the environment are, in this way, virtually eliminated. The pressure chambers are permanently monitored technically for potential leaks. However, despite all these protective measures, natural leakage is inevitable due to the sealing technology and the necessary gas handling. According to a voluntary commitment by SF_6 manufacturers and users, the loss rate measured on the total stock of SF_6 in Germany may only amount to 0.6 percent - at 50 hertz, this rate was significantly lower in the year under review at 0.1 percent. 50Hertz ensures that this technical gas is handled extremely sensitively and responsibly during transport, storage and, use and is aiming for an alternative solution. Nevertheless, there is yet no marketable alternative to SF_6 for switchgear at the 220 and 380 kilovolt levels. Therefore, 50Hertz, together with 13 other companies, is funding a research project at the ETH Zurich. This project aims to systematically investigate alternative gases for their suitability as insulating and switching gases in switchgear. The research programme will be conducted over the course of three years.

Various modes of transport are used for business trips. In the reporting year, air travel accounted for 436 tonnes of CO_2. In addition, employees travelled 546.000 kilometres by long-distance trains. Long-distance train journeys are not reported, as Deutsche Bahn claims to use 100% green electricity.

50Hertz is currently evaluating the successive expansion of its climate management scheme and the associated possibility of reducing its GHG emissions. For the reporting year 2019, the full CO_2 emissions from air travel were offset for the first time via the service provider atmosfair and the first wind farm in Nicaragua's Rivas province was supported. With a total capacity of 39.9 MW and an average electricity production of 196 GWh per year, the wind farm makes a considerable contribution to clean electricity production all while fighting the energy deficit of the second poorest country in this region. The project is in line with the Sustainable Development Goals (SDG 1, 3, 7, 8, 9, 13 and 17) of the United Nations.

In the reporting year, direct (Scope 1) and indirect GHG emissions (Scope 2) were calculated for the second time.

GHG EMISSIONS

Greenhouse gas emissions in 2019 in t CO_2 equivalent		
DIRECT (SCOPE 1)		
SF_6 leakage	4,256.56	0.38%
Emergency power system*	6.82	0.00%
Vehicule fleet*	1,758.18	0.14%
Total direct emissions	5,784.37	0.52%
INDIRECT (SCOPE 2)		
District heating*	184.86	0.02%
Total electricity consumption for the Netzquartier building*	2,007.93	0.18%
Grid losse	1,090,200.00	97.14%
Energy consumption by own assets	23,668.87	2.11%
Total indirect emissions	1,116,072.54	99.45%
INDIRECT (SCOPE 3)		
Flights	436.00	0.04%
Long-distance rail travel	0.00	0.00%
Total indirect emissions	436	0.04%
Total	**1,122,292.91**	**100.00 %**

* The values provided here are estimates as of 31 December 2019. The following calculation bases and emission factors were used to work out the CO_2 equivalents: SF_6 – IPCC Fifth Assessment Report (ARS); vehicle fleet – direct fuel consumption; energy (electricity, district heating) – German Environment Agency 2017 and GHG Protocol Scope 2 Guidance; business trips – service provider data and GHG Protocol Scope 3 Guidance.

The calculated figure in the carbon footprint corresponds to 1,002 tonnes of CO_2 equivalents per person including grid losses and 29 tonnes of CO_2 equivalents per person excluding grid losses (basis: 1,120 employees).

3.9.6. Electric and magnetic fields (EMF)

Strict regulations apply in Germany for electric and magnetic waves, which are regulated by the Federal Emissions Act. 50Hertz fully complies within these limits. 50Hertz takes the concerns of citizens very seriously and, upon request, carries out measurements on site, together with the concerned citizens, all the while demonstrating a precautionary approach.

3.9.7. Noise

Just as in the field of electric and magnetic waves, strict limits apply in Germany for noise emissions, which are regulated by the Federal Emissions Act. 50Hertz fully complies with these limits.

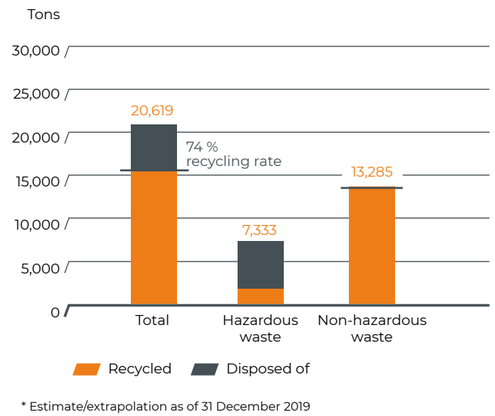
3.9.8. Waste

GRI 306-2

When it comes to handling waste, 50Hertz's top priority is prevention. However, the annual waste production and composition is heavily dependent on restructuring and dismantling projects, as well as compensatory and replacement measures. A year-by-year comparison is therefore not applicable in this case. When dealing with waste that cannot be prevented, we act on the principle "Avoid – reuse – reduce – recycle – dispose". When we build, convert or dismantle a system, we dispose of any parts we no longer need in a resource-friendly way.

In comparison with the previous year, construction and compensation projects generated less waste overall in the year under review.

WASTE DISPOSAL IN 2019



* Estimate/extrapolation as of 31 December 2019

50Hertz was able to comply with the legally prescribed recycling requirement (recycling before disposal) at a recycling rate of approximately 74%.

4. GRI reference table

GRI 102-55

This annual Sustainability Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. It is Elia Group's third integrated annual report and covers the period from 1 January 2019 to 31 December 2019.

Common (C)	Belgium (B)	Germany (G)	GRI number	GRI description	Page
GRI 102: General information 2019					
1. Organisational Profile					
X		X	102-1	Name of the organisation	(C) Activity report p. 12 Sustainability report p. 8 (B) Sustainability Report p. 18 (G) Sustainability report p. 48
X	X	X	102-2	Activities, brands, products, and services	(C) Activity report p. 13 (B) Sustainability report p. 18 (G) Sustainability report p. 48
	X	X	102-3	Location of headquarters	(B) Sustainability report p. 18 (G) Sustainability report p. 48
	X	X	102-4	Location of operations	(B) Sustainability report p. 18 (G) Sustainability report p. 48
X			102-5	Ownership and legal form	(C) Activity report p. 148
X	X	X	102-6	Markets served	(B) Sustainability report p. 18 (G) Sustainability report p. 48
X	X	X	102-7	Scale of the organisation	(C) Sustainability report p. 8 (B) Sustainability report p. 18, 27 (G) Sustainability report p. 48
	X	X	102-8	Information on employees and other workers	(C) Sustainability report p. 8 (B) Sustainability report p. 27 (G) Sustainability report p. 55
X	X	X	102-9	Supply chain	(C) Activity report p. 4 (B) Sustainability report p. 18 & 33 (G) Sustainability report p. 48 & 60
X			102-10	Significant changes to the organisation and its supply chain	(C) Activity report p. 148
	X	X	102-11	Precautionary Principle or approach	(B) Sustainability report p. 21 & 38 (G) Sustainability report p. 50 & 66
X	X	X	102-12	External initiatives	(B) Sustainability report p. 19 (G) Sustainability report p. 49
X	X	X	102-13	Membership of associations	(B) Sustainability report p. 19 (G) Sustainability report p. 49
2. Strategy					
X			102-14	Statement from senior decision-maker	(C) Sustainability report p. 6 (C) Activity report p. 6
X	X	X	102-15	Key impacts, risks, and opportunities	(C) Activity report p. 6, p. 10, p. 132 (C) Sustainability report p. 12

3. Ethics and integrity

X	X	X	102-16	Values, principles, standards, and norms of behaviour	(C) Activity report p. 93 (C) Sustainability report p. 9 (B) Sustainability report p. 20 & 22 (G) Sustainability report p. 49 & 51
	X	X	102-17	Mechanisms for advice and concerns about ethics	(C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49

4. Governance

X			102-18	Governance structure	(C) Activity report p. 114
X	X	X	102-19	Delegating authority	(C) Activity report p. 119 (C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
	X	X	102-20	Executive-level responsibility for economic, environmental, and social topics	(C) Activity report p. 125 (C) Sustainability report p. 9 (B) Sustainability report p. 20, (G) Sustainability report p. 49
X	X	X	102-21	Consulting stakeholders on economic, environmental and social topics	(C) Activity report p. 78 (B) Sustainability report p. 36 (G) Sustainability report p. 64
X			102-22	Composition of the highest governance body and its committees	(C) Activity report p. 116
X			102-23	Chair of the highest governance body	(C) Activity report p. 116
	X	X	102-26	Role of the highest governance body in setting purpose, values, and strategy	(C) Activity report p. 119 (C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49 & 66
X	X	X	102-29	Identifying and managing economic, environmental and social impacts	(C) Activity report p. 72 (B) Sustainability report p. 35 (G) Sustainability report p. 62
X	X	X	102-30	Effectiveness of risk management processes	(C) Activity Report p. 132 (B) Sustainability report p. 21 (G) Sustainability report p. 50
		X	102-32	Highest governance body's role in sustainability reporting	(C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
		X	102-33	Communicating critical concerns	(C) Sustainability report p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 49
		X	102-38	Annual total compensation ratio	(B) Sustainability report p. 30 (G) Sustainability report p. 57

5. Stakeholder engagement

X	X	X	102-40	List of stakeholder groups	(C) Activity report p. 4 (B) Sustainability report p. 35 (G) Sustainability report p. 64
	X	X	102-41	Collective bargaining agreements	(C) Sustainability report p. 8 (B) Sustainability report p. 27 (G) Sustainability report p. 57 & 58
X	X	X	102-42	Identifying and selecting stakeholders	(B) Sustainability report p. 35
X	X	X	102-43	Approach to stakeholder engagement	(C) Activity report p. 74 (B) Sustainability report p. 35 (G) Sustainability report p. 62
X		X	102-44	Key topics and concerns raised	(C) Activity report p. 74 (B) Sustainability report p. 35 (G) Sustainability report p. 62

6. Reporting principles

X			102-45	Entities included in the consolidated financial statements	(C) Activity report p. 148
	X	X	102-46	Defining report content and topic Boundaries	(C) Sustainability report p. 12
X	X	X	102-47	List of material topics	(C) Sustainability report p. 12
			102-48	Restatements of information	There are no restatements of information provided in previous reports.
			102-49	Changes in reporting	The Annual Report 2019 is the third integrated annual reporting in line with the GRI - Core principles
			102-50	Reporting period	Fiscal year 2019
			102-51	Date of most recent report	Annual report 2019
			102-52	Reporting cycle	Annual reporting cycle
	X	X	102-53	Contact point for questions regarding the Annual Report	(B) **Marleen Vanhecke** External Communications & External Relations marleen.vanhecke@elia.be (G) **Kerstin Rippel** Communication and Public Affairs Kerstin.Rippel@50hertz.com
			102-54	Claims of reporting in accordance with the GRI Standards	This Annual Report has been prepared in accordance with the GRI Standards: Core option
X			102-55	GRI content index	(C) Sustainability report p. 73

GRI 103: Identified Material Aspects and Boundaries

X	X	X	103-1	Explanation of the material topic and its Boundary	(C) Activity report p. 16 (C) Sustainability report p. 12
X		X	103-2	The management approach and its components	(C) Activity report p. 16 (C) Sustainability report p. 12
X		X	103-3	Evaluation of the management approach	(C) Activity report p. 16 (C) Sustainability report p. 12

GRI 201: Economic performance

X			201-1	Direct economic value generated and distributed	(C) Activity report p. 19 Financial report (tbc)
X	X	X	201-2	Financial implications and other risks and opportunities for the organisation's activities due to climate change	(C) Activity report p. 14, 24, 42, 56 (B) Sustainability report p.21 (G) Sustainability report p.41

GRI 203: Indirect economic impacts

X		X	203-1	Development and impact of infrastructure investments and services supported	(C) Activity report p. 30 & 32 (G) Sustainability report p. 61
X		X	203-2	Significant indirect economic impacts, including the extent of impacts	(C) Activity report p. 30 (B) Sustainability report p. 37 (G) Sustainability report p. 61

GRI 204: Procurement practices

	X	X	204-1	Proportion of spending on local suppliers	(B) Sustainability report p. 33 & 34 (G) Sustainability report p. 60, 61

GRI 205: Anti-Corruption

	X	X	205-1	Operations assessed for risks related to corruption	(C) Sustainability p. 9 (B) Sustainability report p. 20 (G) Sustainability report p. 60
	X	X	205-2	Communication and training on anticorruption policies and procedures	(B) Sustainability report p. 20 (G) Sustainability report p. 50
X	X	X	205-3	Confirmed incidents of corruption and actions taken	No incidents of corruption occurred during the reporting period.

GRI 206: Anti-competitive behaviour

X	X	X	206-1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	No legal actions pending or completed during the reporting year.

GRI 302: Energy

	X	X	302-1	Energy consumption within the organisation	(B) Sustainability report p. 41 (G) Sustainability report p. 69
	X	X	302-2	Energy consumption outside of the organisation	(B) Sustainability report p. 23 & 24 (G) Sustainability report p. 52 & 53

GRI 304: Biodiversity

X	X	X	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	(C) Activity report p. 84 (B) Sustainability report p. 38 (G) Sustainability report p. 66
X	X	X	304-2	Significant impacts of activities, products, and services on biodiversity	(C) Activity report p. 84 (B) Sustainability report p. 38 (G) Sustainability report p. 66
X	X	X	304-3	Habitats protected or restored	(C) Activity report p. 84 (B) Sustainability report p. 38 (G) Sustainability report p. 66

GRI 305: Emissions

	X	X	305-1	Direct greenhouse gas (GHG) emissions (Scope 1)	(B) Sustainability report p. 41 (G) Sustainability report p. 71
	X	X	305-2	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	(B) Sustainability report p. 41 (G) Sustainability report p. 71
	X		305-3	Other indirect greenhouse gas (GHG) emissions (Scope 3)	(B) Sustainability report p. 41

GRI 306: Effluents and waste

		X	306-2	Waste by type and disposal method	(B) Sustainability report p. 43 (G) Sustainability report p.72

GRI 307: Environmental compliance

X	X	X	307-1	Non-compliance with environmental laws and regulations	The organisation has not identified any significant non-compliance with environmental laws and/or regulations.

GRI 308: Supplier Environmental Assessment

	X	X	308-1	New suppliers that were screened using environmental criteria	(B) Sustainability report p. 33 (G) Sustainability report p. 60 & 66
	X	X	308-2	Significant actual and potential negative environmental impacts in the supply chain and actions taken	(B) Sustainability report p. 33 (G) Sustainability report p. 60 & 66

GRI 401: Employment

	X	X	401-1	Total number and rates of new employee hires and employee turnover	(B) Sustainability report p. 28 (G) Sustainability report p. 56
X	X	X	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	There are no differences between the benefits provided to full-time and part-time employees.
	X	X	401-3	Parental leave	(B) Sustainability report p. 27 & 29 (G) Sustainability report p. 58

GRI 402: Labour/Management Relations (MA)

		X			(G) Sustainability report p. 58

GRI 403: Occupational Health and Safety

X	X	X	403-1	Occupational health and safety management system	(C) Activity report p. 98 (B) Sustainability report p. 31 (G) Sustainability report p. 59
	X	X	403-2	Hazard identification, risk assessment, and incident investigation	(B) Sustainability report p. 31 (G) Sustainability report p. 59
	X	X	403-3	Occupational health services	(B) Sustainability report p. 31 (G) Sustainability report p. 59

GRI 404: Training and Education

X	X	X	404-1	Average hours of training per year per employee by gender, and by employee category	(C) Activity report p. 92 (B) Sustainability report p. 30 (G) Sustainability report p. 66

GRI 405: Diversity and Equal Opportunity

X	X	X	405-1	Diversity of governance bodies and employees	(C) Sustainability report p. 8 (B) Sustainability report p. 27 (G) Sustainability report p. 55
		X	405-2	Ratio of basic salary and remuneration of women to men	(G) Sustainability report p. 55

GRI 406: Non-Discrimination

X	X	X	406-1	Total number of incidents of discrimination and corrective actions taken	The organisation has not identified any incidents of discrimination during the reporting period.

GRI 413: Local Communities

X	X	X	413-1	Operations with local community engagement, impact assessments, and development programmes	(C) Activity report p. 72 (B) Sustainability report p. 35 (G) Sustainability report p. 61, 62

GRI 414: Supplier Social Assessment

	X	X	414-1	New suppliers that were screened using social criteria	(B) Sustainability report p. 33 & 34 (G) Sustainability report p. 60

GRI 416: Customer Health and Safety

X		X	416-1	Assessment of the health and safety impacts of product and service categories	(C) Sustainability report p. 42

GRI 419: Socio-economic Compliance

X	X	X	419-1	Monetary value of significant fines for non-compliance with laws and regulations in the social and economic area	(C) Sustainability report p. 9

G4 - Electric Utilities Specific (EUS)

Lines & losses & quality of service

	X	X	EU4	Length of above and underground transmission and distribution lines by regulatory regime	(B) Sustainability report p. 17 (G) Sustainability report p. 47
	X	X	EU12	Transmission and distribution losses as a percentage of total energy	(B) Sustainability report p. 25 (G) Sustainability report p. 54.

Demand management approach

X			DMA	Demand-side management programmes including residential, commercial, institutional and industrial programmes	(C) Activity report p. 59, 61, 66
	X	X	DMA	Disaster / Emergency Planning and Response	(B) Sustainability report p. 21 (G) Sustainability report p. 50
	X	X	DMA	Disaster / Stakeholder participation	(C) Activity report p. 74 & 78

Biodiversity

	X	X	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected area	(B) Sustainability report p. 38 (G) Sustainability report p. 66 & 70

Health and safety & Human resources

	X	X	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	(B) Sustainability report p. 29

Reporting parameters

Registered office

This report is limited to Elia System Operator and Elia Asset, which operate as a single economic entity under the names Elia and 50Hertz Transmission.

The registered office of Elia System Operator and Elia Asset is located at
Boulevard de l'Empereur 20
1000 Brussels, Belgium

The registered office of 50Hertz GmbH is established at
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The registered office of Eurogrid International is located at
Rue Joseph Stevens, 7
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Reporting period

This annual report covers the period from 1 January 2019 to 31 December 2019.

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Ce document est également disponible en français.
Dit document is ook beschikbaar in het Nederlands.

We would like to thank everyone who contributed to this annual report.

elia group

Elia | 50Hertz | EGI

Ready to accelerate

Financial Report 2019

DECLARATION BY RESPONSIBLE PERSONS

The undersigned Chairman of the Management Committee and Chief Executive Officer Chris Peeters and Chief Financial Officer Catherine Vandenborre declare that to the best of their knowledge:

a. the financial statements, which have been prepared in accordance with applicable accounting policies for financial statements, give a true and fair view of the assets, the financial position and results of Elia and of its subsidiaries included in the consolidation;

b. the annual report gives a true and fair view of the evolution and the results of the Company and of the situation of Elia and of its subsidiaries included in the consolidation, as well as a description of the most significant risks and uncertainties they are facing.

Brussels, 26 March 2020

Catherine Vandenborre
Chief Financial Officer

Chris Peeters
Chief Executive Officer

1. TABLE OF CONTENT

1. TABLE OF CONTENT 2
CONSOLIDATED FINANCIAL STATEMENTS 4
Consolidated statement of profit or loss 4
Consolidated statement of profit or loss and comprehensive income 5
Consolidated statement of financial position 6
Consolidated statement of changes in equity 7
Consolidated statement of cash flows 8
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 9
1. Reporting entity 9
2. Basis of preparation 9
2.1. Statement of compliance 9
2.2. Functional and presentation currency 11
2.3. Basis of measurement 11
2.4. Use of estimates and judgements 11
2.5. Approval by the Board of Directors 12
3. Significant accounting policies 13
3.1. Basis of consolidation 13
3.2. Foreign-currency translation 14
3.3. Balance sheet items 14
3.3.1. Property, plant and equipment 14
3.3.2. Intangible assets 15
3.3.3. Goodwill 15
3.3.4. Trade and other receivables 15
3.3.5. Inventories 16
3.3.6. Cash and cash equivalents 16
3.3.7. Impairment of non-financial assets 16
3.3.8. Financial assets 16
3.3.9. Derivative financial instruments and hedge accounting 17
3.3.10. Equity 17
3.3.11. Financial liabilities 18
3.3.12. Employee benefits 18
3.3.13. Provisions 19
3.3.14. Trade and other payables 19
3.3.15. Other non-current liabilities 19
3.3.16. Leases (applicable from 1 January 2019) 19
3.3.17. Regulatory deferral accounts 20
3.4. Income-statement items 20
3.4.1. Income 20
3.4.2. Expenses 23
3.5. Statement of comprehensive income and statement of changes in equity 23
4. Segment reporting 24
4.1. Basis for segment reporting 24
4.2. Elia Transmission (Belgium) 25
4.3. 50Hertz Transmission (Germany) 27
4.4. Non-regulated activities and Nemo Link 29
4.5. Reconciliation of information on reportable segments to IFRS amounts 31
4.6. Adjusted items – reconciliation table 32
5. Items in the consolidated statement of profit or loss and other comprehensive income 33
5.1. Revenue, net income (expense) from settlement mechanism and other income 33
5.2. Operating expenses 33
5.3. Net finance costs 34
5.4. Income taxes 35
5.5. Earnings per share (EPS) 36
5.6. Other comprehensive income 36
6. Items in the consolidated statement of financial position 37
6.1. Property, plant and equipment 37
6.2. Intangible assets 38
6.3. Goodwill 38
6.4. Non-current trade and other receivables 41
6.5. Equity-accounted investees 41
6.5.1. Joint ventures 41
6.5.2. Associates 41
6.6. Other financial assets 42
6.7. Deferred tax assets and liabilities 43
6.8. Inventories 44
6.9. Current trade and other receivables, deferred charges and accrued revenues 44
6.10. Current tax assets and liabilities 45
6.11. Cash and cash equivalents 45
6.12. Shareholders' equity 45
6.12.1. Equity attributable to the owners of the Company 45
6.12.2. Hybrid securities 46

6.13. Interest-bearing loans, borrowings and lease liabilities 46
6.14. Employee benefits 47
6.15. Provisions 53
6.16. Other non-current liabilities 54
6.17. Trade and other payables 54
6.18. Financial instruments – fair values 55
6.19. Leasing 56
6.20. Accruals and deferred income 58
7. Group structure 59
7.1. Subsidiaries, joint ventures and associates 59
8. Other notes 61
8.1. Financial risk and derivative management 61
8.2. Commitments and contingencies 64
8.3. Related parties 65
8.4. Subsequent events 66
8.5. Miscellaneous 66
8.6. Services provided by the auditors 66
9. REGULATORY FRAMEWORK AND TARIFFS 67
9.1. Regulatory framework in Belgium 67
9.1.1. Federal legislation 67
9.1.2. Regional legislation 67
9.1.3. Regulatory agencies 67
9.1.4. Tariff setting 67
9.2. Regulatory framework in Germany 70
9.2.1. Relevant legislation 70
9.2.2. Regulatory agencies in Germany 70
9.2.3. Tariff setting in Germany 70
9.3. Regulatory framework for the Nemo Link interconnector 72
JOINT AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS 73
INFORMATION ABOUT THE PARENT COMPANY 77
Statement of financial position after distribution of profits 78
Income statement 79
Financial terms or Alternative Performance Measures 80

CONSOLIDATED FINANCIAL STATEMENTS

Consolidated statement of profit or loss

(in million EUR) - year ended 31 December	Notes	2019	2018
Continuing operations			-
Revenue	(5.1)	2,242.3	1,934.8
Raw materials, consumables and goods for resale	(5.2)	(76.9)	(41.5)
Other income	(5.1)	150.3	109.0
Net income (expense) from settlement mechanism	(5.1)	(73.7)	(112.0)
Services and other goods	(5.2)	(1,007.1)	(945.7)
Personnel expenses	(5.2)	(282.9)	(229.3)
Depreciations, amortizations and impairments	(5.2)	(374.6)	(252.3)
Changes in provisions	(5.2)	14.1	4.4
Other expenses	(5.2)	(30.1)	(30.4)
Results from operating activities		**561.4**	**437.0**
Share of profit of equity accounted investees (net of tax)	(6.5)	8.3	65.6
Earnings before interest and tax (EBIT)		**569.7**	**502.6**
Net finance costs	(5.3)	**(139.6)**	**(93.3)**
Finance income		5.6	21.9
Finance costs		(145.2)	(115.2)
Profit before income tax		**430.1**	**409.3**
Income tax expense	(5.4)	(121.0)	(102.2)
Profit from continuing operations		**309.1**	**307.1**
Profit for the period		**309.1**	**307.1**
Profit attributable to:			
Equity holders of the parent - Equity holders of ordinary shares		254.3	275.2
Equity holders of the parent - Hybrid securities		19.3	6.2
Non-controlling interest		35.5	25.7
Profit for the period		**309.1**	**307.1**
Earnings per share (EUR)			
Basic earnings per share		3.91	4.52
Diluted earnings per share		3.91	4.52

The accompanying notes (1-9) form an integral part of these consolidated financial statements.

Consolidated statement of profit or loss and comprehensive income

(in million EUR) - year ended 31 December	Notes	2019	2018
Profit for the period		**309.1**	**307.1**
Other comprehensive income (OCI)			
Items that may be reclassified subsequently to profit or loss:			
Effective portion of changes in fair value of cash flow hedges	(5.6)	(1.0)	(8.4)
Foreign currency translation difference of foreign operations		(0.1)	0.0
Related tax		0.2	2.2
Items that will not be reclassified to profit or loss:			
Remeasurements of post-employment benefit obligations	(6.14)	(5.4)	0.8
Effective portion of changes in fair value of investments	(5.6)	0.0	2.7
Related tax	(6.10)	1.5	(0.2)
Other comprehensive income for the period, net of tax		**(4.8)**	**(2.9)**
Total comprehensive income for the period		**304.3**	**304.2**
Total comprehensive income attributable to:			
Equity holders of the parent - ordinary shareholders		250.1	271.9
Equity holders of the parent - hybrid securities holders		19.3	6.2
Non-controlling interest		34.9	26.1
Total comprehensive income for the period		**304.3**	**304.2**

The accompanying notes (1-9) form an integral part of these consolidated financial statements.

Consolidated statement of financial position

(in million EUR)	Notes	31 December 2019	31 December 2018
ASSETS			
NON CURRENT ASSETS		**12,390.8**	**11,362.8**
Property, plant and equipment	(6.1)	9,445.6	8,456.2
Goodwill	(6.3)	2,411.1	2,411.1
Intangible assets	(6.2)	96.4	91.2
Trade and other receivables	(6.4)	2.3	177.0
Equity-accounted investees	(6.5)	342.8	135.4
Other financial assets (including derivatives)	(6.6)	88.9	86.9
Deferred tax assets	(6.7)	3.7	5.0
CURRENT ASSETS		**1,502.6**	**2,391.5**
Inventories	(6.8)	24.3	19.2
Trade and other receivables	(6.9)	488.0	558.9
Current tax assets	(6.10)	5.5	3.6
Cash and cash equivalents	(6.11)	975.0	1,789.3
Deferred charges and accrued revenues	(6.9)	9.8	20.6
Total assets		**13,893,4**	**13,754.3**
EQUITY AND LIABILITIES			
EQUITY		**4,332.1**	**3,748.9**
Equity attributable to owners of the Company	(6.12)	4,022.3	3,447.5
Equity attributable to ordinary shares		3,320.8	2,741.3
Share capital		1,705.9	1,521.5
Share premium		259.1	14.3
Reserves		173.0	173.0
Hedging reserve		(7.0)	(6.2)
Retained earnings		1,189.8	1,038.7
Equity attributible to hybrid securities holders	(6.12)	701.4	706.2
Non-controlling interest		309.9	301.4
NON-CURRENT LIABILITIES		**5,924.9**	**6,289.0**
Loans and borrowings	(6.13)	5,378.9	5,773.8
Employee benefits	(6.14)	118.2	104.0
Derivatives	(8.1)	4.4	2.9
Provisions	(6.15)	122.3	96.9
Deferred tax liabilities	(6.7)	87.0	95.2
Other liabilities	(6.16)	214.1	216.2
CURRENT LIABILITIES		**3,636.4**	**3,716.4**
Loans and borrowings	(6.13)	1,119.2	621.1
Provisions	(6.15)	15.6	16.5
Trade and other payables	(6.17)	1,356.9	1,989.1
Current tax liabilities	(6.10)	54.8	93.1
Accruals and deferred income	(6.20)	1,089.9	996.6
Total equity and liabilities		**13,893.4**	**13,754.3**

The accompanying notes (1-9) form an integral part of these consolidated financial statements.

Consolidated statement of changes in equity

(in million EUR)	Share capital	Share premium	Hedging reserve	Foreign currency translation	Reserves	Retained earnings	Equity attributable to ordinary shares	Hybrid securities	Equity attributable to the owners of the company	Non controlling interests	Total equity
Balance at 31 December 2017, as originally presented	1,517.6	11.9	0.0	0.0	173.0	938.1	2,640.7	0.0	2,640.7	1.1	2,641.8
Change in accounting policy IFRS 15						(77.4)	(77.4)		(77.4)		(77.4)
Restated balance at 31 December 2017	1,517.6	11.9	0.0	0.0	173.0	860.7	2,563.3	0.0	2,563.3	1.1	2,564.4
Change in accounting policy IFRS 9						2.9	2.9		2.9		2.9
Restated balance at 1 January 2018	1,517.6	11.9	0.0	0.0	173.0	863.7	2,566.2	0.0	2,566.2	1.1	2,567.3
Profit for the period						281.6	281.6		281.6	25.7	307.3
Other comprehensive income			(6.2)	0.0		2.8	(3.5)		(3.5)	0.5	(3.1)
Total comprehensive income for the period			**(6.2)**	**0.0**		**284.4**	**278.2**		**278.2**	**26.1**	**304.2**
Transactions with owners, recorded directly in equity											
Contributions by and distributions to Owners											
Shares issued	2.8	2.5					5.3		5.3		5.3
Share-based payment expenses	1.0						1.0		1.0		1.0
Issue of hybrid securities						(3.2)	(3.2)	700.0	696.8		696.8
Distribution on hybrid securities						(6.2)	(6.2)	6.2	0.0		0.0
Taxes on distribution on hybrid secutities						(1.8)	(1.8)		(1.8)		(1.8)
Dividends						(98.7)	(98.7)		(98.7)	(20.0)	(118.7)
Total contributions and distributions	3.8	2.5	0.0			(109.9)	(103.6)	706.2	602.6	(20.0)	582.6
Changes in ownership interests											
Non-controlling interests adjustment on EGI, due to acquisition						0.5	0.5		0.5	(0.5)	0.0
Acquisition				0.0		0.0	0.1		0.1	294.6	294.7
Total changes in ownership interests				0.0		0.5	0.6		0.6	294.1	294.7
Total transactions with Owners	3.8	2.5	0.0	0.0		(109.4)	(103.0)	706.2	603.2	274.1	877.3
Balance at 31 December 2018	**1,521.4**	**14.4**	**(6.2)**	**0.0**	**173.0**	**1,038.7**	**2,741.3**	**706.2**	**3,447.5**	**301.4**	**3,748.9**
Balance at 1 January 2019	**1,521.4**	**14.4**	**(6.2)**	**0.0**	**173.0**	**1,038.7**	**2,741.3**	**706.2**	**3,447.5**	**301.4**	**3,748.9**
Profit for the period						273.6	273.6		273.6	35.5	309.1
Other comprehensive income			(0.8)	(0.0)		(3.3)	(4.2)		(4.3)	(0.6)	(4.8)
Total comprehensive income for the period			**(0.8)**	**(0.0)**	0.0	**270.2**	**269.4**		**269.4**	**34.9**	**304.3**
Transactions with owners, recorded directly in equity											
Contributions by and distributions to Owners											
Shares issued	190.5	244.8					435.3		435.3		435.3
Issuance costs	(6.2)						(6.2)		(6.2)		(6.2)
Share-based payment expenses	0.1						0.1		0.1		0.1
Hybrid: dividend accrual						4.8	4.8	(4.8)	0.0		0.0
Hybrid: tax effect on dividend accrual						1.5	1.5		1.5		1.5
Dividends to non-controlling interests						0.0	0.0		0.0	(26.4)	(26.4)
Dividends						(101.3)	(101.3)		(101.3)		(101.3)
Hybrid: coupon paid						(24.0)	(24.0)		(24.0)		(24.0)
Total contributions and distributions	184.4	244.8	0.0			(119.1)	310.1	(4.8)	305.4	(26.4)	279.0
Total transactions with Owners	184.4	244.8	0.0	0.0		(119.1)	310.1	(4.8)	305.4	(26.4)	279.0
Balance at 31 December 2019	**1,705.8**	**259.2**	**(7.0)**	**(0.0)**	**173.0**	**1,189.8**	**3,320.8**	**701.4**	**4,022.2**	**309.9**	**4,332.1**

The accompanying notes (1-9) form an integral part of these consolidated financial statements.

Consolidated statement of cash flows

(in million EUR) Year ended 31 December	Notes	2019	2018
Cash flows from operating activities			-
Profit for the period		**309.1**	**307.1**
Adjustments for:			
Net finance costs	(5,3)	139.6	93.3
Other non-cash items		(2.2)	1.1
Current income tax expense	(5.4)	124.7	105.9
Profit or loss of equity accounted investees, net of tax		(8.3)	(65.6)
Depreciation of property, plant and equipment and amortisation of intangible assets		365.8	249.5
Gain on sale of property, plant and equipment and intangible assets		10.0	12.6
Impairment losses of current assets		0.3	3.8
Change in provisions		(9.4)	(9.2)
Change in loans and borrowings		1.1	1.3
Change in deferred taxes	(6.7)	(3.7)	(3.6)
Cash flow from operating activities		**927.1**	**696.1**
Change in inventories		(5.6)	(1.8)
Change in trade and other receivables		66.2	(50.5)
Change in other current assets		14.9	7.8
Change in trade and other payables		(640.4)	(12.9)
Change in other current liabilities		28.2	117.9
Changes in working capital		**(536.7)**	**60.5**
Interest paid		(158.4)	(141.8)
Interest received		5.8	5.7
Income tax paid		(166.5)	(103.8)
Net cash from operating activities		**71.2**	**516.7**
Cash flows from investing activities			
Acquisition of intangible assets		(26.9)	(23.2)
Acquisition of property, plant and equipment		(1,130.8)	(991.1)
Acquisition of equity-accounted investees	(6.5)	(201.8)	(23.8)
Acquisition of investment		(1.1)	(988.7)
Acquired cash from acquisition of subsidiary		0.0	1,902.7
Proceeds from sale of property, plant and equipment		1.6	2.4
Proceeds from sales of investments		0.0	0.2
Dividend received		2.6	2.0
Loans and long-term receivables to joint ventures		174.4	(35.7)
Net cash used in investing activities		**(1,182.0)**	**(155.2)**
Cash flow from financing activities			
Proceeds from the issue of share capital	(6.12)	435.3	5.3
Expenses related to the issue of share capital	(6.12)	(6.1)	(0.1)
Dividends paid (-)	(6.12)	(101.3)	(98.7)
Hybrid coupon paid (-)		(24.0)	0.0
Dividends to non-controlling parties		(24.0)	0.0
Repayment of borrowings (-)	(6.13)	(757.6)	0.0
Issuance of hybrid (+)	(6.12)	0.0	696.8
Proceeds from withdrawal of borrowings (+)	(6.13)	774.2	656.9
Non-controlling interests		0.0	(20.0)
Other cash flows from financing activities		0.0	(7.6)
Net cash flow from (used in) financing activities		**296.4**	**1,232.6**
Net increase (decrease) in cash and cash equivalents		**(814.3)**	**1,594.1**
Cash & cash equivalents at 1 January		1,789.3	195.2
Cash & cash equivalents at 31 December		975.0	1,789.3
Net variations in cash & cash equivalents		**(814.3)**	**1,594.1**

The accompanying notes (1-9) form an integral part of these consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Reporting entity

Established in Belgium, Elia Group SA (the 'Company' or 'Elia') has its registered office at Boulevard de l'Empereur 20, B-1000 Brussels. The Company's consolidated financial statements for the financial year 2019 include those of the Company and its subsidiaries (together referred to as the 'Group' or 'Elia Group') and the Group's interest in joint ventures and associates.

The Company is a limited liability company, with its shares listed on Euronext Brussels, under the symbol ELI.

The Elia Group is organised around two electricity transmission system operators: Elia Transmission in Belgium and 50Hertz Transmission, one of Germany's four transmission system operators, which is active in the north and east of Germany and in which Elia Group holds 80% of ownership.

The Group also has a 50% stake in NemoLink Ltd, which has constructed an electrical interconnector between the UK and Belgium known as the Nemo Link interconnector. Nemo Link is a joint venture with National Grid Ventures (UK) and began commercial operations on 30 January 2019, with a transfer capacity of 1000 MW.

With around 2,500 employees and a transmission grid comprising some 19,000 km of high-voltage connections serving 30 million consumers, the Elia Group is one of Europe's top five TSOs. It efficiently, reliably and securely transmits electricity from generators to distribution system operators and major industrial consumers, while also importing and exporting electricity from and to neighbouring countries. The Group is a driving force behind the development of the European electricity market and the integration of energy generated from renewable sources. In addition to its system-operator activities in Belgium and Germany, the Elia Group offers businesses a range of consultancy and engineering services. The Group operates under the legal entity Elia Group, a listed company whose reference shareholder is municipal holding company Publi-T.

2. Basis of preparation

2.1. Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted by the European Union. The Group has applied all new and revised standards and interpretations published by IASB and applicable to the Group's activities which are effective for financial years starting on 1 January 2019.

New and amended standards and interpretations

If a standard or amendment affects the Group, it is described hereunder, together its impact.

- **IFRS 16** was issued in January 2016 and replaces IAS 17: Leases, IFRIC 4: Determining Whether an Arrangement Contains a Lease, SIC-15: Operating Leases – Incentives and SIC 27: Evaluating the Substance of Transactions Involving the Legal Form of a Lease. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under IAS 17. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g. personal computers) and short-term leases (i.e. leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e. the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e. the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

  Lessees will also be required to remeasure the lease liability upon the occurrence of certain events (e.g. a change in the lease term, or a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset.

  Lessor accounting under IFRS 16 is substantially unchanged from today's accounting under IAS 17. Lessors will continue to classify all leases using the same classification principle as in IAS 17 and distinguish between two types of leases: operating and finance leases.

  IFRS 16 also requires lessees and lessors to make more extensive disclosures than under IAS 17.

  IFRS 16 is effective for annual periods beginning on or after 1 January 2019. Early application is permitted, but not before an entity applies IFRS 15. A lessee can choose to apply the standard using either a full retrospective or a modified retrospective approach. The standard's transitional provisions allow for certain reliefs.

  Transition to IFRS 16

  The Group has adopted IFRS 16 using the modified retrospective approach, i.e. it will apply the standard to its leases with the cumulative effect of initially applying the standard recognised at the date of initial application, 1 January 2019.

  In accordance with the standard on lease contracts, the Group elects to use following exemptions when applying IFRS 16 accounting:
  - short-term leases, i.e. contract duration of less than one year;
  - leases for which the underlying asset is of low value;
  - intangible assets.

  The most important judgements and assumptions in determining the lease asset and liability are to be located in the following areas:

- The Group made use of the practical expedients, i.e. a single discount rate per group of contracts, summarised per their duration. Those leases were assumed to have similar characteristics. No hindsight was used. The discount rate used is the Group's best estimate for the weighted average incremental borrowing rate and ranges from 0.26% to 2.94%.
- The Group assessed the non-cancellable period of each of the contracts falling into the scope of IFRS 16. This includes the period covered by an option to extend the lease, if the lessee is reasonably certain of exercising that option. With regard to office rental contracts, in particular, the Group applied its best estimate of the non-cancellable period based on all the information at its disposal..

Impact on financial statements

On 1 January 2019, upon its transition to IFRS 16, the Group recognised the following right-of-use assets and lease liabilities:

(in million EUR)	1 January 2019
Property, plant and equipment (right-of-use assets)	95.8
Lease liability	95.8

As the Group's assets are equal to its liabilities at the date of transition, there is no impact on retained earnings at the adoption date. Deferred tax assets and liabilities are offset. The Group presents right-of-use assets within "property, plant and equipment" and lease liabilities within "loans and borrowings" in the statement of financial position.

The Group´s operating lease commitments under IAS 17 and the Group´s lease liabilities under IFRS 16 can be reconciled as follows:

(in million EUR)	Reconciliation IAS 17 to IFRS 16
Minimum lease payments under operating leases IAS 17 as of 31 December 2018	**53.7**
Contracts considered not in scope for IFRS 16	(5.6)
Effect from discounting	(21.8)
Effect from lease term assumptions	69.5
Liabilities recognized under IFRS 16 as of 1 January 2019	**95.8**

Contracts considered out of scope for IFRS 16 are most often contracts where (i) no asset could be identified, or where, (ii) an asset is to be identified in the contract, but over which no control can be exercised by the Group.

The effect from lease term assumptions comes from the estimation of the most probable end date of the contract under IFRS 16 which can differ from the end date stipulated in the contract. This is often the case for contracts where it is probable that the contract will be prolonged.

The recognised right-of-use assets fall into the following categories:

(in million EUR)	1 January 2019
Use of land	4.5
Use of overhead line	32.7
Rent of buildings/offices	32.1
Cars	12.7
IT equipment / facilities	0.1
Optical fibers	10.1
Strategic reserves	3.6
Total	**95.8**

The use (portions) of land and overhead lines constitutes a right for the Group to use a well identified piece of land to construct on someone's property. Only the contracts where the Group has the full right to control the use of the identified asset are in scope. Strategic reserves are contracts where the Group has the right to control the use of a power plant to keep the balance in the electricity network.

Accounting policies

See note 3.3.16 for a detailed description of the accounting policies.

Besides IFRS 16, a number of other standards, amendments and interpretations came in effect in 2019 with only limited or no impact for the Group:

- **Uncertainty over Income Tax Treatment** (IFRIC Interpretation 23 – effective from 1 January 2019). In June 2017, the IASB issued IFRIC Interpretation 23 which clarifies application of the recognition and measurement requirements in IAS 12 Income Taxes when there is uncertainty over income tax treatments. This amendment had no impact on the Group.
- **Prepayment features with Negative Compensation** (amendments to IFRS 9 – effective from 1 January 2019). The amendments to IFRS 9 clarify that a financial asset passes the SPPI criterion regardless of the event or circumstance that causes the early termination of the contract and irrespective of which party pays or receives reasonable compensation for the early termination of the contract. These amendments had no impact on the Group.
- **Plan Amendment, Curtailment or Settlement** (amendments to IAS 19 – effective from 1 January 2019). The amendments to IAS 19 Employee Benefits address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. These amendments had no impact on the Group.
- **Long-term interests in associates and joint ventures** (amendments to IAS 28 – effective from 1 January 2019). The amendments clarify that an entity applies IFRS 9 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). These amendements had no impact on the Group.
- **Annual improvements to IFRS Standards 2015-2017 Cycle** (specific focus on IFRS 3, IFRS 11, IAS 12 and IAS 23 – effective from 1 January 2019). These amendments do not have any impact on the Group's consolidated financial statements.

The following **standards, amendments and interpretations** had not yet taken effect in 2019. The changes in the below standards, amendments and interpretations are not expected to have a material impact on the annual accounts and are therefore not set out in more detail:

- Amendments to IFRS 3:Definition of a Business;
- IFRS 17: Insurance Contracts;
- Amendments to IFRS 10 and IAS 28: Sale or Contribution of Assets between an Investor and its Associate or Joint Venture;
- Amendments to IAS 1 and IAS 8, regarding the definition of materiality;
- Amendments to References to the Conceptual Framework in IFRS Standards: Amendments to conceptual framework.

2.2. Functional and presentation currency

The consolidated financial statements are presented in million euro (the functional currency of the Company), rounded to the nearest hundred thousand, unless stated otherwise.

2.3. Basis of measurement

The consolidated financial statements have been prepared on a historical-cost basis, except for the derivative financial instruments, which are measured at fair value. Non-current assets are valued at the lowest of the carrying amount and the recoverable amount . Employee benefits are valued at the present value of the defined benefit obligations, less the fair value of the plan assets (see also note 6.14). Changes in fair value of other shareholdings are recorded through OCI.Financial assets not classified as measured at amortised cost or fair value through OCI are measured at fair value through profit and loss.

2.4. Use of estimates and judgements

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgements, estimates and assumptions that could affect the reported amounts of assets and liabilities and revenue and expenses. The estimates and underlying assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements regarding the carrying amounts of assets and liabilities. Actual results could differ from these estimates. The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision only affects this period, or in the period in which the estimate is revised and future periods if the revision affects both current and future periods.

The following notes include information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements:

- The total allowed remuneration for its role as TSO in the Belgian segment and in the German segment is mainly determined by calculation methods set by, respectively, the Belgian federal regulator, the Commission for Electricity and Gas Regulation ('CREG') and the German federal regulator, the Federal Network Agency ('BNetzA'). In this context the recognition of deferral regulatory accounts is also based on the different regulatory schemes. For certain calculations, a level of judgement is needed. More disclosures are to be found in Notes 6.20, 9.1.4 and 9.2.3.
- Entities in which the Group holds less than 20% of the voting rights but has significant influence are accounted for under the equity method. Following the guidance in IAS 28, the Group assesses whether it has significant influence over its associates and therefore needs to account for them under the equity method (rather than applying IFRS 9) and reassesses this in each reporting period (see also Note 6.5).
- Deferred tax assets are recognised for the carry-forward of unused tax losses and unused tax credits in so far as it is probable that future taxable profit will be available against which the unused tax losses and unused tax credits can be utilised. In making its judgement, management takes into account elements such as long-term business strategy and tax planning opportunities (see Note 6.7).

- Credit risk related to customers: management closely reviews the outstanding trade receivables, also considering ageing, payment history and credit risk coverage (see Note 8.1).
- Employee benefits including reimbursement rights – see Note 6.14:
  - The Group has defined-benefit plans and defined-contribution plans which are disclosed in Note 6.14. The calculation of the liabilities or assets related to these plans is based on actuarial and statistical assumptions. For example, this is the case for the present value of future pension liabilities. The present value is, among other factors, impacted by changes in discount rates, and financial assumptions such as future increases in salary. In addition, demographic assumptions, such as average assumed retirement age, also impact the present value of future pension liabilities;
  - In determining the appropriate discount rate, management considers the interest rates of corporate bonds in currencies consistent with currencies of the post-employment benefit obligation, i.e. euro, with at least an AA rating or above, as set by at least one dominant rating agency and extrapolated along the yield curve to correspond with the expected term of the defined benefit obligation. Higher and lower yielding bonds are excluded in developing the appropriate yield curve;
  - Each plan's projected cash flow is matched to the spot rates of the yield curve to calculate an associated present value. A single equivalent discount rate is then determined that produces that same present value. Hence, the resulting discount rate reflects both the current interest rate environment and the plan's distinct liability characteristics.
- Provisions for environmental remediation costs: at each year-end, an estimate is made of future expenses in respect of soil remediation, based on the advice of an expert. The extent of remediation costs is dependent on a limited number of uncertainties, including newly identified cases of soil contamination (see Note 6.15).
- Other provisions are based on the value of the claims filed or on the estimated amount of the risk exposure. The expected timing of the related cash outflow depends on the progress and the duration of the associated process/procedures (see Note 6.15).
- Goodwill impairment testing: the Group performs impairment tests on goodwill and on cash-generating units (CGUs) at the reporting date, and whenever there are indicators that the carrying amount might be higher than the recoverable amount. This analysis is based on assumptions such as estimated investment plans, remuneration defined in the regulatory frameworks, market evolution, market share, margin evolution and discount rates (see Note 6.3).
- Fair value measurement of financial instruments: when the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques. The inputs for these valuation techniques are taken from observable markets where possible. Where this is not feasible, a level of judgement is required in establishing fair values. Changes in the fair value of the derivative hedging instrument designated as a cash flow hedge are recognised directly in other comprehensive income (OCI) to the extent that the hedge is effective. To the extent that the hedge is ineffective, changes in fair value are recognised in profit or loss (see Note 6.18).
- The useful life of the fixed assets is defined to reflect the real depreciation of each asset. The depreciation of property, plant and equipment is mainly calculated based on the useful lives determined by the regulatory framework in Belgium and Germany, which is considered to be the best possible approximation of actual events in terms of economic utilisation. (see Note 3.3.1 and 6.1)
- The Group made use of practical expedients when applying IFRS 16 Leasing:
  - The Group applies a single discount rate per group of contracts, summarised per their duration. Those leases were assumed to have similar characteristics. The discount rate used is the Group's best estimation for the weighted average incremental borrowing rate. Each lease contract is classified in a duration bucket (<5 years, between 5 and 10 years,…) for which an interest rate is derived equal to the interest rate of a traded bond with the same rating as Elia Group in the same sector with similar duration. The interest rate is set fixed over the lifetime of the lease contract.
  - The Group assessed the non-cancellable period of each of the contracts in scope of IFRS 16. This includes the period covered by an option to extend the lease, if the lessee is reasonable certain to exercise that option. Certainly where it relates to office rent contracts, the Group's made its best estimation of the non-cancellable period based on all information on which the Group disposes. (see note 6.19)

2.5. Approval by the Board of Directors

These consolidated financial statements were authorised for publication by the Board of Directors on 26 March 2020.

3. Significant accounting policies

3.1. Basis of consolidation

SUBSIDIARIES

A subsidiary is an entity that is controlled by the Company. The Group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that this ceases. The accounting policies of subsidiaries are changed when necessary to align them with the policies adopted by the Group. Losses applicable to the non-controlling interests in a subsidiary are allocated to the non-controlling interests even if doing so results in a deficit balance of the non-controlling interests. Changes in the Group's interest in a non-wholly-owned subsidiary that do not result in a loss of control are accounted for as equity transactions

ASSOCIATES

Associates are those companies in which the Company exerts significant influence, but not control, over the financial and operating policies. Investments in associates are accounted for in the consolidated financial statements in accordance with the equity method. They are recognised initially in the consolidated statement of financial position at cost, with all transaction costs incurred with the acquisition included, and adjusted thereafter to recognise the Group's share of the profit or loss and other comprehensive income of the associate. This accounting under the equity method is done from the date that significant influence commences until the date that significant influence ceases. When the Group's share of the losses exceeds its interest in an associate, its carrying amount is reduced to nil and further losses are not recognised except to the extent that the Group has incurred legal or constructive obligations or has made payments on behalf of an associate .

INTERESTS IN JOINT VENTURES

A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, as opposed to joint operations whereby the Group has rights to its assets and obligations for its liabilities. Interests in joint ventures are accounted for using the equity method. They are recognised initially at cost price, with all transaction costs incurred with the acquisition included. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the total recognised profits and losses of joint ventures on the basis of the equity method, from the date that joint control commences until the date that joint control ceases. When the Group's share of the losses exceeds its interest in joint ventures, its carrying amount is reduced to nil and further losses are not recognised except to the extent that the Group has incurred legal or constructive obligations or has made payments on behalf of a joint venture.

NON-CONTROLLING INTERESTS

Non-controlling interests are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date.

LOSS OF CONTROL

Upon the loss of control, the Group derecognises the assets and liabilities of the subsidiary, any non-controlling interests and the other components of other comprehensive income related to the subsidiary. Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the former subsidiary, then such interest is measured at fair value at the date that control is lost. Subsequently, it is accounted for as an equity-accounted investee or as a fair value financial asset depending on the level of influence retained.

ELIMINATION OF INTRA-GROUP TRANSACTIONS

Intra-Group balances and any unrealised gains or losses or income and expenses arising from intra-Group transactions are eliminated when preparing the consolidated financial statements.

Unrealised gains from transactions with associates are eliminated to the extent of the Group's interest in the entity. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

BUSINESS COMBINATIONS AND GOODWILL

Goodwill arises on the acquisition of subsidiaries represents the excess of the consideration transferred over the Group's interest in the net fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree.

The Group measures goodwill at the acquisition date as:

- the fair value of the consideration transferred; plus
- the recognised amount of any non-controlling interest in the acquiree; plus
- if the business combination is completed in stages, the fair value of the pre-existing equity interest in the acquiree; less
- the fair value of the identifiable assets acquired and liabilities at acquisition date.

When the excess is negative, a gain on a bargain purchase is recognised immediately in profit or loss.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognised in profit or loss.

Transactions costs incurred by the Group in connection with a business combination, other than those associated with the issue of debt or equity securities, are expensed as incurred.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognised in profit or loss.

3.2. Foreign-currency translation

FOREIGN-CURRENCY TRANSACTIONS AND BALANCES
Transactions in foreign currencies are converted into the functional currency of the Company at the foreign exchange rate on the date of the transaction. Monetary assets and liabilities denominated in foreign currencies on the reporting date are converted at the foreign exchange rate on that date. Foreign exchange differences arising on conversion are recognised in profit or loss.

Non-monetary assets and liabilities denominated in foreign currencies that are valued in terms of historical cost are converted at the exchange rate on the date of the transaction.

FOREIGN OPERATIONS
A foreign operation is an entity that is a subsidiary, an associate, an interest in a joint venture or a branch of the reporting entity, whose activities are based or conducted in a country or currency other than those of the reporting entity.

The financial statements of all Group entities that have a functional currency different from the Group's presentation currency are translated into the presentation currency as follows:
- assets and liabilities are translated at the exchange rate at the reporting date;
- income and expenses are translated at the average exchange rate of the year.

Exchange differences arising from the translation of the net investment in foreign subsidiaries, interests in joint ventures and associates at closing exchange rates are included in shareholder's equity under OCI. Upon the (partial) disposal of foreign subsidiaries, joint ventures and associates, (part of) cumulative translation adjustments are recognised in the profit or loss as part of the gain/loss of the sale.

3.3. Balance sheet items

3.3.1. Property, plant and equipment

Owned assets

Items of property, plant and equipment are stated at cost (including the directly allocated costs such as finance costs), less accumulated depreciation and impairment losses (see the section 3.3.7. 'Impairment of non-financial assets'). The cost of self-produced assets comprises the cost of materials, of direct labour and, where relevant, of the initial estimate of the costs of dismantling and removing the assets and restoring the site where the assets were located. If parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items of property, plant and equipment.

Subsequent costs

The Group recognises in the carrying amount of an item of property, plant and equipment the subsequent costs of replacing part of such an item when that cost is incurred, but only when it is probable that the future economic benefits embodied in the item will flow to the Group and the cost of the item can be measured reliably. All other costs, such as repair and maintenance costs, are recognised in profit or loss as and when they are incurred.

Depreciation

Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful life of each component of an item of property, plant and equipment. Land is not depreciated. The applied depreciation percentages can be found in the table below.

Depreciation methods, remaining useful lives and residual values of the property, plant and equipment are reassessed annually and are prospectively adjusted as the occasion arises.

Administrative buildings	1.67% – 2.00%
Industrial buildings	2.00 – 4.00%
Overhead lines	2.00 – 4.00%
Underground cables	2.00 – 5.00%
Substations (facilities and machines)	2.50 – 6.67%
Remote control	3.00 – 12.50%
Dispatching	4.00 – 10.00%
Other PPE (fitting out rented buildings)	contractual period
Vehicles	6.67 – 20.00%
Tools and office furniture	6.67 – 20.00%
Hardware	25.00 – 33.00%
Right of use assets	contractual period

Decommissioning asset

Provision is made for decommissioning and environmental costs, based on future estimated expenditure, discounted to present values. An initial estimate of decommissioning and environmental costs attributable to property, plant and equipment is recorded as part of the original cost of the related property, plant and equipment.

Changes in the provision arising from revised estimates or discount rates or changes in the expected timing of expenditure relating to property, plant or equipment are recorded as adjustments to their carrying value and depreciated prospectively over their remaining estimated economic useful lives; otherwise such changes are recognised in the profit or loss.

The unwinding of the discount is recorded in the profit or loss as a financing charge.

Derecognition

An asset is no longer recognised when the asset is subject to disposal or when no future economic benefits are expected from its use or disposal. Gains or losses arising from the derecognition of the asset (which is determined as the difference between the net disposal proceeds and the carrying amount of the asset) are included in profit or loss, under other income or other expenses, during the year in which the asset was derecognised.

3.3.2. Intangible assets

Computer software

Software licences acquired by the Group are stated at cost, less accumulated amortisation (see below) and impairment losses (see the section 3.3.7. 'Impairment').

Expenditure on research activities undertaken with the purpose of developing software within the Group is recognised in profit or loss as expenditure as incurred. Expenditure on the development phase of software developed within the Group is capitalised if:
- the costs of development can be measured reliably;
- the software is technically and commercially feasible and future economic benefits are probable;
- the Group plans – and has sufficient resources – to complete development;
- the Group plans to use the software.

The capitalised expenditure includes cost of material, direct labour costs and overhead costs that are directly attributable to preparing the software for its use. Other costs are recognised in profit or loss as incurred.

Licences, patents and similar rights

Expenditure on acquired licences, patents, trademarks and similar rights are capitalised and amortised on a straight-line basis over the contractual period, if any, or the estimated useful life.

Subsequent expenditure

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is recognised in profit or loss as expenditure as incurred.

Amortisation

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful life of intangible assets, unless the useful life is indefinite. Goodwill and intangible assets with indefinite useful lives are tested systematically for impairment on each end of the reporting period. Software is amortised from the date it becomes available for use. The estimated useful lives are as follows:

Licences	20.00%
Concessions	contractual period
Computer software	20.00 – 25.00%

Depreciation methods, remaining useful lives and residual values of intangible assets are reassessed annually and are prospectively adjusted as the occasion arises.

3.3.3. Goodwill

Goodwill is stated at cost, less accumulated impairment losses. Goodwill is allocated to cash-generating units and is not amortised but tested annually for impairment (see the section 3.3.7 'Impairment of non-financial assets'). In the case of associates, the carrying amount of goodwill is included in the carrying amount of the investment in the associates.

3.3.4. Trade and other receivables

Contract assets

Revenue arising from 3rd party services (see note 3.4.1.) and associated costs are recognised over time as we have the right to consideration for work performed but not billed. Progress is determined based on the costs incurred.

The contract assets primarily relate to the Group’s rights to consideration for work completed but not billed at the reporting date on project work. The contract assets are transferred to receivables when the rights become unconditional. This usually occurs when the Group issues an invoice to the customer.Contract assets are included in trade and other receivables.

Trade and other receivables

Trade receivables and other receivables are measured at amortised cost minus the appropriate allowance for amounts regarded as unrecoverable.

Impairment

For trade receivables and contract assets, the Group applies a simplified approach in calculating the Expected Credit Losses (ECLs). The Group therefore does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, as its best proxy for future credit losses to be incurred.

Refer to Note 8.1, ‘Credit risk’, for a detailed description of the model.

3.3.5. Inventories

Inventories (spare parts) are stated at the lower of cost and net realisable value. Net realisable value is the estimated selling price minus the estimated costs of completion and selling expenses. The cost of inventories is based on the weighted-average-cost-price method. The cost includes the expenditure incurred in acquiring the inventories and the direct costs of bringing them to their location and making them operational.

Write-downs of inventories to net realisable value are recognised in the period in which the write-offs occurred.

3.3.6. Cash and cash equivalents

Cash and cash equivalents comprise cash balances, bank balances, commercial paper and deposits that can be withdrawn on demand. Overdrafts that are repayable on demand form an integral part of the Group's cash management and are included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

3.3.7. Impairment of non-financial assets

The carrying amount of the Group's assets, excluding inventories and deferred taxes, is reviewed at the end of the reporting period for each asset to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated.

The recoverable amount of goodwill and intangible assets with an indefinite useful life and intangible assets that are not yet available for use is estimated at the end of each reporting period.

An impairment loss is recognised whenever the carrying amount of such asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss. Recognised impairment losses relating to cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to cash-generating units and then to reduce the carrying amount of the other assets in the units on a pro-rata basis.

After recognition of impairment losses, the depreciation costs for the asset will be prospectively adjusted.

Calculation of the recoverable amount

The recoverable amount of intangible assets and property, plant and equipment is determined as the higher of their fair value less costs of disposal, or their value in use. In assessing value in use, the expected future cash flows are discounted to their present value using a pre-tax discount rate that reflects both the current market assessment of the time value of money and the risks specific to the asset.

The Group's assets do not generate cash flows that are independent from other assets. The recoverable amount is therefore determined for the cash-generating unit (i.e. the entire high-voltage grid) to which the asset belongs. This is also the level at which the Group administers its goodwill and gather the economic benefits of acquired goodwill.

Reversals of impairment

An impairment loss in respect of goodwill is not reversed. Impairment loss on other assets is reversed if there have been changes in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

3.3.8. Financial assets

Initial recognition and measurement

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. The Group initially measures a financial asset at its fair value plus transaction costs.

Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in three categories:

- financial assets at amortised cost (debt instruments)
- financial assets measured at fair value through OCI (equity instruments)
- financial assets measured at fair value through profit and loss

Financial assets at amortised cost

Financial assets at amortised cost are managed with a view to holding them to maturity and collecting contractual cash flows. The financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the Effective Interest Rate (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

The Group's financial assets at amortised cost include loans to third parties.

Financial assets measured at fair value through OCI (equity instruments)

Upon initial recognition, the Group irrevocably classifies its equity investments as equity instruments measured at fair value through OCI when the Group does not have significant influence and the assets are not held for trading. This classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognised as other income in the statement of profit or loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case any such gains are recorded in OCI. Equity instruments measured at fair value through OCI are not subject to impairment assessment.

The Group has elected to irrevocably classify non-listed equity investments over which the Group does not have significant influence in this category.

Financial assets measured at fair value through profit and loss

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for its debt instruments. See Note 8.1, 'Credit risk', for a detailed description of the approach.

3.3.9. Derivative financial instruments and hedge accounting

Derivative financial instruments

The Group sometimes uses derivative financial instruments to hedge its exposure to foreign-exchange and interest-rate risks arising from operating, financing and investment activities. In accordance with its treasury policy, the Group neither holds nor issues derivative financial instruments for trading purposes. However, derivatives that do not qualify for hedge accounting are accounted for as instruments held for trading purposes.

Derivative financial instruments are initially recognised at fair value. Any gain or loss resulting from changes in the fair value is immediately booked in the income statement. Where derivative financial instruments qualify for hedge accounting, the reflection of any resulting gain or loss depends on the nature of the item being hedged.

The fair value of interest-rate swaps is the estimated amount that the Group would receive or pay to terminate the swap at the end of the reporting period, taking into account the current interest rates and the current creditworthiness of the swap counterparties and the Group. The fair value of forward exchange contracts is their quoted market price at the end of the reporting period, i.e. the present value of the quoted forward price.

Derivatives used as hedging instruments

Cash-flow hedges

Changes in the fair value of the derivative hedging instrument designated as a cash-flow hedge are recognised directly in other comprehensive income (OCI) to the extent that the hedge is effective. To the extent that the hedge is ineffective, changes in fair value are recognised in profit or loss.

The Group designates only the spot element of forward contracts as a hedged risk. The forward element is considered as cost of hedging and is recognised in OCI and accumulated in a separate component of the statement of financial position under hedging reserves.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated or exercised, hedge accounting is prospectively discontinued. The cumulative gain or loss previously recognised in OCI remains there until the forecast transaction occurs. When the hedged item is a non-financial asset, the amount recognised in OCI is transferred, where justified, to the carrying amount of the asset. In other cases, the amount recognised in OCI is transferred to profit or loss in the same period that the hedged item affects profit or loss.

When a derivative or hedge relationship is terminated, cumulative gains or losses still remain in OCI provided that the hedged transaction is still expected to occur. If the hedged transaction is no longer expected to take place, the cumulative unrealised gain or loss is removed from OCI and is immediately recognised in profit or loss.

Hedging of monetary assets and liabilities

Hedge accounting is not applied to derivative instruments that economically hedge monetary assets and liabilities denominated in foreign currencies. Changes in the fair value of such derivatives are recognised in profit or loss as foreign-currency gains and losses.

3.3.10. Equity

Share capital – transaction costs

Transaction costs in respect of the issuing of capital are deducted from the capital received.

Dividends

Dividends are recognised as a liability in the period in which they are declared (see note 6.12.1)

Hybrid securities

Hybrid securities are deeply subordinated securities. With the exception of ordinary shares, hybrid securities rank as the most junior instruments in the capital structure of the Group in an insolvency hierarchy. The holders of the hybrid securities have limited ability to influence the outcome of a bankruptcy proceeding or a restructuring outside bankruptcy. Hybrid securities are perpetual instruments; the terms do not provide for any events of default nor entitle holders to demand repayment or redemption.

Subject to certain exceptions where accrued interest would be mandatorily payable (e.g. in the event that a dividend is paid on any ordinary shares), the Group may elect to defer payment of all of the interest which would otherwise be paid on an interest payment date. Any such failure to pay would not constitute a default for any purpose. In light of their characteristics, hybrid securities are classified as an equity instrument under IFRS. The associated issue costs are recognised directly in retained earnings.

3.3.11. Financial liabilities

Financial liabilities consist of interest-bearing loans and borrowings in the Group. They are initially recognised at fair value, less related transaction costs. Subsequent to initial recognition, interest-bearing loans and borrowings are stated at amortised cost price with any difference between amount at initial recognition and redemption value being recognised in profit or loss over the period of the loans on an effective interest basis.

3.3.12. Employee benefits

Defined-contribution plans

In Belgium, contribution-based promises, called defined-contribution pension plans under Belgian pension legislation, are classified as defined-benefit plans for accounting purposes due to the legal minimum return to be guaranteed by the employer.

Before 01/01/2016, the legal minimum return was 3.75% on the employee contributions, 3.25% on the employer contributions and 0% for the deferreds.

As from 01/01/2016, the legal minimum return is a variable rate between 1.75% and 3.75%. The interest rate is automatically adapted on January 1st of each year based on the average return OLO 10 years over 24 months, with 1.75% as a minimum. As from 01/01/2016, the legal minimum return is 1.75% on employee and employer contributions and 0% for the deferreds.

As the plans are funded via a pension fund, the vertical approach is applied, meaning that 1.75% is applied on all the reserves (even before 2016).

The employer needs to finance the deficits related to the LSP ("Law on Supplementary Pensions) guarantee at any time for the employee contract and at the moment the vested reserves are transferred in case of departure, retirement or liquidation of the pension for the employer contract.

For each plan, the fair value of assets equals the sum of the accrued individual reserves (if any) and the value of the collective fund(s) (if any).

The Defined-Benefit Obligation (DBO) was determined following the Projected Unit credit (PUC) method. Depending on the plan formula (if the plan is backloaded or not), the premiums are projected or not.

In Germany, the defined-contribution plan involves a fixed pension to be paid to an employee upon retirement, which is usually based on one or several factors such as the employee's age, years of service and salary.

In both countries the calculation is performed by an accredited actuary.

Defined-benefit plans

For defined-benefit plans, which exist in both Belgium and Germany, the pension expenses for each plan are assessed separately on an annual basis by accredited actuaries using the projected unit credit method. The estimated future benefit that employees have earned in return for their service in the current and previous periods is discounted to determine its present value, and the fair value of any plan assets is deducted. The discount rate is the interest rate, at the end of the reporting period on high-quality bonds that have maturity dates approximately equivalent to the terms of the Group's obligations and that are denominated in the currency in which the benefits are expected to be paid.

When the benefits of a plan are improved, the portion of the increased benefit relating to past service by employees is recognised as an expense in profit or loss at the earlier of the following dates:

- when the plan amendment or curtailment occurs; or
- when the entity recognises related restructuring costs under IAS 37 or termination benefits.

Where the calculation results in a benefit to the Group, the recognised asset is limited to the present value of any future refunds from the plan or reductions in future contributions to the plan.

Remeasurements – comprising actuarial gains and losses, the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability) and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability) – are recognised immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Reimbursement rights (Belgium)

Reimbursement rights are recognised as a separate asset when, and only when, it is virtually certain that another party will reimburse some or all of the expenditure required to settle the corresponding benefit obligation. Reimbursement rights are presented as non-current assets under other financial assets and are measured at fair value. These rights are handled the same as the corresponding defined-benefit obligation. When the changes in the period result from changes in financial assumptions or from experience adjustments or changes in demographic assumptions, then the asset is adjusted through OCI. The components of the defined-benefit cost are recognised net of amounts relating to changes in the carrying amount of the rights to reimbursement.

Other long-term employee benefits

The Group's net obligation in respect of long-term service benefits other than pension plans is assessed on an annual basis by accredited actuaries. The net obligation is calculated using the projected unit credit method and is the amount of future benefit that employees have earned in return for their service in the current and previous periods. The obligation is discounted to its present value, and the fair value of any related assets is deducted. The discount rate is the yield, at the end of the reporting period, on high-quality bonds that have maturity dates approximately equivalent to the terms of the Group's obligations and that are denominated in the currency in which the benefits are expected to be paid.

Short-term employee benefits

Short-term employee benefits are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid out under a short-term cash bonus or profit-sharing plans if the Group has a legal or constructive obligation to pay this amount as a result of the past service provided by the employee and the obligation can be reliably estimated.

3.3.13. Provisions

A provision is recognised in the balance sheet when the Group has a current legal or constructive obligation as a result of a past event and it is likely that an outflow of economic benefits – of which a reliable estimate can be made – will be required to settle the obligation. If the effect is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects the current market assessment of the time value of money and, where appropriate, of the risks specific to the liability.

The total estimated cost of dismantling and disposal of an asset is, if applicable, recognised as property, plant and equipment and depreciated over the asset's entire useful life. The total estimated cost of dismantling and of disposal of the asset is posted as provisions for the discounted current value. If the amount is discounted, the increase in the provision due to the passage of time is classified as finance expenses.

3.3.14. Trade and other payables

Trade and other payables are stated at amortised cost.

Levies

In its role as TSO, Elia is subject to various public service obligations imposed by Government and/or regulation mechanisms. Public authorities/regulation mechanisms identify public service obligations in various fields (such as promotion of renewable energy, social support, fees for the use of the public domain, offshore liability) to be executed by TSOs. Costs incurred by grid operators in respect of those obligations are fully covered by tariff 'levies' as approved by the regulator. The amounts outstanding are reported as a trade and other receivable. See also note 9.1.14

3.3.15. Other non-current liabilities

Government grants

Government grants are recognised when it is reasonably certain that the Group will receive the grant and that all underlying conditions will be met. Grants related to an asset are presented under other liabilities and will be recognised in the income statement on a systematic basis over the expected useful life of the related asset. Grants related to expense items are recognised in the income statement in the same period as the expenses for which the grant was received. Government grants are presented as other operating income in the income statement.

Contract liabilities – Last mile connection

The consideration of the last mile connection is paid upfront, whilst the revenues are recogniased over the life time of the underlying asset. The amounts to be released in future are reflected in this section. See also note 3.4.1..

3.3.16. Leases (applicable from 1 January 2019)

At inception of a contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in IFRS 16.

This policy is applied to contracts entered into, on or after 1 January 2019.

The Group as a lessee

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. Assets and liabilities arising from a lease are initially measured on a present value basis anddiscounted using the Group's best estimate for the weighted average incremental borrowing rate, in case the rate implicit in the lease cannot be readily determined. The Group applies a single discount rate per group of similar contracts, summarised per their duration.
Lease payments included in the measurement of the lease liability comprise fixed payments, including in-substance fixed payments. Variable lease payments are expensed as incurred. As practical expedient, no distinction is made between lease and non-lease components. Components that do not transfer any goods or service (initial direct costs, prepayments) are excluded from the lease price.

The right of use assets is subsequently reduced by accumulated depreciation, impairment losses and any adjustments resulting from the remeasurement of the lease liability. The right-of-use asset is depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Group by the end of the lease term or the cost of the right-of-use asset reflects that the Group will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment.

The lease liability is subsequently increased by the interest cost on the lease liability and reduced by lease payment made. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, a change in the estimate of the amount expected to be payable under a residual value guarantee, or a change in the reassessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option not to be exercised.

The Group presents right-of-use assets within "property, plant and equipment" and lease liabilities within "loans and borrowings" (current and non-current) in the statement of financial position.

The Group has elected not to recognise right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, including IT equipment. The Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

The Group as a lessor

Leases that substantially transfer all the risks and rewards incidental to ownership of an underlying asset are recognised as finance leases. All other leases that do not transfer all the risks and rewards incidental to ownership of an underlying asset are recognised as operating leases. The Group as a lessor has only operating lease contracts. These lease payments received are recognised as other income on a straight-line basis over the lease term.

3.3.17. Regulatory deferral accounts

The Group operates in a regulated environment in which tariffs are meant to realise total revenue/income consisting of:

1. a reasonable return on invested capital;
2. all reasonable costs which are incurred by the Group.

Since the tariffs are based on estimates, there is always a difference between the tariffs that are actually charged and the tariffs that should have been charged (tariff setting agreed with regulator) to cover all reasonable costs of the system operator including a reasonable profit margin for the shareholders.

If the applied tariffs result in a surplus or a deficit at the end of the year, this means that the tariffs charged to consumers/the general public should have been respectively lower or higher (and vice versa). This surplus or deficit is therefore reported in the regulatory deferral account.

The release of the regulatory deferral account will impact future tariffs: incurred regulatory liabilities will decrease future tariffs, incurred regulatory assets will increase future tariffs.

In the absence of an IFRS specifically applying to the treatment these regulatory deferral accounts, Elia management referred to the requirements of IFRS 14 and the Conceptual Framework for Financial Reporting alongside the latest evolutions of the IASB project on Rate-regulated Activities to develop the following accounting policy in that respect:

- a liability is recognized in the statement of financial position and presented as part of “accruals and deferred income” ” in respect of the Elia Group’s obligation to deduct an amount from the tariffs to be charged to customers in future periods because the total allowed compensation for goods or services already supplied is lower than the amount already charged to customers, or excess revenues has been generated due to higher volumes than initially estimated. (regulatory liability);
- an asset is recognized in the statement of financial position in respect of the Elia Group’s right to add an amount to the tariffs to be charged to customers in future periods because the total allowed compensation for the goods or services already supplied exceeds the amount already charged to customers or shortage in revenues has been occurred due to lower volumes than initially estimated (regulatory asset); and
- the net movement in the regulatory deferral accounts for the period is presented separately in the statement of profit or loss within the line item “net regulatory income (expense)”.

The amount in the regulatory deferral accounts is yearly reported and assessed by the regulator.

The sum of revenue from contracts with customers (as defined in IFRS 15) , other income and the net income (expense) from settlement mechanism is also presented as a subtotal headed “Revenue, other income and net income (expense) from settlement mechanism” , as in substance it represents the revenue that is economically earned during the period taking into account the regulated environment in which the Elia Group operates. The effect of discounting is reflected in the financial result. See note 9.

3.4. Income-statement items

3.4.1. Income

Revenues

IFRS 15 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. These are the five steps to consider for each customer contract:

1. Identify the contract(s) with a customer;
2. Identify the performance obligations in the contract(s);
3. Determine the transaction price;
4. Allocate the transaction price to the performance obligations;
5. Recognise revenue when performance obligations are satisfied, or when control of goods or services is transferred to the customer.

The Group’s main revenues are realised by Transmission System Operators (TSOs), acting under a regulatory framework and having a factual / legal monopoly. The applicable frameworks in the main countries are detailed in Note 9 *Regulatory framework and tariffs*.

For the regulated business, each service is based on a standard contract with the customer, with mostly a predefined regulated tariff (unit price multiplied with the volume (injection or offtake) or the reserved capacity (depending on the type of service), so pricing is not variable. Hence, the allocation of the transaction price over the different performance obligations is straight forward (one-to-one relationship). Most of these contracts are concluded for an indefinite period with general payment terms of 15-30 days.

Considering the business of the Elia Group, there are no relevant right-of-returns and warranty obligations.

For all services provided by the Group, Elia is the solely and primary party responsible for executing the service and so the principal.

However, Elia in its role as TSO, some public service obligations are imposed by Government/regulation mechanism These obligations are mainly related to financial support for the development of renewable energy. For these activities, the TSO’s are acting as an agent and as the expense/income streams are fully covered by tariffs there is no impact in the statement of profit and loss. We refer to 3.3.14 for more information on the accounting treatment.

The Group’s main performance obligations / type of contracts, their pricing and revenue recognition method for 2019 can be summarised as follows:

Revenue by category for Elia Transmission:

Revenue stream	Nature, customer and timing of satisfaction of performance obligations	Contract – Price setting
Grid revenues		
Grid connection	**Technical studies** conducted at the request of grid users, directly connected to the grid, to get a new or an alteration of an existing connection. Revenue is recognised at the point in time when the study is delivered.	Contract and tariff approved by Regulator. Fixed amount per type of study
	Last mile connection (Transfer of assets from customers) is a component of the grid connection contract. At the request of a future grid user, Elia constructs/adjusts a dedicated/ physical connection, a so called last-mile connection, to connect the customers’ facility to Elia’s grid. Although the control of the asset is not transferred as such to the grid user, the grid user obtains direct access to the high voltage grid. This access right transferred by Elia is valuable to the grid user, which is the reason why the grid user is compensating Elia in cash. As the grid user enters simultaneously into a grid connection contract both activities (access right and the grid connection services) are not distinct and constitute a single performance obligation and interdependence between these contracts. The total amount of revenue recognised for this single performance obligation, which includes grid connection services, is recognised over the life of the assets, as the contract has no specific end date. This component of the grid connection/ grid user contract is presented separately (not part of the grid connection/ revenues from revenue cap) as from regulatory perspective the tariff setting is very specific.	Standard contract approved by regulator, but the price setting is based on the budget of realisation of the connection.
	Fees charged to grid users/ DSOs cover the m**aintenance and operating** costs related to the **dedicated connection facilities** Revenue is recognised over time as this service is a continuous performance throughout the contractual term.	Contract and tariff approved by Regulator. Tariff is set per type of asset (bay, km cable, ..)
Management and development of grid infrastructure	This component of the access contract signed with access holders/DSOs, covers the development and management of the grid with a view to meeting capacity needs and satisfying demand for electricity transmission.. Revenue is recognised over time as providing sufficient capacity and a resilient grid is a service performed continuously throughout the contractual term.	Contract and tariff approved by Regulator. EUR per kW/KVA for yearly/monthly peak and power available at access point
Management of the electrical system	This component of the access contract signed with access holders/DSO, covers the management and operation of the electricity system and the offtake of additional reactive energy related to Elia’s grid (different from the connection assets). Revenue is recognised over time as these services are performed continuously throughout the contractual term.	Contract and tariff approved by Regulator. EUR per kW/ kVArh at access point
Market integration	This component is part of the access contract signed with access holders/DSOs, covering (i) services to facilitate the energy market: to (ii) develop and enhance integration of an effective and efficient electricity market, (iii) the management of interconnections and the coordination with neighbouring countries and the European authorities, and (iv) the publication of data as required by transparency obligations. Revenue is recognised over time as these services are performed continuously throughout the contractual term.	Contract and tariff approved by Regulator. EUR per kW at access point
Compensation of imbalances	As defined in the BRP contract, the BRP (Balance Responsible Party) has a commitment to ensure a perfect balance between offtake and injection in the grid. In the event of an imbalance by the BRP, Elia has to activate the ancillary services which are to be invoiced to the BRP. Revenue is recognised at the point in time when an imbalance occurs.	Contract and tariff/mechanism approved by Regulator. Based on market prices,EUR per kW imbalance at access point
International revenues	The use of the grid on individual borders is organised through, half-yearly, quarterly, monthly, weekly, weekend, daily and intra-day auctions. Elia and Regulators decide which auctions are conducted on individual borders. Auctions are organised via an auction office, which acts as an agent. The auction office collects the revenues paid by the European energy traders, which are finally shared between neighbouring TSOs based on the volumes imported/exported on the border. The revenue is recognised at the point in time when an import/export activity occurs.	Framework agreement with parties and auction office. Price setting is based on price difference in cross border market prices.

Revenue by category for 50 Hertz Transmission :

Revenue stream	Nature and timing of satisfaction of performance obligations	Contract – Price setting
Grid revenues		
Revenues from incentive regulation	The 'grid use fee' is charged to gridusers/DSO connected to the grid, for the volume of injection and/or offtake on the onshore grid. This contract is signed with grid users. Revenue is recognised over time as this service is a performed continuously throughout the contractual term.	Standard contract and grid tariffs defined by the regulator.
	Last mile connection (Transfer of assets from customers)is a component of the 'Grid use fee' contract. At the request of a future grid user, Elia constructs a dedicated/ physical connection, a so called last-mile connection, to create an interface point to the grid. Although the control of the asset is not transferred as such to the grid user, the grid user obtains a direct access to the high voltage grid. This access right transferred by Elia is valuable to the grid user, which is the reason why the grid user is compensating Elia in cash. As the grid user enters simultaneously into a grid connection contract both activities (access right and the grid connection services) are not distinct and constitute a single performance obligation and interdependence between these contracts. The total amount of revenue recognised for this single performance obligation, which includes the grid connection services, is recognised over the life of the assets, as these contract have no specific end date. This component of the grid connection/ grid user contract is presented separately (not part of the grid connection/ revenues from revenue cap) as from regulatory perspective the tariff setting is very specific.	Standard contract approved by regulator, but the price setting is based on the budget of realisation of the connection.
Revenues from offshore regulation	This component comprises tariffs charged to gridusers/DSOs to cover grid connection costs for offshore wind farms. Revenue is recognised over time as this service is performed continuously throughout the contractual term	Contract and tariffs predefined in regulatory mechanism .
Energy revenues	This revenue stream consists of different components **Congestion management and redispatch** fees, are paid by market participants for use of the capacity made available by 50Hertz on specific lines (included the use of crossborder assets). This allocation mechanism is governed by market-oriented and transparent procedures. Revenue is recognised at the point in time when it is generated	Standard contracts approved by regulator and tariffs mechanism is defined in regulatory schemes .
	Compensation for imbalances Market participants (Balance Responsible Party) have a commitment to ensure a perfect balance between offtake and injection on the grid. In the event of an imbalance, 50Hertz invoices the market participant to compensate for the costs incurred. Revenue is recognised at the point in time when an imbalance occurs.	Standard contracts approved by regulator and tariffs mechanism is defined in regulatory schemes .
	Horizontal reimbursement of lignite back-up costs In its role as TSO, 50Hertz charges fees to other TSO's for services related to the reserve power required by the legal framework. Revenue is recognised over time as this service is performed continuously throughout the contractual term.	

Other revenues

Revenue stream	Nature and timing of satisfaction of performance obligations	Contract – Price setting -
Other revenues		
3rd party services	Elia Grid International provides consultancy services to third parties around the world. The revenue is recognised over the duration of the contract. The 3rd party services are presented in other revenues.	Contract negotiated between Elia and customer. The contract price is set when concluding the contract with the customer. The payment term is generally 30 days from the invoice date.
Others	Principally includes other services (than described here above) Revenue is recognised at the point in time the service is complete.	

Consequently, all revenue components contain revenue from contracts with customers, i.e. parties that have contracted with Elia to obtain services resulting from Elia's ordinary activities in exchange for a consideration.

Other income

Other income is recognised when the related service is performed and no further performance obligations will arise.

Net regulatory income (expense)

Since the tariffs are based on estimates, there is always a difference between the tariffs that are actually charged and the tariffs that should have been charged (tariff setting agreed with regulator) to cover all reasonable costs of the system operator including a reasonable profit margin for the shareholders.

If the applied tariffs result in a surplus or a deficit at the end of the year, this means that the tariffs charged to consumers/the general public could have been respectively lower or higher (and vice versa). This surplus or deficit is therefore reported in the deferral account from settlement mechanism.

The release of this deferral account will impact future tariffs, incurred regulatory liabilities will decrease future tariffs, incurred regulatory assets, will increase future tariffs. The net movement in the regulatory deferral accounts for the period is presented separately in the statement of profit or loss within the line "net income (expense) from settlement mechanism". We also refer to note 3.3.17.

3.4.2. Expenses

Operating lease payments (until end of 2018)

Payments made under operating leases are recognised in profit or loss on a straight-line basis over the term of the lease. Lease incentives received to conclude the leasing agreement are recognised in profit or loss as an integral part of the total lease expenses.

Other expenses

Property taxes are directly recognised in full as soon as ownership is certain (generally as of 1 January of the year in question). However, these costs, qualified as non-controllable costs in the regulatory framework, are recorded as revenue through the settlement mechanism for the same amount, resulting in zero impact in terms of profit or loss.

Finance income and expenses

Finance expenses comprise interest payable on borrowings (calculated using the effective interest rate method), interest on lease liabilities, foreign-exchange losses, gains on currency hedging instruments offsetting currency losses, results on interest-rate hedging instruments, losses on hedging instruments that are not part of a hedge accounting relationship, losses on financial assets classified as for trading purposes and impairment losses on financial assets as well as any losses from hedge ineffectiveness.

Finance income includes interest receivables on bank deposits, which are recognised in profit or loss using the effective interest rate method as they accrue.

Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

Income taxes

Income taxes comprise current and deferred tax. Income-tax expense is recognised in profit or loss, except where it relates to items recognised directly in equity. Taxes on hybrid coupon is recognized in the statement of profit and loss as it is a tax on profits whereas the hybrid copon itself is recognized directly in equity.

Current tax is the expected tax payable on taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustments to tax payable in respect of previous years.

Deferred tax is recognised, using the balance-sheet method, on temporary differences arising between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for the following temporary differences: the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit; and differences relating to investments in subsidiaries and joint ventures where these will probably not be reversed in the foreseeable future. In addition, deferred tax is not recognised for taxable temporary differences arising from initial recognition of goodwill. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they are reversed, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and the deferred items relate to income taxes levied by the same tax authority on the same taxable entity or on different tax entities, but they are intended to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised only to the extent that it is likely that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer likely that the related tax benefit will be realised.

Additional income taxes that arise from the distribution of dividends are recognised at the same time as the liability to pay the related dividend.

3.5. Statement of comprehensive income and statement of changes in equity

The statement of comprehensive income presents an overview of all revenues and expenses recognised in the consolidated statement of profit or loss and in the consolidated statement of changes in equity. The Group has elected to present comprehensive income using the two-statement approach, i.e. the statement of profit or loss immediately followed by the statement of other comprehensive income. As a result of this presentation, the content of the statement of changes in equity is restricted to owner-related changes.

4. Segment reporting

4.1. Basis for segment reporting

The Group has opted for a segment reporting in conformity with the different regulatory frameworks currently existing within the Group. This reporting approach closely reflects the Group's operational activities and is also in line with the Group's internal reporting to the Chief Operating Decision Maker (CODM), enabling the CODM to better evaluate and assess the Group's performance and activities in a transparent way.

Pursuant to IFRS 8, the Group has identified the following operating segments based on the aforementioned criteria:

- Elia Transmission (Belgium), which comprises the activities based on the Belgian regulatory framework: the regulated activities of Elia Transmission Belgium NV/SA, Elia Asset NV/SA, Elia Engineering NV/SA, Elia Re SA, HGRT SAS, Coreso NV/SA, Ampacimon SA and Enervalis NV, whose activities are directly linked to the role of Belgian transmission system operator and are subject to the regulatory framework applicable in Belgium – see Section 9.1.3.
- 50Hertz Transmission (Germany), which comprises the activities based on the German regulatory framework: Eurogrid GmbH, 50Hertz Transmission GmbH and 50Hertz Offshore GmbH, whose activities are directly linked to the role of transmission system operator in Germany – see Section 9.2.3.
- Non-regulated activities and Nemo Link, comprising:
  - Elia Group NV/SA, mainly consisting of the holding activities in the Elia Transmission (Belgium) and 50Hertz Transmission (Germany) segment; The holding activities includes some operating activities, finance activities for the acquisition of the extra 20% stake in 50Hertz Transmission and the goodwill arising out of this.
  - Eurogrid International NV/SA;
  - the holding activities in Nemo Link Ltd. This company comprises and manages the Nemo project, which connects the UK and Belgium using high-voltage electricity cables, enabling power to be exchanged between the two countries and for which a specific regulatory framework has been set up. See Section 9.3 for more details
  - the non-regulated activities of the Elia Transmission (Belgium) segment. 'Non-regulated activities' refers to activities which are not directly related to the role of TSO (see Section 9.1).
  - EGI (Elia Grid International NV/SA, Elia Grid International GmbH, Elia Grid International Pte. Ltd Singapore and Elia Grid International LLC Qatar), companies supplying specialists in consulting, services, engineering and procurement, creating value by delivering solutions based on international best practice while fully complying with regulated business environments.
  - Re.Alto-Energy BV/SRL, a start-up company founded in August 2019 that is building a platform to facilitate users to exchange energy data and services.

The CODM has been identified by the Group as the Boards of Directors, CEOs and Management Committees of each segment. The CODM periodically reviews the performance of the Group's segments using various indicators such as revenue, EBITDA and operating profit.

The information presented to the CODM follows the Group's IFRS accounting policies, so no reconciling items have to be disclosed.

4.2. Elia Transmission (Belgium)

The table below shows the 2019 consolidated results of Elia Transmission (Belgium)

Elia Transmission key figures (in million EUR) - Year ended 31 December	**2019**	**2018**	**Difference (%)**
Revenue, other income and net income (expense) from settlement mechanism	948.8	959.4	(1.1%)
Revenues	*914.2*	*908.1*	*0.7%*
Other income	*60.7*	*57.2*	*6.1%*
Net income (expense) from settlement mechanism	*(26.1)*	*(5.9)*	*n.r.*
Depreciation, amortization, impairment and changes in provisions	(150.9)	(140.2)	7.6%
Results from operating activities	242.1	227.1	6.6%
Equity accounted investees	1.8	1.8	0.0%
EBIT	243.9	228.9	6.6%
Adjusted items	*4.7*	0.0	*n.r.*
Adjusted EBIT	239.2	228.9	4.5%
EBITDA	394.8	369.1	7.0%
Finance income	0.7	0.6	16.7%
Finance costs	(65.1)	(66.0)	(1.4%)
Income tax expenses	(54.4)	(48.6)	11.9%
Net profit	**125.0**	**114.9**	**8.8%**
Adjusted items	*2.7*	*0.0*	*n.r.*
Adjusted net profit	*122.3*	*114.9*	*6.4%*
Consolidated statement of financial position (in million EUR)	**31 December 2019**	**31 December 2018**	**Difference (%)**
Total assets	6,452.1	5,909.2	9.1%
Capital expenditures	748.5	600.7	24.6%
Net financial debt	3,013.4	2,825.1	6.7%

The tariff methodology approved by the regulator CREG on 26 November 2015 came into force in early 2016. The methodology is applicable for a four-year period (2016 – 2019). See Note 9.1 for more information about the new regulated framework.

Financial

Elia Transmission's total revenues decreased to €948.8 million, 1.1% down on the previous year. Revenues were impacted by higher depreciations, higher financial costs linked to the capital increase and the bond consent process for the corporate reorganization and higher taxes however are fully offset by lower costs for ancillary services and lower regulated net profit, which are all passed through into revenue to the benefit of consumers.

The table below provides more details of changes in the various revenue and other income components:

(in million EUR)	**2019**	**2018**	**Difference (%)**
Grid revenue:	910.1	904.2	0.6%
Grid connection	44.5	42.6	4.5%
Management and development of grid infrastructure	479.6	472.7	1.5%
Management of the electrical system	112.2	116.2	(3.4%)
Compensation for imbalances	204.5	189.5	7.9%
Market integration	25.0	25.5	(2.1%)
International revenue	44.3	57.8	(23.3%)
Transfer of assets from customers	3.2	1.9	71.8%
Other revenue	0.9	2.0	(55.6%)
Subtotal revenue	**914.2**	**908.1**	**0.7%**
Other income	60.7	57.2	6.1%
Net income (expense) from settlement mechanism	(26.1)	(5.9)	n.r.
Total revenue and other income	**948.8**	**959.4**	**(1.1%)**

Grid connection revenue increased to €44.5 million (up 4.5%) mainly due to higher revenue from connection studies and new direct customers connections (offshore wind farms and data centres).

Revenue from **management and development of grid infrastructure** increased slightly to €479.6 million (up 1.5%) mainly due to a tariff increase, while revenues from **management of the electrical system** dropped by 3.4% to €112.2 million due to lower tariffs and a decrease in overall net grid offtake.

Services rendered in the context of energy management and individual balancing of balancing groups are covered by the revenues from **compensation for imbalances**. These revenues rose by €15.0 million to €204.5 million, largely due to the tariff increase for the management of power reserves and black-start based on offtake (up €8.5 million), a net grid injection increase for the management of power reserves and black-start based on injection due to higher nuclear availability (up €15.6 million) and lower revenues from compensation of imbalances (down €9.1 million) due to high imbalance price peaks in several months of 2018.

Finally, the last section of tariff revenues encompasses the services that Elia Transmission Belgium provides in the context of **market integration**. These revenues dropped by 2.1% to €25.0 million mainly due to a decrease in overall net grid offtake.

International revenue dropped by 23.3% to €44.3 million, mainly due to lower congestion income (long term and day ahead income), improved nuclear availability in Belgium in 2019 prompting fewer exchanges in the CWE region and with no price spikes compared to 2018.

Transfer of assets from customers increased slightly compared to prior year while **other revenue** dropped to €0.9 million.

The **net expense from settlement mechanism** (€26.1 million) encompasses both deviations in the current year from the budget approved by the regulator (+€136.7 million) and the settlement of net surpluses from prior tariff period (-€110.6 million). The operating excess, in relation to the budget of the costs and revenues authorised by the regulator, must be returned to the consumers and therefore does not form part of the revenues. The operational surplus compared to the budget is primarily a result of the lower regulated net profit (€12.1 million), higher tariff sales (€1.2 million), increased cross-border revenues (€10.0 million), lower costs for ancillary services (€109.4 million) and lower financial charges (€11.3 million). This was partly offset by higher taxes compared to the budget (€9.0 million).

EBITDA (up 7.0%) and **EBIT** (up 6.6%) were mainly affected by higher depreciations attributable to the growing asset base, lower financing costs and higher current taxes to be passed on in tariffs. Additionnally, EBITDA was also impacted by the treatment of leasing costs with the adoption of IFRS 16 (up €9.6 million). These increases were partly offset by a slightly lower regulated net profit. The contribution of equity-accounted investments (HGRT, Ampacimon and Coreso) remained flat at €1.8 million.

Net **finance costs** dropped by €1.0 million (down 1.5%) compared to the previous year. Early in 2019, Elia took advantage of supportive market conditions to manage its liquidity position by refinancing a €500 million bond that matured in May 2019, and thereby significantly reduced its average cost of debt, to consumers' benefit. This was partially offset by a full year of interest charges linked to a €100 million EIB loan drawn in the last quarter of 2018 and lower interest income on cash advances provided to Nemo Link during the construction phase, because the Nemo Link interconnector was commissioned at the beginning of 2019. The push-down of regulated debt from Elia System Operator (ESO) to Elia Transmission Belgium (ETB) as part the Group's corporate reorganisation (Adjusted item), generated financial charges totalling €4.7 million. As the bank and consent fees are spread over the maturity of the various bonds under IFRS, the net financial costs recognised for regulated debt in 2019 totals €0.9 million.

Adjusted net profit rose by 6.4% to €122.3 million, mainly due to the following factors:

1. Lower **fair remuneration** (down €5.5 million)
2. The lower average OLO compared to 2018 (down 0.62%), partially offset by the increase in equity due to the reservation of part of the 2018 result (€65.1 million) and the capital increase allocated the Belgian regulated activities (€327.5 million), led to a fair remuneration of €38.8 million.
3. Increase in the **incentives** (up €4.9 million)
4. Strong operational performance, primarily driven by focusing on operational efficiency (up €4.1 million), the good performance on the influencable incentive (up €6.3 million) and the incentive for timely completion of strategic interconnection investments (up €1.0 million) as no project went operational in 2018. This was partially offset by a lower performance regarding the incentive linked to import capacity, which was attributable to a higher nuclear availability than in the previous year (down €4.5 million). Although the tax rate decreased year on year, the higher gross incentives are partially offset by a higher tax total.
5. Higher **mark-up** for strategic investments (up €6.2 million)
6. Higher IAS 19 and tax provisions (down €4.1 million)
7. Tariff compensation for the financial costs linked to the capital increase accounted through equity under IFRS (up €6.1 million)
8. Higher capitalised borrowing costs driven by the growing asset base (up €2.2 million)
9. Slightly more damage to electrical installations compared to 2018 (down € 1.4 million)
10. Other items (down €0.9 million) include mainly lower bad debt provisions (up €3.2 million), and the capitalisation of hardware and software cost (€2.1 million) which were offset by deferred tax effects (down €7.3 million).

Net profit increased by a more pronounced 8.8% to €125.0 million due to tariff compensations for the financial costs linked to the push-down of regulated debt to ETB as part of the corporate reorganisation and amortised under IFRS.

Total assets increased by €542.9 million to €6,452.1 million, mainly as a result of the investment program. **Net financial debt** increased to €3,013.4 million (up 6.7%), as Elia's Capex program was mainly financed by cash flows generated from operating activities, capital raised following the rights issue, and use of a temporary credit facility of €75 million. The commercial paper drawn at the end of 2018 (€50 million) was reimbursed in the course of 2019

4.3. 50Hertz Transmission (Germany)

The table below shows the 2019 consolidated results for 50Hertz Transmission (Germany) system operator activities in Germany:

50Hertz Transmission key figures (in million EUR) - Year ended 31 December	**2019**	**2018**	**Difference (%)**
Revenue, other income and net income (expense) from settlement mechanism	1,360.1	1,364.9	(0.4%)
Revenue	*1,323.6*	*1,403.6*	*(1.7%)*
Other income	*84.1*	*67.4*	*24.8%*
Net income (expense) from settlement mechanism	*(47.6)*	*(106.1)*	*(55.1%)*
Depreciation, amortization, impairment and changes in provisions	(209.2)	(89.6)	133.5%
Results from operating activities	321.3	385.4	(16.6%)
EBIT	321.3	385.4	(16.6%)
Adjusted items	*0.0*	*30.6*	*n.r.*
Adjusted EBIT	321.3	354.8	(9.4%)
EBITDA	530.5	475.0	11.7%
Finance income	1.4	2.5	(44.0%)
Finance costs	(66.7)	(48.1)	38.7%
Income tax expenses	(78.6)	(101.9)	(22.9%)
Net profit	**177.5**	**237.9**	**(25.4%)**
Of which attributable to Elia Group	***142.0***	***169.2***	***(16.1%)***
Adjusted items	*0.0*	*21.6*	*n.r.*
Adjusted net profit	*177.5*	*216.3*	*(17.9%)*
Consolidated statement of financial position (in million EUR)	**31 December 2019**	**31 December 2018**	**Difference (%)**
Total assets	6,279.6	6,752.1	(7.0%)
Capital expenditures	516.0	511.0	1.0
Net financial debt	2,108.1	1,272.9	65.6%

50Hertz Transmission's total revenues and other income are stable compared to last year (down 0.4%). With the start of a new regulatory period in 2019, the regulatory return on equity dropped from 9.05% to 6.91% before tax, but this decrease was mainly offset by asset growth. Furthermore, the offshore remuneration scheme changed and is now remunerated via a separate offshore surcharge. Although the asset growth and updated Opex revenue base positively impacted the remuneration the turnover dipped due to the lower regulatory return on equity. Moreover the new offshore surcharge leads to decreased pass-through third-party revenues for the offshore business.

Total revenues are detailed in the table below:

Total revenue (in million EUR)	**2019**	**2018**	**Difference (%)**
Grid revenues	1,318.7	1,404.5	(6.1%)
Revenues from incentive regulation	815.1	1,262.8	(35.5%)
Revenues from offshore regulation	329.1	0.0	*n.r.*
Energy revenues	174.5	141.7	23.1%
Other revenues (incl. transfer of assets from customers)	4.9	(0.9)	*n.r*
Subtotal revenues	**1,323.6**	**1403.6**	**(5.7%)**
Other income	84.1	67.4	24.8%
Net income (expense) from settlement mechanism	(47.6)	(106.1)	(55.1%)
Total revenue and other income	**1,360.1**	**1,364.9**	**(0.4%)**

Revenues from incentive regulation including net income (expense) from settlement mechanism mainly consist of grid tariffs and are driven primarily by the regulatory remuneration for onshore activities (revenue cap). Included is the net regulatory income (expense) which comprises both the annual offsetting of deficits and surpluses arising accounted for prior to 2019 (+€52.8 million) and the net surplus generated in 2019 between the costs allowed to be passed on in the tariffs and the actual costs (-€100.4 million).

Revenues from incentive regulation decreased by €389.2 million, mainly due to the removal of offshore costs from the revenue cap to a separate surcharge (down €438.6 million). At the start of the new regulatory period, the Opex remuneration was updated using cost from the base year 2016 (up €38.7 million). Furthermore, several pass-through energy costs went up compared to 2018, e.g. ancillary services (up €33.3 million) whereas redispatch revenues dropped (by €19.2 million) as a result of investments in recent years (e.g. the Southwest Coupling Line).

Revenues from offshore regulation include all revenues derived from the new offshore grid surcharge. This includes remuneration for 50Hertz's own costs, imputed remuneration related to the connection of offshore wind farms and offshore costs charged to 50Hertz by third parties, e.g. other TSOs.

In 2019, the new offshore surcharge generated €329.1 million, €237.4 million of which related to 50Hertz's own offshore grid connection costs (up €34.1 million) and a €91.7 million pass-through of third party costs (down €168.5 million).

Energy revenues include all operating revenues relating to system operation, which are usually linked to corresponding ancillary service costs charged on to third parties, e.g. redispatch measures, reserve power plants and balancing groups, but also includes revenues generated from auctioning interconnector capacity.

Energy revenues rose by €32.8 million compared to 2018, driven mainly by a new cost-sharing mechanism for reserve power plant costs (up €56.5 million), which was partly offset by lower charges to other TSOs for redispatch measures (down €16.5 million) and lower revenues from balancing groups (down €8.0 million).

Other revenues (including amortisation of transfer of assets from customers) increased by €5.8 million, mainly due to revenues from the cost balancing mechanism "ITC" (Inter-TSO compensation). This revenue component can either be a revenue or a loss – and amounted to a loss last year (up €5.5 million).

Other income went up by €16.7 million, partly due to insurance payments mainly related to offshore cable damage (up €13.2 million), higher passing-on of IT-costs to third parties (up €3.4 million) and higher own work capitalised (up €2.6 million).

Although the new regulatory period is marked by a lower regulatory return on equity, **EBITDA** increased by €55.5 million (up 11.7%). With the start of the new regulatory period, the completed onshore investments measure projects rolled over to being remunerated via the base year mechanism. Together with the decrease in the regulatory return on equity, which fell from 9.05% to 6.91%, remuneration for investment measures also dropped (down €64.7 million). However this decrease was more than offset by higher revenues from the Base Year mechanism (up €100.4 million), firstly because completed onshore investment projects are now being remunerated via the Base Year and secondly because the Opex revenue base was updated at the beginning of the new regulatory period. Despite the drop in regulatory return on equity, the offshore investment remuneration increased driven by asset growth and last year's successful commissioning of Ostwind 1 (up €15.7 million). Personnel costs increased compared to the same period last year, following continuous business growth (down €8.2 million) leading as well to higher own work capitalised (up €2.6 million). Finally, EBITDA was also impacted by the treatment of leasing costs with the adoption of IFRS 16 (up €7.6 million) and higher other revenues, e.g. from damage claim payments (up €1.5 million).

EBIT dipped by €64.1 million (down 16.6%) due to the release of a large portion of the easement claim provision in 2018 (€72.1 million) following a re-assessment after a tax audit. A further portion was released in 2019, amounting to €5.9 million pre-tax (down €66.2 million). Depreciations increased (down €53.7 million), mainly as a result of commissioning the first cables and platform of Ostwind 1 in December 2018 (€36.5 million) and due to the depreciation component of leasing as per IFRS 16 (€6.9 million).

Excluding the impact of the major release of the easement provision in 2018, the **adjusted EBIT** would have increased (up 13.7%), attesting to the strong operational performance of 50Hertz despite the drop in regulatory return on equity with the start of the third regulatory period.

The **adjusted net profit** decreased by 17.9% to €177.5 million as a result of:

1. Higher base year revenues (up €70.7 million) through asset growth and an updated Opex revenue base
2. Lower onshore investment remuneration (down €45.5 million);
3. Higher offshore investment remuneration (up €34.5 million) with €23.5 million from the offshore commissioning in 2018 that was presented as an adjusted item in 2018 and presented as part of the adjusted net profit as from 2019.
4. Stable onshore Opex and other costs and revenues (down by €0.4 million);
5. Lower release of provisions (down €46.4 million);
6. Increased depreciation (down €37.8 million);
7. Increased net finance costs (down €13.9 million), mainly due to lower capitalisation of borrowing costs after completion of the construction of Ostwind 1 (down €7.1 million) and the adoption of IFRS 16 (down €1.1 million);

Total assets were €472.5 million down on the year-end total in 2018, mainly due to a drop in EEG's cash (down €429.0 million). In 2019 there was also a negative **free cash flow** of €656.8 million, including the effect of the €429.0 million associated with the EEG mechanism. No new debts were issued in 2019. **Net financial debt** rose by €835.1 million mainly due to the financing of the ongoing investment program and the high EEG cash-out. The EEG cash position as at 31 December 2019 totalled to €430.5 million.

4.4. Non-regulated activities and Nemo Link

The table below shows the 2019 consolidated results of the 'Non-regulated activities and Nemo Link' segment:

Non-regulated activities & Nemo Link key figures (in million EUR)	**2019**	**2018**	**Difference (%)**
Total revenue	4.9	7.5	(34.6%)
Other income	15.8	6.4	146.3%
Depreciation, amortization, impairment and changes in provisions	(0.3)	(1.0)	(70.0%)
Results from operating activities	(2.0)	(9.3)	(78.5%)
Share of profit of equity accounted investees (net of income tax)	6.5	0.3	n.r.
EBIT	4.5	(8.9)	(150.6%)
Adjusted items	*1.3*	*(3.3)*	*n.r.*
Adjusted EBIT	3.2	*(5.6)*	(157.0%)
EBITDA	4.8	(7.9)	(160.8%)
Finance income	3.5	19.1	(81.7%)
Finance costs	(13.4)	(17.8)	(24.7%)
Income tax expenses	12.0	4.1	n.r.
Net profit	**6.6**	**(3.5)**	**(288.6%)**
Of which attributable to Elia Group	***6.5***	***(2.8)***	***(332.1%)***
Adjusted items	*0.2*	*4.3*	*(94.9%)*
Adjusted net profit	*6.4*	*(7.8)*	*(182.0%)*
Consolidated statement of financial position (in million EUR)	**31 December 2019**	**31 December 2018**	**Difference (%)**
Total assets	1,733.5	1,677.9	3.3%
Capital expenditures	0.8	0.0	n.r.
Net financial debt	401.6	507.6	(20.9%)

Non-regulated revenue increased by 48.9% compared to 2018. EGI's revenue rose by €3.0 million to €12.5 million on the back of stronger owner's engineering services and the expansion of international consulting activities. In addition, one-off regulatory compensation totalling €3.8 million was recognised.

As an equity-accounted investment, **Nemo Link** contributed €6.5 million to the Group's result in its first year of operation. The interconnection was commissioned in late January 2019. Since then, 5.6 TWh of commercial flows have been exchanged between Belgium and the UK. The interconnector's overall availability was 95.8%, but since Q4 2019, it has been 100%. Despite this high availability, Nemo Link's performance throughout the year was impacted by low spreads of the electricity commodity price, driven by higher CO2 prices in continental Europe and low gas prices in the UK. Higher-than-planned curtailments also affected revenues from Nemo Link during the first half of 2019. Throughout the lifetime of the project, Nemo Link will be exposed to volatility in the spread of the electricity commodity price.

Adjusted EBIT increased to €3.2 million. The €8.8 million increase in adjusted EBIT compared to last year is mainly due to the contribution of Nemo Link (€6.5 million), a higher operational result for EGI (up €0.6 million) and lower non-regulated costs. Taking into account one-time costs linked to the reorganisation of the corporate structure (down €2.5 million) and regulatory compensation (up €3.8 million), EBIT totals €4.5 million.

Net finance costs increased to €9.9 million, primarily as a result of a full year of interest charges linked to the €300 million non-regulated senior bond contracted during the second half of 2018 to finance the acquisition of an additional stake in Eurogrid (€4.7 million). The corporate reorganisation of the Group resulted in a one-off consent fee (€4.3 million) paid to noteholders for the aforementioned non-regulated bond and generated other financial costs amounting to €0.2 million. The financing of Nemo Link incurred a net financial cost of €0.5 million due to higher financial costs linked to the €210 million take out financing concluded at the end of 2018 and partly offset by interest income on cash advances to Nemo Link during the construction phase. Following the rights issue at the end of June, these cash advances were reimbursed and Nemo Link became financed in a manner similar to the current regulatory framework in Belgium (33% equity / 66% debt). Finally, the previous year's financial result benefited from adjusted items linked to the aforementioned acquisition, being a one-off financial gain (€9.2 million) linked to the remeasurement to fair value of the Group's initial 60% shareholding in Eurogrid and offset to some extent by costs for the unwinding of the hedge linked to the hybrid bond (€3.2 million).

Adjusted net profit rose to €6.4 million, mainly due to::

1. Contribution from Nemo Link since its commissioning in 2019 (up €6.2 million)
2. Higher result for EGI (up €0.8 million)
3. Higher non-regulated financing costs (down €0.4 million)
   Higher interest costs linked to the non-regulated €300 million senior bond (up €1.6 million) issued in September 2018 and replacing the initial bridge financing (down €1.3 million). Interest costs linked to the €700 million hybrid bond did not impact profit as they were directly accounted in equity
4. Tax credit on the interest charges linked to hybrid securities (up €4.8 million)
5. Lower operating and tax expenses of Eurogrid International(up €2.5 million)
6. Other items (up €0.4 million): mainly lower other non-regulated costs

Total assets increased by €55.6 million to €1,733.5 million driven by the capital increase of which €107.8 million was allocated to the non-regulated segment to finance Nemo Link and was offset by the contribution of non-regulated activities in the 2018 dividend payment. The capital increase which was allocated to the non-regulated segment was used to change the financing structure of Nemo Link from debt financing to equity financing. Consequently, **net financial debt** decreased by €105.9 million to €401.6 million.

4.5. Reconciliation of information on reportable segments to IFRS amounts

Consolidated results (in million EUR) - Year ended 31 December	**2019** Elia Transmission (a)	**2019** 50Hertz Transmission (b)	**2019** Non-regulated activities and Nemo Link (c)	**2019** Consolidation entries & intersegment transactions (d)	**2019** Elia Group (a) + (b) + (c) + (d)
Total revenue	914.2	1,323.6	4.9	(0.4)	2,242.3
Other income	60.7	84.1	15.8	(10.3)	150.3
Net income (expense) from settlement mechanism	(26.1)	(47.6)	0.0	0.0	(73.7)
Depreciation, amortization, impairment and changes in provisions	(150.9)	(209.2)	(0.3)	0.0	(360.4)
Results from operating activities	242.1	321.3	(2.0)	0.0	561.4
Share of profit of equity accounted investees, net of tax	1.8	0.0	6.5	0.0	8.3
Earnings before interest and tax (EBIT)	243.9	321.3	4.5	0.0	569.7
Earnings before depreciations, amortizations, interest and tax (EBITDA)	394.8	530.5	4.8	0.0	930.1
Finance income	0.7	1.4	3.5	0.0	5.6
Finance costs	(65.1)	(66.7)	(13.4)	0.0	(145.2)
Income tax expenses	(54.4)	(78.6)	12.0	0.0	(121.0)
Profit attributable to the owners of the company	**125.0**	**142.0**	**6.5**	**0.0**	**273.5**
Consolidated statement of financial position (in million EUR)	**31 Dec 2019**	**31 Dec 2019**	**31 Dec 2019**	**31 Dec 2019**	**31 Dec 2019**
Total assets	6,452.1	6,279.6	1,733.5	(571.8)	13,893.4
Capital expenditures	748.5	516.0	0.8	0.0	1,265.3
Net financial debt	3,013.4	2,108.1	401.6	0.0	5,523.1

Consolidated results (in million EUR) - Year ended 31 December	**2018** Elia Transmission (a)	**2018** 50Hertz Transmission (b)	**2018** Non-regulated activities and Nemo Link (c)	**2018** Consolidation entries & intersegment transactions (d)	**2018** Elia Group (a) + (b) + (c) + (d)
Total revenues	908.1	1,403.6	7.5	(384.4)	1,934.8
Other income	57.2	67.4	6.4	(22.0)	109.0
Net income (expense) from settlement mechanism	(5.9)	(106.1)	0.0	0.0	(112.0)
Depreciation, amortization, impairment and changes in provisions	(140.2)	(89.6)	(1.0)	(17.1)	(247.9)
Results from operating activities	227.1	385.4	(9.3)	(166.2)	437.0
Share of profit of equity accounted investees, net of tax	1.8	0.0	0.3	63.5	65.6
Earnings before interest and tax (EBIT)	228.9	385.4	(8.9)	(102.8)	502.6
Earnings before depreciations, amortizations, interest and tax (EBITDA)	369.1	475.0	(7.9)	(85.7)	750.5
Finance income	0.6	2.5	19.1	(0.3)	21.9
Finance costs	(66.0)	(48.1)	(17.8)	16.7	(115.2)
Income tax expenses	(48.6)	(101.9)	4.1	44.2	(102.2)
Profit attributable to the owners of the company	**114.9**	**169.2**	**(2.8)**	**0.1**	**281.4**
Consolidated statement of financial position (in million EUR)	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**	**31 Dec 2018**
Total assets	5,909.2	6,752.1	1,677.9	(584.9)	13,754.3
Capital expenditures	600.7	511.0	0.0	(20.8)	1,090.9
Net financial debt	2,825.1	1,272.9	507.6	0.0	4,605.6

There are no significant intersegment transactions.

The Group has no concentration of customers in either of the operating segments.

4.6. Adjusted items – reconciliation table

(in € million) - Period ended 31 Dec. 2019	Elia Transmission	50Hertz Transmission (100%)	Non-regulated & Nemo Link (100%)	Consolidation entries	Elia Group
Adjusted items					
Regulatory compensation for acquisition	0.0	0.0	3.8	0.0	3.8
Corporate reorganisation	4.7	0.0	(2.5)	0.0	2.2
Adjusted items EBIT	**4.7**	**0.0**	**1.3**	**0.0**	**6.0**
Corporate reorganisation fin. cost	(0.9)	0.0	(4.5)	0.0	(5.4)
Adjusted items before tax	**3.8**	**0.0**	**(3.2)**	**0.0**	**0.6**
Tax impact	(1.1)	0.0	3.4	0.0	2.3
Net profit – Adjusted items	**2.7**	**0.0**	**0.2**	**0.0**	**2.9**

(in € million) - Period ended 31 Dec. 2018	Elia Transmission	50Hertz Transmission (100%)	Non-regulated & Nemo Link (100%)	Consolidation entries	Elia Group
Adjusted items					
Regul. settlements prior year (*)	0.0	(2.8)	0.0	1.4	(1.4)
Equity consolidation 50Hertz (60% net profit)	0.0	0.0	0.0	(0.6)	(0.6)
Offshore commissioning (*)	0.0	33.3	0.0	0.0	33.3
Energy bonuses	0.0	0.1	0.0	0.0	0.1
Eurogrid acquisition costs	0.0	0.0	(3.3)	0.0	(3.3)
Adjusted items EBIT	**0.0**	**30.6**	**(3.3)**	**0.8**	**28.1**
Financial acquisition cost	0.0	0.0	(3.8)	0.0	(3.8)
Revaluation participation Eurogrid	0.0	0.0	9.2	0.0	9.2
Adjusted items before tax	**0.0**	**30.6**	**2.1**	**0.8**	**33.5**
Impact tax reform on deferred tax	0.0	0.0	0.0	0.0	0.0
Tax impact	0.0	(9.0)	2.2	(0.4)	(7.3)
Net profit – Adjusted items	**0.0**	**21.6**	**4.3**	**0.4**	**26.3**

(*) As from 2019 these items are regarded as a non-adjusted items and directly reported in the Adjusted EBIT and Adjusted Net profit

5. Items in the consolidated statement of profit or loss and other comprehensive income

Besides the adoption of IFRS 16 as from 1 January 2019, there were no changes in the basis of preparation and therefore no restatements of figures from previous years were required.

5.1. Revenue, net income (expense) from settlement mechanism and other income

(in million EUR)	2019	2018
Total revenues	**2,242.3**	**1,934.8**
Grid revenue	2,228.8	1,923.7
Transfers of assets from customers	4.6	2.6
Other revenue	8.9	8.5
Net income (expense) from settlement mechanism	**(73.7)**	**(112.0)**
Other income	**150.3**	**109.0**
Services and technical expertise	0.6	1.6
Own production	63.0	53.9
Optimal use of assets	17.4	16.3
Other	68.8	36.8
Gain on sale PPE	0.4	0.5

See the segment reporting, which contain a detailed analysis of the Group's recognised revenues at segment level. The Elia Transmission (Belgium) segment reported revenues and other income of €948.8 million (Note 4.2), the 50Hertz Transmission (Germany) segment reported revenues and other income of €1,360.1 million (Note 4.3) and the 'Non-regulated activities and Nemo Link' segment reported revenues and other income of €20.7 million (Note 4.4). The reported revenues and other income amounts to €2,319.0 million.

No further geographical information is provided as the revenue is realised in the countries where the grid infrastructure is located, which is substantially correspond to the segments mentioned above.

The Group's own production relates to time spent on investment projects by Group employees.

The Group has recognised €3.0 million of revenue in the reporting period that was included in the contract liability balance at the beginning of the period (€9.2 million). The Group did not recognise any substantial revenues in the reporting period in respect of performance obligations in previous periods.

5.2. Operating expenses

COST OF MATERIALS, SERVICES AND OTHER GOODS

(in million EUR)	2019	2018
Raw materials, consumables and goods for resale	76.9	41.5
Purchase of ancillary services	616.4	500.2
Services and other goods (excl. purchase of ancillary services)	390.7	445.5
Total	**1,084.0**	**987.2**

The Group's costs for 'Raw materials, consumables and goods for resale' increased to €76.9 million for financial year 2019. In 2018 costs were attributable to Elia Transmission (Belgium) for an amount of €5.6 million, EGI for an amount of €0.5 million and 50Hertz Transmission (Germany) for €35.4 million. Whereas costs attributable to Elia Transmission (Belgium) decreased in 2019 to €4.7 million, EGI's raw material costs increased significantly in the year to €3.4 million mainly due to the increase in EPC contracts. The costs attributable to 50Hertz Transmission (Germany) amounted to €70.5 million due to raw material costs. In 2018, the costs incurred by the German segment totalled €35.4 million (for eight months).

'Purchase of ancillary services' includes the costs for services which enable the Group to balance generation with demand, maintain constant voltage levels and manage congestion on its grids. The cost incurred in 2019 by Elia Transmission (Belgium) decreased to €146.7 million (from €203.6 million in 2018) mainly because of the increased availability of nuclear power which resulted in lower reservation prices on the market in 2019. 50Hertz Transmission (Germany) incurred costs of €469.7 million compared to €296.6 million in 2018, this latter figure corresponding to the costs incurred from the date of acquisition to the end of 2018 (eight months).

'Services and other goods' relates to maintenance of the grid, services provided by third parties, insurance and consultancy, and others. The decrease is mainly driven by 50Hertz Transmission (Germany)'s, with a contribution of €165.1 million for a full year in 2019, whereas it contributed €222.4 million in 2018 where only 8 months were taken into account. The decrease at 50Hertz Transmission (Germany) can be explained by a new regulatory compensation mechanism for offshore investments as of 1 January 2019. This has led to an amended breakdown of purchased services, from costs in 'Services and other goods' to 'Purchases of ancillary services'. Elia Transmission (Belgium) incurred €225.6 million of 'Services and other goods' costs, relative stable compared with 2018 (€223.1 million).

PERSONNEL EXPENSES

(in million EUR)	2019	2018
Salaries and wages	206.9	159.5
Social security contributions	44.1	36.1
Pension costs	20.5	17.0
Other personnel expenses	6.2	4.8
Share-based payment	(0.2)	1.1
Employee benefits (excl. pensions)	5.4	10.8
Total	**282.9**	**229.3**

In March 2019, the second tranche of the 2018 capital increase for Elia employees was completed. The capital increase resulted in the creation of 9,776 additional shares without nominal value. The Group's employees were granted a 16.66% reduction on the quoted share price, which resulted in a €0.1 million reduction overall.

Total 2019 personnel expenses for the Belgian and non-regulated activities amounted to €160.7 million (up from €157.7 million the previous year). 50Hertz Transmission (Germany) accounted for €122.2 million of the Group's personnel expenses for 2019 compared to 2018 in which for 8 months 50Hertz Transmission (Germany) accounted for €71.6 million. On a comparative full-year basis, the personnel expenses for 50Hertz Transmission increased by €8.2 million due to a continued growth in headcount (2019: 1,051 ; 2018: 1,006).

For more information about pension costs and employee benefits, see Note 6.14, 'Employee benefits'.

DEPRECIATION, AMORTISATION, IMPAIRMENT AND CHANGES IN PROVISIONS

(in million EUR)	2019	2018
Amortisation of intangible assets	21.5	16.5
Depreciation of property, plant and equipment	353.1	233.1
Total depreciation and amortisation	**374.6**	**249.5**
Impairment of inventories and trade receivables	(1.2)	2.8
Total impairment	**(1.2)**	**2.8**
Provisions for litigations	(9.0)	(3.1)
Environmental provisions	(3.3)	(1.3)
Dismantling provision	(0.6)	0.0
Changes in provisions	**(12.9)**	**(4.4)**
Total	**360.5**	**247.9**

The amount of impairment on trade receivables is explained in Note 8.1, 'Financial risk and derivative management'.

A detailed description is provided in other sections for 'Intangible assets' (see Note 6.2), 'Property, plant and equipment' (see Note 6.1) and 'Provisions' (see Note 6.15).

OTHER EXPENSES

(in million EUR)	2019	2018
Taxes other than income tax	13.0	13.9
Loss on disposal/sale of property, plant and equipment	10.4	13.5
Impairment on receivables	2.8	0.4
Other	3.9	2.6
Other operating expenses	**30.1**	**30.4**

Taxes other than income tax mainly consist of property taxes.

Losses on disposal for property, plant and equipment totalled €10.3 million for Elia Transmission (Belgium), compared with €11.2 million the previous year.

50Hertz Transmission (Germany)'s total share in the Group's other expenses in 2019 was €6.1 million.

5.3. Net finance costs

(in million EUR)	2019	2018
Finance income	**5.6**	**21.9**
Interest income on cash and cash equivalents and granted loans	4.1	7.1
Other financial income	1.5	14.8
Finance costs	**(145.2)**	**(115.2)**
Interest expense on eurobonds and other bank borrowings	(113.5)	(95.8)
Interest expense on derivatives	(2.1)	(4.4)
Interest cost on leasing	(2.0)	0.0
Other financial costs	(27.6)	(15.0)
Net finance costs	**(139.6)**	**(93.3)**

Finance income decreased from €21.9 million in 2018 to €5.6 million in 2019. 50Hertz Transmission (Germany)'s contribution to finance income amounts to €1.6 million for 2019. Interest income includes €3.3 million (2018: €6.3 million) of interest from a loan agreement between Elia System Operator and Nemo Link Ltd. In June 2019, the loan agreement was terminated and the loan was swapped to equity.

Other financial income decreased from €14.8 million to €1.5 million in 2019, mainly due to a 2018 one-off remeasurement gain to fair value of €9.2 million of the Group's initial 60% shareholding in Eurogrid following the acquisition in 2018.

The interest expenses on Eurobonds and other bank borrowings increased significantly compared to previous year. This is due to 50Hertz, which interest expenses for 2018 were only accounted for from the date of full control at Elia Group level (from May 2018). Neutralizing this effect, the interest expense on Eurobonds and other bank borrowings remained stable.

Other financial costs increased from €15.0 million to €27.6 million in 2019. The increase is mainly related to the internal corporate reorganisation in 2019 (see note 7.1) . In this context, Elia Group paid consent fees to bondholders in order to secure their acceptance of the change of borrower for the debt linked to regulated activities and to compensate them for the subordination of the € 300 million bond remaining at Elia Group NV/SA. Additionally, bank fees and other financial costs were incurred in respect of this reorganisation, resulting in a total of €5.4 million of financial costs.

With the adoption of IFRS 16, 2019 was the first year to have interest costs on leasing, which amounted to €2.0 million.

For more details of net debt and loans, see Note 6.13.

5.4. Income taxes

RECOGNISED IN PROFIT OR LOSS

The consolidated income statement includes the following taxes:

(in million EUR)	2019	2018
Current year	129.4	82.6
Adjustments for prior years	(4.7)	23.2
Total current income tax expenses	**124.7**	**105.9**
Origination and reversal of temporary differences	(3.7)	(3.7)
Total deferred taxes expenses	**(3.7)**	**(3.7)**
Total income taxes and deferred taxes recognised in profit and loss	**121.0**	**102.2**

Total income tax expenses were higher in 2019 than in 2018. The increase in tax expenses is mainly driven by a higher profit before income tax.

RECONCILIATION OF THE EFFECTIVE TAX RATE

The tax on the Group's profit (loss) before tax differs from the theoretical amount that would arise using the Belgian statutory tax rate applicable to profits (losses) of the consolidated companies:

(in million EUR)	2019	2018
Profit before income tax	430.1	409.3
Income tax expense	**121.0**	**102.2**
Income tax, using the domestic corporate income tax rate	127.2	121.0
Domestic corporate income tax	29.58%	29.58%
Effect of the foreign tax rate*	0.2	(0.1)
Share of profit of equity-accounted investees	5.9	(19.4)
Non-deductible expenses	5.2	5.3
Adjustments for prior years	(4.7)	0.5
Tax on hybrid securities	(6.0)	0.0
Tax credit for R&D	(0.1)	(0.5)
Tax reform: deferred income tax adjustments	0.0	(0.4)
Other	(6.7)	(4.2)
Income tax expense	**121.0**	**102.2**

**the income tax rate in Germany amounts to 29.61%*

The income tax expense is lower than the theorethical income tax expense (calculated using the nominal tax rate) due to prior year adjustments and tax deduction for the dividend coupons on hybrid securities in the Belgian tax books while not having the negative impact of the dividend coupons in the statement of profit and loss as they are accounted directly in equity.

Deferred income taxes are discussed further in Note 6.7.

5.5. Earnings per share (EPS)

BASIC EPS

Basic earnings per share are calculated by dividing the net profit attributable to the shareholders of the Company (after adjustment for the distribution on hybrid securities) (€254.3 million) by the weighted average number of ordinary shares outstanding during the year.

Weighted average number of ordinary shares	2019	2018
Ordinary shares issued on 1 January	61,015,058	60,901,019
Impact of the shares issued in December 2018	0	3,437
Ordinary shares issued in March 2019	7,794	0
Ordinary shares issued in June 2019	4,096,187	0
Weighted average number of shares on 31 December	**65,119,039**	**60,904,456**

DILUTED EPS

Diluted earnings per share are determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding for the effects of all dilutive potential ordinary shares, which comprise share options and convertible bonds.

Diluted earnings per share are equal to basic earnings per share, since there are no share options or convertible bonds.

Share capital and reserves per share

Share capital and reserves per share, , totalled €48.4 per share on 31 December 2019, compared with a value of €44.9 per share at the end of 2018.

5.6. Other comprehensive income

Total comprehensive income includes both the result of the period recognised in the statement of profit or loss and other comprehensive income recognised in equity. 'Other comprehensive income' includes all changes in equity other than owner-related changes, which are reported in the statement of changes in equity.

Changes in fair value

Cash flow hedges

The fair value change of the cash flow hedges had a negative impact on OCI of €1.0 million and was due to a decrease in the fair value of the interest rate swap hedges on the loan with Publi-Part and other loans.

Remeasurements

The OCI on post-employment obligations had an impact of (€5.4) million ((€3.9) million net of tax). See Note 6.14 for more details.

6. Items in the consolidated statement of financial position

6.1. Property, plant and equipment

(in million EUR)	Land and buildings	Machinery and equipment	Furniture and vehicles	Other tangible assets	Leasing and similar rights	Assets under construc-tion	Total
ACQUISITION VALUE							
Balance at 1 January 2018	205.9	5,265.1	169.3	16.4	2.9	401.9	6,061.6
Acquisition business combinations	207.0	2,713.3	68.6	0.0		1,504.4	4,493.4
Additions	6.1	162.5	20.1	0.1		841.4	1,030.1
Disposals	(4.1)	(68.6)	(6.3)	0.0		(22.2)	(101.1)
Transfers from one heading to another	2.7	1,087.1	10.4	5.7		(1,105.9)	0.0
Balance at 31 December 2018	**417.6**	**9,159.3**	**262.2**	**22.3**	2.9	**1,619.7**	**11,483.9**
Balance at 1 January 2019	417.6	9,159.3	262.2	22.2	2.9	1,619.7	11,483.9
Recognition of right-of-use on initial application of IFRS16	0.0	0.0	0.0	0.0	95.8	0.0	95.8
Additions	9.0	465.4	43.0	0.2	8.8	759.9	1,286.3
Disposals	(0.6)	(67.6)	(4.0)	0.0	(0.4)	0.0	(72.7)
Transfers from one heading to another	2.3	862.2	9.0	4.7	0.0	(878.3)	0.0
Balance at 31 December 2019	**428.4**	**10,419.3**	**310.2**	**27.1**	**107.2**	**1,501.3**	**12,793.4**
DEPRECIATION AND IMPAIRMENT							
Balance at 1 January 2018	(24.7)	(2,685.9)	(132.6)	(13.2)	(2.9)	-	(2,859.2)
Depreciation	(4.4)	(207.2)	(21.2)	(0.9)		-	(233.7)
Disposals	2.8	56.4	6.0	0.0		-	65.2
Transfers from one heading to another	0.0	5.7	(0.3)	(5.3)		-	0.0
Balance at 31 December 2018	**(26.3)**	**(2,831.0)**	**(148.1)**	**(19.4)**	(2.9)	**-**	**(3,027.7)**
Balance at 1 January 2019	(26.3)	(2,831.0)	(148.1)	(19.4)	(2.9)	-	(3,027.7)
Depreciation	(5.7)	(300.7)	(29.5)	(1.2)	(16.0)	-	(353.1)
Disposals	0.0	29.3	4.0	0.0	(0.1)	-	33.2
Transfers from one heading to another	0.0	4.0	(0.0)	(4.0)	0.0	-	(0.0)
Balance at 31 December 2019	**(32.0)**	**(3,098.4)**	**(173.7)**	**(24.5)**	**(19.1)**	**-**	**(3,347.7)**
CARRYING AMOUNT							
Balance at 1 January 2018	181.2	2,579.3	36.7	3.2		401.9	3,202.4
Balance at 31 December 2018	391.3	6,328.3	114.1	2.9		1,619.7	8,456.2
Balance at 1 January 2019	391.3	6,328.3	114.4	2.9		1,619.7	8,456.2
Balance at 31 December 2019	396.3	7,320.8	136.5	2.6	88.1	1,501.3	9,445.6

The biggest investments are related to the Modular Offshore Grid (€215 million), interconnection project ALEGrO (€92 million), the investments in Brabo project (€41 million) and the upgrading of the Mercator-Horta-Avelin high-voltage lines (€71 million).

In Germany, a total of €259.5 million was invested in onshore projects, while offshore investments totalled €229.1 million. The most significant onshore investments related to the construction of the overhead line between Wolmirstedt and Güstrow (€29.8 million) and the upgrading of high voltage pylons to boost operational safety (€30.0 million). Offshore investments mainly concerned the offshore grid connection of Ostwind 1 (€68.3 million) and Ostwind 2 (€131.0 million).

During 2019, €18.6 million of borrowing costs were capitalised on assets under construction. €11.1 million (€8.8 million in 2018), based on an average interest rate of 2.28% (2.68% in 2018), originates from the Elia Transmission Belgium segment. An amount of €7.5 million, based on an average interest rate of 1.25% (1.25% in 2018) comes from the 50Hertz Transmission segment.

There were no mortgages, pledges or similar securities on PP&E relating to loans.

Outstanding capital expenditure commitments are described in Note 8.2.

6.2. Intangible assets

(in million EUR)	Development costs of software	Licences/ concessions	Total
ACQUISITION VALUE			
Balance at 1 January 2018	100.7	3.6	104.3
Acquisition through business combinations	30.8	21.8	52.6
Additions	24.3	0.0	24.3
Disposals	(0.5)	0.0	(0.5)
Balance at 31 December 2018	**155.3**	**25.4**	**180.7**
Balance at 1 January 2019	155.3	25.4	180.7
Additions	25.7	1.0	26.7
Disposals	(1.0)	0.0	(1.0)
Balance at 31 December 2019	180.1	26.4	206.5
DEPRECIATION AND IMPAIRMENT			
Balance at 1 January 2018	(70.9)	(2.6)	(73.5)
Depreciation	(15.1)	(1.3)	(16.4)
Disposals	0.4	0.0	0.0
Balance at 31 December 2018	**(85.7)**	**(3.9)**	**(89.5)**
Balance at 1 January 2019	(85.7)	(3.9)	(89.5)
Depreciation	(19.6)	(1.8)	(21.5)
Disposals	0.9	0.0	0.9
Balance at 31 December 2019	**(104.4)**	**(5.7)**	**(110.1)**
CARRYING AMOUNT			
Balance at 1 January 2018	29.8	1.0	30.8
Balance at 31 December 2018	69.6	21.5	91.2
Balance at 1 January 2019	69.6	21.5	91.2
Balance at 31 December 2019	75.6	20.7	96.4

Software comprises both IT applications developed by the Company for operating the grid and software for the Group's normal business operations.

During 2019, €0.2 million in borrowing costs were capitalised on software in development (compared with €0.2 million in 2018) in the Elia Transmission (Belgium) segment, based on an average interest rate of 2.28% (2.68% in 2018). No borrowing costs on software in development were capitalised in the 50Hertz Transmission segment.

6.3. Goodwill

(in million EUR)	Goodwill
ACQUISITION VALUE	
Balance at 1 January 2018	**1,707.8**
Additions	703.3
Balance at 31 December 2018	**2,411.1**
Balance at 1 January 2019	**2,411.1**
Additions	0.0
Disposals	0.0
Balance at 31 December 2019	**2,411.1**
CARRYING AMOUNT	
Balance at 1 January 2018	1,707.8
Balance at 31 December 2018	2,411.1
Balance at 1 January 2019	2,411.1
Balance at 31 December 2019	2,411.1

The goodwill relates to the following business combinations and is allocated to the CGU Elia Transmission for the acquisition of Elia Asset and Elia Engineering and to the CGU 50Hertz Transmission for the acquisition of the 20% stake in Eurogrid International:

(in million EUR)	2019	2018
Acquisition Elia Asset - 2002	1,700.1	1,700.1
Acquisition Elia Engineering - 2004	7.7	7.7
Acquisition Eurogrid International – 2018	703.4	703.4
Total	**2,411.2**	**2,411.2**

IMPAIRMENT TEST FOR CASH-GENERATING UNITS CONTAINING GOODWILL

- According to IFRS rules, goodwill should be tested for impairment at least on an annual basis or upon the occurrence of a triggering event. Goodwill is allocated to the cash generating units (CGUs) Elia Transmission and 50Hertz Transmission for impairment testing. Cash-generating units to which goodwill has been allocated are tested for impairment at least annually as the higher of their fair value less costs to sell.

Acquisition of Elia Asset and Elia Engineering

In 2002, the acquisition of Elia Asset by the Company for €3,304.1 million resulted in a positive consolidation difference of €1,700.1 million. This positive consolidation difference was the result of the difference between the acquisition value of this entity and the carrying amount of its assets. This difference consists of various aspects such as the fact that (i) Elia was appointed as a TSO for a period of 20 years (ii) Elia had unique resources in Belgium as Elia owns the whole of the very-high-voltage grid and owns 94% of the high-voltage grid (or has the right to use this), and hence only Elia is entitled to put forward a development plan and (iii) Elia had the relevant TSO know-how.

At the date of acquisition, the description or the quantification in euros of these aspects could not be performed on an objective, transparent and reliable basis and therefore, the difference could not be allocated to specific assets and was considered unallocated. This difference has therefore been recognised as goodwill since the initial adoption of IFRS in 2005. The regulatory framework, in particular the offsetting in the tariffs of the decommissioning of fixed assets, applicable from 2008 onwards, did not have an impact on this accounting treatment. The goodwill described above and the goodwill resulting from the acquisition of Elia Engineering in 2004 were allocated to the single cash-generating unit for the impairment test determined, since the income and expenses were generated by one activity, specifically 'regulated activity in Belgium', which will also be considered to be one cash-generating unit.

As a result, the Company assigned the carrying amount of the goodwill to one unit, the regulated activity in Belgium. Since 2004, annual impairment tests have been conducted and have not resulted in recognition of any impairment losses.

The impairment test was conducted by an independent expert. This impairment test is based on fair value less costs to sell and uses two main valuation methods to estimate the recoverable amount, 1) a discounted cash flows method (DCF) and 2) a dividend discount model (DDM), both of which are further detached in valuation variants depending on the terminal value calculation. Costs to sell were considered negligible in the exercise.

Future cash flows and future dividends are based on a business plan for the period 2019-2028 (two regulatory periods). As the asset base of the Group consists of assets with long useful lifes, the business plan's projection period has been set to encompass the coming two regulatory periods. Note that the regulatory framework within which Elia operates is characterised by an allowed revenues basis structured around 1) a fair remuneration of the regulatory asset base and 2) incentives to guarantee the continuity of supply and improve efficiency. Considering that the regulator will allow a fair remuneration of the regulatory asset base consistent with market expectations, the estimated regulatory asset base for the last forecast year can be considered an indication of the terminal value. This approach does not capture potential cash flows from meeting or beating future efficiency targets.

The valuation methods are subject to different assumptions, most importantly:

1. Discounting of future cash flows (DCF-models):
   - Discount rate:
     - Cost of Equity of 7.1%;
       - Risk-free-rate: -0.3%
       - Beta 0.9
       - Equity market risk premium 5.5%
       - Country risk premium 0.5%
       - Small firm premium 1.8%
     - Pre-tax Cost of Debt of 1.1%;
     - Corporate tax rate of 25%;
     - Target gearing (D/(D+E)): 60%;
     - Post-tax WACC: 3.3%.
   - Terminal value based on three variants:
     - Terminal value based on a 1.1x RAB multiple in 2028
   - NB: as such, the RAB itself does not capture the contribution of the incentive remuneration to the value creation process.
     - Terminal value based on a value driver approach, assuming any new CAPEX after 2028 will generate a return equal to the WACC of 3.3%. This means that CAPEX in the terminal value will neither create nor destroy value.
     - Terminal value based on a perpetual growth rate of 1.5% reflecting the long-term inflation expectation reported by the International Monetary Fund (IMF).

2. Discounting of future dividends (DDM-models):
   - Discount rate:
     - Cost of Equity of 7.1%
   - Terminal value based on two variants:
     - Terminal value based on 1.1x RAB multiple in 2028.
   - NB: as such, the RAB itself does not capture the contribution of the incentive remuneration to the value creation process.
     - Terminal value based on a perpetual growth rate of 1.5%. This approach assumes that the residual value consists of profit after tax less investments and considers net borrowings (in relation to the investments). However, profit and thus dividend payments in FY28 is most likely not yet capturing the (positive) impact of the investments planned in FY23-FY28.

   - The independent analysis, based on a (€2,640 million) midpoint of the different valuation approaches and variants used, and sensitivity analysis did not result in the identification of an impairment of goodwill in the financial year 2019. Moreover, market multiples (based on current enterprise values and current/forecasted EBITDA) were applied for plausibility.

   - As the median and the average of the different methods presented above were relatively far apart (€2.487 million and €3.121 million respectively), mainly due to differences in assumptions in the terminal value, the expert based its mid-point on 75% of the median and 25% of the average, bearing in mind, among other factors, that the median alone might not appropriately reflect the impact of the incentive remuneration in the terminal value (see above for more details).

Acquisition of Eurogrid International

- In April 2018, the acquisition of an extra 20% stake in Eurogrid International by the Company for €988.7 million resulted in a positive consolidation difference of €703.4 million. This positive consolidation difference was the result of the difference between the acquisition value of this entity and the carrying amount of its assets. The goodwill resulting from the additional 20% stake in Eurogrid International was allocated to the cash-generating unit 50Hertz Transmission, since it comprises all income and expenses generated thereby.

- The impairment test was conducted by an independent expert. This impairment test is based on two main valuation methods, 1) a discounted cash flows (DCF) method and 2) a dividend discount model (DDM), both of which are further detached in valuation variants depending on the terminal value calculation. Future cash flows and future dividends are based on a business plan for the period 2019-2028 (two regulatory periods). As the asset base of the Group consists of assets with long useful lives, the business plan's projection period has been set to encompass the coming two regulatory periods.

1. Discounting of future cash flows (DCF-models):
   - Discount rate:
     - Cost of Equity of 6.6%;
       - Risk-free-rate: -0.3%
       - Beta 0.9
       - Equity market risk premium 5.5%
       - Country risk premium 0.0%
       - Small firm premium 1.8%
     - Pre-tax Cost of Debt of 1.1%;
     - Corporate tax rate of 30%;
     - Target gearing (D/(D+E)): 60%;
     - WACC: 3.1%.
   - Terminal value based on three variants:
     - Terminal value based on a 1.1x RAB multiple in 2028;
     - Terminal value based on a value driver approach, assuming any new CAPEX after 2028 will generate a return equal to the WACC of 3.1%;
     - Terminal value based on a perpetual growth rate of 1.5%.

2. Discounting of future dividends (DDM-models):
   - Discount rate:
     - Cost of Equity of 6.6%
   - Terminal value based on two variants:
     - Terminal value based on 1.1x RAB multiple in 2028;
     - Terminal value based on a perpetual growth rate of 1.5%.

- The independent analysis, based on a median of the different valuation approaches and variants used, and sensitivity analysis did not result in the identification of an impairment of goodwill in the financial year 2019.

6.4. Non-current trade and other receivables

(in million EUR)	2019	2018
Loans to third parties	2.3	2.6
Loans to joint ventures	0.0	174.4
Total	**2.3**	**177.0**

The Group has a receivable outstanding to a third party for an amount of €2.3 million. This receivable was granted for the financing of a joint project with Elia.

The loans to joint ventures was related to Nemo Link Ltd., in which both Elia Group and National Grid have a 50% stake. Until June 2019, Nemo Link Ltd was financed by both shareholders through equity and loans. In June 2019, the shareholders' loan has been swapped to equity funding.

6.5. Equity-accounted investees

6.5.1. Joint ventures

Nemo Link Ltd
On 27 February 2015, Elia System Operator and National Grid signed a joint venture agreement to build the Nemo Link Interconnector between Belgium and the UK. This project consists of subsea and underground cables connected to a converter station and an electricity substation in each country, allows electricity to flow in either direction between the two countries and give the UK and Belgium improved reliability and access to electricity and sustainable generation. Each shareholder holds a 50% stake in Nemo Link Ltd, a UK company. The interconnection was commissioned in late January 2019.

To finance the project both shareholders have provided funding to Nemo Link Ltd since 2016 via equity contributions and loans (divided on a 50/50 basis). In June 2019, the loans were incorporated in the share capital (loan swap to equity), which explains the significant decrease in non-current liabilities with the inverse effect in equity.

The following table summarises the financial information of the joint venture, based on its IFRS financial statements and reconciliation with the carrying amount for the Group's interest in the consolidated financial statements.

(in million EUR)	2019	2018
Percentage ownership interest	**50.0%**	**50.0%**
Non-current assets	660.8	606.3
Current assets	33.9	35.5
Non-current liabilities	30.9	381.2
Current liabilities	14.8	27.4
Equity	649.0	233.2
Group's carrying amount for the interest	**324.5**	**116.6**
Revenues and other income	61.5	0.0
Depreciation and amortisation	24.2	0.0
Net finance result	(6.4)	0.6
Profit before income tax	13.7	0.6
Income tax	(0.8)	0.0
Profit for the year	12.9	0.6
Total comprehensive income for the year	12.9	0.6
Group's share of profit for the year	**6.5**	**0.3**
Dividends received by the Group	0.0	0.0

6.5.2. Associates

The Group has four associates, all of which are equity-accounted investees.

The Group has a 17.4% interest in Enervalis NV, a start-up that develops innovative software-as-a-service solutions that will allow market players to optimise their energy bills while helping to meet the growing need for flexibility in the electricity system. A representative of the Group has been appointed a member of Enervalis's Board of Directors. The Group therefore considers itself as having a significant influence and Enervalis is, as such, accounted for using the equity method.

The Group has a 20.5% interest in Ampacimon SA, a Belgian company working on developing innovative monitoring systems for TSOs and distribution system operators (DSOs) so that they can more quickly anticipate on changes in energy supply and demand.

Following the acquisition of a 20% stake in 50Hertz, the Group's interest in Coreso NV/SA increased to 22.2%. Coreso NV/SA is a company which provides coordination services aimed at facilitating the secure operation of the high-voltage electricity system in several European countries.

HGRT SAS is a French company with a 49.0% stake in Epex Spot, the exchange for power spot trading in Germany, France, Austria, Switzerland, Luxembourg and (through its 100% associate APX) the UK, Netherlands and Belgium. The Group itself holds a 17.0% stake in HGRT. As one of the founding partners of HGRT, the Group has a 'golden share', enabling the Group to have a minimum number of representatives on the Board of Directors. This constitutes a significant influence and therefore HGRT is accounted for using the equity method. In 2019, the Group received a dividend of €2.6 million from HGRT (€2.0 million in 2018).

None of these companies are listed on any public exchange.

The following table illustrates the summarised financial information of the Group's investment in these companies, based on their respective financial statements prepared in accordance with IFRS.

(in million EUR)	Enervalis 2019	Ampacimon 2019	Coreso 2019	HGRT 2019
Percentage ownership interest	**17.4%**	**20.5%**	**22.2%**	**17.0%**
Non-current assets	0.0	0.0	7.9	93.3
Current assets	6.0	2.6	3.6	1.0
Non-current liabilities	0.0	0.0	0.0	0.0
Current liabilities	0.0	0.0	8.4	0.0
Equity	6.0	2.6	3.2	94.3
Group's carrying amount for the interest	**1.0**	**0.5**	**0.7**	**16.0**
Revenues and other income	0.0	0.0	17.7	0.0
Profit before income tax	0.0	0.1	0.8	10.4
Income-tax expense	0.0	0.0	(0.4)	(0.1)
Profit for the year	0.0	0.1	0.1	10.2
Total comprehensive income for the year	0.0	0.1	0.1	10.2
Group's share of profit for the year	**0.0**	**0.0**	**0.1**	**1.8**

(in million EUR)	Enervalis 2018	Ampacimon 2018	Coreso 2018	HGRT 2018
Percentage ownership interest	**12.5%**	**20.5%**	**22.2%**	**17.0%**
Non-current assets	0.3	0.3	4.4	93.7
Current assets	1.4	2.2	2.2	6.3
Non-current liabilities	0.0	0.0	0.0	0.0
Current liabilities	0.3	0.0	4.5	0.4
Equity	1.3	2.5	2.7	99.6
Group's carrying amount for the interest	**0.7**	**0.5**	**0.6**	**16.9**
Revenues and other income	0.0	0.0	13.7	0.0
Profit before income tax	0.0	(0.6)	0.6	10.8
Income-tax expense	0.0	0.0	(0.3)	0.1
Profit for the year	0.0	(0.6)	0.3	10.9
Total comprehensive income for the year	0.0	(0.6)	0.3	10.9
Group's share of profit for the year	**0.0**	**(0.1)**	**0.0**	**1.9**

6.6. Other financial assets

(in million EUR)	2019	2018
Immediately claimable deposits	7.0	7.0
Other shareholdings	28.8	27.7
Reimbursement rights	53.1	52.2
Total	**88.9**	**86.9**

Immediately claimable deposits are measured at fair value. The risk profile of these investments is discussed in Note 8.1.

Other shareholdings mainly consist of the shareholdings owned by 50Hertz Transmission and grew by €1.1 million due to an increase in the ownership percentage in EEX. The full list of other shareholdings is disclosed in note 7.1.

The reimbursement rights are linked to the obligations for (i) the retired employees falling under specific benefit schemes (Scheme B - unfunded plan) and for (ii) the medical plan and plan for tariff benefits for retired staff members. See Note 6.14: 'Employee benefits'. The reimbursement rights are recoverable through the regulated tariffs. The following principle applies: all incurred pension costs for 'Scheme B' retired employees and the costs linked to healthcare and tariff benefits for retired Elia staff members are defined by the regulator (CREG) as non-controllable expenses that are recoverable through the regulatory tariffs. The increase in the carrying value of this asset is disclosed in Note 6.14: 'Employee benefits'.

6.7. Deferred tax assets and liabilities

RECOGNISED DEFERRED TAX ASSETS AND LIABILITIES

(in million EUR)	2019		2018	
	Assets	Liabilities	Assets	Liabilities
Property, plant and equipment	3.3	(211.8)	3.3	(157.4)
Intangible assets	0.0	(8.6)	0.0	(8.2)
Non-current trade and other receivables	1.3	(0.2)	1.7	0.0
Interest-bearing loans and other non-current financial liabilities	26.7	(4.6)	2.2	(4.0)
Employee benefits	29.6	(13.3)	26.2	(13.9)
Provisions	48.0	(0.6)	40.6	0.0
Deferred revenue	31.5	(2.2)	9.4	(2.9)
Regulatory liabilities	25.3	(0.0)	19.6	0.0
Deferred tax on investment grants	0.0	(1.1)	0.0	(1.1)
Losses carried forward	0.6	(0.1)	2.5	0.0
Other items	0.6	(7.8)	0.7	(9.0)
Tax asset/liability before offsetting	**166.9**	**(250.2)**	**106.3**	**(196.5)**
Offsetting of tax	(163.2)	163.2	(101.3)	101.3
Net tax asset/(liability)	**3.7**	**(87.0)**	**5.0**	**(95.2)**

The changes in deferred tax assets and liabilities can be presented as follows:

CHANGES IN DEFERRED TAX ASSETS AND LIABILITIES RESULTING FROM MOVEMENTS IN TEMPORARY DIFFERENCES DURING THE FINANCIAL YEAR

(in million EUR)	Opening balance	Business Combinations	Recognised in profit or loss	Recognised in OCI	Other	Closing balance
2018						
Property, plant and equipment	(8.8)	(157.6)	12.4		0.0	(154.1)
Intangible assets	(8.4)		0.2			(8.2)
Non-current trade and other receivables		1.8	(0.1)			1.7
Interest-bearing loans and other non-current financial liabilities	(1.2)	(3.2)	0.4	2.2		(1.8)
Employee benefits	7.5	4.2	0.7	(0.2)		12.3
Provisions		54.4	(13.8)			40.6
Deferred revenue		6.3	0.2			6.5
Regulatory liabilities		18.1	1.5			19.6
Losses carried forward			2.5			2.5
Deferred tax on investment grants	(1.2)		0.1			(1.1)
Other items	(6.5)	0.5	(0.4)		(1.8)	(8.2)
Total	**(18.6)**	**(75.5)**	**3.7**	**2.0**	**(1.8)**	**(90.2)**
2019						
Property, plant and equipment	(180.0)		(28.4)			(208.4)
Intangible assets	(8.2)		(0.4)			(8.6)
Non-current trade and other receivables	1.7		(0.4)			1.2
Interest-bearing loans and other non-current financial liabilities	24.2		(2.2)	0.2		22.1
Employee benefits	12.3		2.5	1.5		16.3
Provisions	40.6		6.7			47.4
Deferred revenue	6.5		22.8			29.3
Regulatory liabilities	19.6		5.7			25.3
Losses carried forward	2.5		(2.1)			0.4
Deferred tax on investment grants	(1.1)					(1.1)
Other items	(8.2)		(0.4)	1.5		(7.2)
Total	**(90.2)**		**3.7**	**3.2**	**0.0**	**(83.3)**

The deferred tax liability on right-of-use assets from IFRS 16 leases is shown under property, plant and equipment, the deferred tax asset on finance lease liability is shown under 'Interest-bearing loans and other non-current financial liabilities'.

UNRECOGNISED DEFERRED TAX ASSETS OR LIABILITIES
As at 31 December 2019, there is an unrecognised deferred tax asset of € 0.5 million relating to tax losses carried forward originating from EGI NV.

6.8. Inventories

(in million EUR)	2019	2018
Raw materials and consumables	39.5	34.0
Write-downs	(15.3)	(14.8)
Total	**24.3**	**19.2**

The warehouse primarily stores replacement and spare parts for maintenance and repair work on the Group's high-voltage substations, overhead lines and underground cables. It also included work-in-progress balances.

Write-downs are recorded following the non-utilisation of stock items based on their underlying rotation. These were slightly higher than in 2018.

6.9. Current trade and other receivables, deferred charges and accrued revenues

(in million EUR)	2019	2018
Contract assets	4.6	3.6
Trade and other receivables and advance payments	338.1	417.9
Levies	2.3	38.9
VAT and other taxes	56.9	50.5
Other	86.2	48.0
Deferred charges and accrued revenues	9.8	20.5
Total	**497.8**	**579.4**

Trade receivables are non-interest-bearing and generally have payment terms of 15 to 30 days.

Contract assets increased slightly from €3.6 million in the previous year to €4.6 million at year-end and are mainly related to EGI's business.

The decrease in levies is mainly due to a decrease of €36.6 million relating to Flemish green certificates which were auctioned earlier in the year than in previous years.

The increase in 'other' is mainly due to an increase of outstanding receivables linked to the regulatory surcharges in Germany (up €16.4).

The Group's exposure to credit and currency risks, and impairment losses related to trade and other receivables are shown in Note 8.1.

At 31 December, the ageing analysis of trade and other receivables and advance payments is as follows:

(in million EUR)	2019	2018
Not past due	320.0	389.7
Past due 0-30 days	14.1	6.6
Past due 31-60 days	1.2	(0.6)
Past due 61 days - one year	3.0	23.6
More than one year	0.7	0.5
Total (excl. impairment)	**339.1**	**419.8**
Doubtful amounts	199.6	170.2
Amounts of write-offs	(199.1)	(169.8)
Provision for expected credit losses	(1.5)	(2.3)
Total	**338.1**	**417.9**

See Note 8.1 for a detailed analysis of the credit risk incurred in connection with these trade receivables.

6.10. Current tax assets and liabilities

(in million EUR)	2019	2018
Tax receivables	5.5	3.6
Tax liabilities	(54.8)	(93.1)
Net tax asset / (liability)	**(49.3)**	**(89.5)**

Tax receivables increased compared with the previous year. The €5.5 million in income tax receivables at 31 December 2019 mainly relates to 2019 advances on corporation tax to be recovered in the financial year 2020. Income tax liabilities decreased to €54.8 million in 2019.

6.11. Cash and cash equivalents

(in million EUR)	2019	2018
Short-term deposits	573.5	1,356.2
Balance at bank	401.5	433.1
Total	**975.0**	**1,789.3**

Cash and cash equivalents have declined as a result of a significant drop at 50Hertz Transmission (Germany), primarily driven by a by €428.8 million decrease in EEG cash and a €356.6 million decrease in core cash.

Short-term deposits are invested for periods varying from a few days and a few weeks to several months (generally not exceeding three months), depending on immediate cash requirements, and earn interest in accordance with the interest rates for the short-term deposits.

Bank-account balances earn or pay interest in line with the variable rates of interest on the basis of daily bank deposit interest rates. The Group's interest-rate risk and the sensitivity analysis for financial assets and liabilities are discussed in Note 8.2.

The cash and cash equivalents disclosed above and in the statement of cash flows include €30.8 million held by Elia RE. These deposits are subject to regulatory restrictions and are therefore not directly available for general use by the other entities within the Group.

6.12. Shareholders' equity

6.12.1. Equity attributable to the owners of the Company

SHARE CAPITAL AND SHARE PREMIUM

Number of shares	2019	2018
Outstanding on 1 January	61,015,058	60,901,019
Issued against cash payment	7,638,880	114,039
Number of shares (end of period)	**68,652,938**	**61,015,058**

The capital increase of 14 June 2019 resulted in the creation of 7,628,104 additional shares at a subscription price of €57 per share. This transaction involved €434.8 million of funds raised, consisting of a €190.3 million capital increase and a €244.5 million increase in share premium. The transaction costs related to this capital increase were €6.2 million.

In addition to this, the second tranche of the 2018 capital increase for Elia employees was completed in March 2019. This transaction involved €0.5 million of funds raised, consisting of a €0.2 million capital increase and a €0.3 million increase in share premium. Through this transaction, 9,776 new shares were issued.

RESERVES
In line with Belgian legislation, 5% of the Company's statutory net profit must be transferred to the legal reserve each year until the legal reserve represents 10% of the capital. As at 31 December 2019 the Group's legal reserve amounts to €173.0 million and represents 10% of the capital.

The Board of Directors can propose the payout of a dividend to shareholders up to a maximum of the available reserves plus the profit carried forward from the Company's previous financial years, including the profit for the financial year ended 31 December 2019. Shareholders must approve the dividend payment at the Annual General Meeting of Shareholders.

HEDGING RESERVE
The hedging reserve comprises the effective portion of the cumulative net change in fair value of cash-flow hedging instruments with regard to hedged transactions that have not yet occurred.

DIVIDEND
After the reporting date, the Board of Directors will put forward the dividend proposal indicated below.

Dividend	2019	2018
Per ordinary share entitled to dividend	1.69	1.66

At the General Meeting of Shareholders on 21 May 2019, the Board of Directors proposed the payout of a gross dividend of €1.66 per share, yielding a total amount of €101.3 million.

The Board of Directors' meeting of 5 March 2020 proposed a gross dividend of €1.69 per share. This dividend is subject to approval by shareholders at the Annual General Meeting on 19 May 2020 and is not included as a liability in the consolidated financial statements of the Group.

The total dividend, calculated based on the number of shares outstanding on 5 March 2020, corresponds to a total of €116.0 million.

6.12.2. Hybrid securities

In September 2018, the Group issued hybrid securities for the financing of the additional 20% stake in 50Hertz Transmission (Germany). The issue resulted in an increase in the Group's equity for an amount of € 700 million.

The hybrid securities bear an optional, cumulative coupon of 2.75%, payable at the Group's discretion annually on 5 December of each year, with the first payment on 5 December 2019. As at 31 December 2019, the unpaid cumulative dividend amounts to €1.4 million. (2018: € 6.2 million). A coupon of 24.0 million has been paid to the bondholders, as result the impact in the profit attributable to the hybrid securities is € 19.3 million.

The hybrid securities have an initial call date in December 2023 with a reset every five years thereafter.

The hybrid securities are structured as perpetual instruments, have junior ranking to all the senior debt and are recorded as equity in the Group's accounts pursuant to IFRS.

6.13. Interest-bearing loans, borrowings and lease liabilities

(in million EUR)	2019	2018
Non-current borrowings	5,304.2	5,773.8
Finance lease liabilities – non current	74.7	0.0
Subtotal non-current borrowings	5,378.9	5,773.8
Current borrowings	1,042.2	549.9
Finance lease liabilities – current	14.1	0.0
Accrued interest	62.9	71.1
Subtotal current loans and borrowings	1,119.2	621.1
Total	**6,498.1**	**6,394.9**

The tables below disclose the changes in the Group's liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes.

(in million EUR)	Current interest-bearing loans and borrowings	Non-current interest-bearing loans and borrowings	Total
Balance at 1 January 2018	**49.5**	**2,834.7**	**2,884.2**
Acquisition through business combinations	28.5	2,829.9	2,858.4
Cash flow: interest paid	(141.8)	0.0	(141.8)
Cash flow: proceeds from withdrawal borrowings	50.0	606.9	656.9
Interest accruals	121.2	0.0	121.2
Other	513.7	(497.7)	16.0
Balance at 31 December 2018	**621.1**	**5,773.8**	**6,394.9**
Balance at 1 January 2019	**621.1**	**5,773.8**	**6,394.9**
Cash flow: interest paid	(158.4)	0.0	(158.4)
Cash flow: repayment of borrowings	(757.6)	0.0	(757.6)
Cash flow: proceeds from withdrawal borrowings	275.0	499.2	774.2
Interest accruals	62.9	0.0	62.9
Other	1,076.2	(894.1)	182.1
Balance at 31 December 2019	**1,119.2**	**5,378.9**	**6,498.1**

In January 2019, the Company has successfully issued a €500 million Eurobond under its €5 billion EMTN program. The €500 million senior bond will mature in 2026 and has an annual coupon of 1.375%.

The proceeds from the new bond issue has been used to refinance an existing €500 million Eurobond which matured in May 2019.

Movements in 'Other' in the financial year 2019 mainly relates to reclassifications of long-term debt to short-term debt in accordance with when instruments become due in 2020.

Information on the terms and conditions of the outstanding interest-bearing loans and borrowings is given below:

(in million EUR)	Maturity	Amount	Interest rate before hedging	Interest rate after hedging	Current proportion - fixed	Current proportion - variable
Eurobond issues 2013/15 years	2028	546.9	3.25%	3.25%	100.00%	0.00%
Eurobond issues 2013/20 years	2033	199.1	3.50%	3.50%	100.00%	0.00%
Eurobond issues 2014/15 years	2029	346.5	3.00%	3.00%	100.00%	0.00%
Eurobond issues 2015/8.5 years	2024	498.2	1.38%	1.38%	100.00%	0.00%
Eurobond issues 2017/10 years	2027	247.6	1.38%	1.38%	100.00%	0.00%
Senior bond 2018/10 years	2028	297.3	1.50%	1.50%	100.00%	0.00%
Eurobond issues 2019/7 years	2026	498.0	1.38%	1.38%	100.00%	0.00%
Other loans	2020	453.6	Euribor 6M + 1,15%	0.97%	60.51%	39.49%
Loan with Publi-Part	2022	42.1	Euribor 6M + 1,15%	0.97%	60.51%	39.49%
Amortized term loan	2033	209.7	1.80%	1.80%	100.00%	0.00%
European Investment Bank	2025	100.0	1.08%	1.08%	100.00%	0.00%
Credit line facility	2019	75.0	0.275%	0.275%	100.00%	0.00%
Bond as part of Euro Medium Term Note program 2010	2020	499.6	3.875%	3.875%	100.00%	0.00%
Bond as part of Debt Issuance Program 2015	2025	497.9	1.875%	1.875%	100.00%	0.00%
Bond as part of Debt Issuance Program 2015	2023	748.7	1.625%	1.625%	100.00%	0.00%
Bond as part of Debt Issuance Program 2015	2030	139.2	2.625%	2.625%	100.00%	0.00%
Bond as part of Debt Issuance Program 2016	2028	747.0	1.500%	1.500%	100.00%	0.00%
Registered bond 2014	2044	50.0	3.000%	3.000%	100.00%	0.00%
Unsecured bank loan	2026	150.0	0.90%	0.900%	100.00%	0.00%
Total		**6,346.4**			**96.92%**	**3.08%**

The above €6,346.4 million is to be increased with €62.9 million of interest accruals and €88.8 million of finance lease liabilities to reconstitute the overall debt of €6,498.1 million.

The following covenants are required for the Eurobonds issued under the €3-billion EMTN programme and the back-up facilities:

- The company will not grant any security interest (i.e. any mortgage, charge, pledge, lien or other form of encumbrance or security interest; a personal guarantee or suretyship does not constitute a 'security interest') to secure any relevant debt of any person or to secure any guarantee of or indemnity in respect of any relevant debt of any person.
- The Company shall ensure that none of its material subsidiaries grant any security interest to secure any relevant debt of any person or to secure any guarantee of or indemnity in respect of any relevant debt of any person.
- The Company will and shall ensure that its material subsidiaries will ensure that no other person grants any security interest to secure any of the company's, or any of its material subsidiaries', relevant debt or to secure any guarantee of or indemnity in respect of any of the Issuer's, or any of its material subsidiaries', relevant debt.
- The Company will retain at least a 75% participation in Elia Asset SA/NV.
- The Company will keep its licence as a transmission system operator.

Information on the maturity profile of the Group's financial liabilities based on contractual undiscounted payments is given in Note 8.1 'Liquidity risk'.

6.14. Employee benefits

The Group has various legal and constructive defined benefit obligations linked to its Belgian and German operations.

The total net liability for employee-benefit obligations is as follows:

(in million EUR)	2019			2018		
	Belgium	Germany	Total	Belgium	Germany	Total
Defined-benefit plans	20.6	26.5	47.1	20.3	20.6	40.8
Post-employment benefits other than pensions	67.5	5.0	72.1	62.2	2.4	64.6
Total provisions for employee benefits	**88.1**	**31.5**	**119.6**	**82.5**	**22.9**	**105.4**

Of the €119.6 million in employee benefit provisions recognised at the end of financial year 2019, €118.1 million is presented in the long term and €1.5 million in the short term (see Note 6.14).

The overall increase of €14.2 million is mainly driven by decreases in discount rates.

BELGIUM

DEFINED-CONTRIBUTION PLANS

Employees remunerated based on a salary scale and recruited after 1 June 2002, as well as management staff recruited after 1 May 1999 are covered by two defined-contribution pension plans (Powerbel and Enerbel):

- The Enerbel plan is a plan for salaried employees hired after 1 June 2002, to which the employee and the employer contribute based on predefined formula.
- The Powerbel plan is a plan for managers hired after 1 May 1999. The contributions of the employee and employer are based on a fixed percentage of the employee's salary.

The new law on occupational pension plans, published at the end of 2015, made various changes to the guaranteed return on defined-contribution plans. For payments made after 1 January 2016, the law requires employers to guarantee an average annual return of at least 1.75% (up to 3.75% depending on who contributes) over the course of the career.

For insured plans the minimum guaranteed return until 31 December 2015 still needs to be equivalent to at least 3.25% for the employer's contribution and 3.75% for the employee's contribution, with any shortfall being covered by the employer.

As a result of the above change and as mentioned in the accounting policies, all defined-contribution pension plans under Belgian pension legislation are classified as defined-benefit plans for accounting purposes due to the legal minimum return to be guaranteed by the employer, which represents a plan amendment. They are accounted for with the Projected Unit Credit method (PUC-method). For each plan, the fair value of assets equals the sum of the accrued individual reserves (if any) and the value of the collective fund(s) (if any), hence no application of IAS 19 § 115. In addition, with the exception of Enerbel, the DC plans are not backloaded, as such these plans are valued without projection of future contributions. The Enerbel DC plan is backloaded and this plan is valued with projection of future contributions.

Elia Transmission Belgium has transferred certain acquired reserves guaranteed by the insurers to 'Cash balance – best off' plans since 2016. The main objective of these plans is to guarantee for every subscriber a minimum guaranteed return of 3.25% on the acquired reserves until retirement age.

Both employee' and employer' contributions are paid on a monthly basis for the base plans. The employee' contribution is deducted from the salary and paid to the insurer by the employer. The amount of future cash flows depends on wage growth.

DEFINED-BENEFIT PLANS

For a closed population, collective agreements in the electricity and gas industries provide 'pension supplements' based on the annual salary and an employee's career within a company (partially revertible to the inheritor in case of early death of the employee).The benefits granted are linked to Elia's operating result. There is no external pension fund or group insurance for these liabilities, which means that no reserves are constituted with third parties. The obligations are classified as a defined benefit.

The collective agreement determines that active staff hired between 1 January 1993 and 31 December 2001 and all managerial/executive staff hired prior to 1 May 1999 will be granted the same guarantees via a defined-benefit pension scheme (Elgabel and Pensiobel – closed plans). Obligations under these defined-benefit pension plans are funded by a number of pension funds for the electricity and gas industries and by insurance companies.

As mentioned above, Elia Transmission Belgium has transferred certain acquired reserves guaranteed by the insurers to 'Cash balance – best off' plans since 2016. As this guarantee is an obligation by the employer, these plans represent defined-benefit plans.

Both employees' and employers' contributions are paid on a monthly basis for the base plans. The employee's contribution is deducted from the salary and paid to the insurer by the employer.

OTHER PERSONNEL OBLIGATIONS

Elia Transmission (Belgium) has also granted staff certain early-retirement schemes and other post-employment benefits such as reimbursement of medical expenses and a contribution to energy prices, as well as other long-term benefits (seniority payments). Not all of these benefits are funded and, in accordance with IAS 19, these post-employment benefits are classified as defined-benefit plans.

GERMANY

DEFINED-CONTRIBUTION PLANS

In the case of externally financed defined contribution plans, 50Hertz Transmission (Germany)'s obligation is limited to paying the agreed contributions. For those defined contribution plans recognised in the form of direct guarantees, there are pledged congruent employer's liability insurance policies in place.

- **Pension obligations for executives (agreement with staff representatives from 2003 onwards):** individual contractual pension obligations based on an agreement with representatives;
- **Pension obligations for executives (agreement with staff representatives from 19 August 2008 onwards):** individual contractual pension obligations relating to a company pension plan with the Vattenfall Europe Group;
- **Collective bargaining agreement on the company pension scheme:** obligations based on the collective bargaining agreement on 50Hertz Transmission's company pension scheme, concluded on 28 November 2007
- **Direct insurance:** direct insurance policies for all former employees who worked at Vereinigte Energiewerke AG (VEAG) from 1993 to 31 December 2004, with the exception of managers;
- **Individual commitments:** individual commitments which are financed exclusively by external pension funds (welfare fund and pension fund).

DEFINED-BENEFIT PLANS

Defined benefit plans entitle employees to make direct pension claims against 50Hertz Transmission. Provisions for these are recognised in the statement of financial position. If plan assets are created for the sole purpose of fulfilling pension obligations, the amount is offset against the present value of the obligation. The following defined benefit plans exist in Germany:

- Group works agreement on the company pension scheme

In accordance with the group works agreement on the company pension scheme, employees are granted a company pension plan on the basis of a defined contribution plan (effective 1 January 2007). This agreement applies to all employees within the meaning of Sec. 5 (1) of the German Work Constitution Act (BetrVG) and came into effect at the Company on 1 January 2007. Participation in the scheme is voluntary. The scheme grants pension benefits upon reaching the statutory retirement age, upon taking early retirement from statutory pension insurance, and in the event of occupational disability for death. Current pension benefits are increased by 1% p.a., so the scheme is classified as a defined benefit plan.

- TVV Energie

This pension plan relates to direct guarantees resulting from a collective bargaining agreement concluded on 16 October 1992. It was closed to new hires on 1 January 1993. This contribution plan applies to employees who worked at Vereinigte Energiewerke AG until 30 November 2001 and whose vested benefits were allocated to Vattenfall Europe Transmission GmbH (now 50Hertz Transmission GmbH). The scheme covers pension obligations, based on years of service and remuneration level and grants retirement and disability pensions, but no pension for surviving dependants. It is not possible to index current post-employment benefits falling due for the first time after 1 January 1993.

OTHER PERSONNEL OBLIGATIONS

50Hertz Transmission also has following obligations, which are listed under 'Other personnel obligations':

- Obligations for long-service benefits;
- Obligations from German phased retirement schemes;
- Obligations for working lifetime accounts.

Not all of these benefits are funded and, in accordance with IAS 19, these post-employment benefits are classified as defined-benefit plans.

EMPLOYEE BENEFIT OBLIGATIONS AT GROUP LEVEL

The Group's net liability for employee benefit obligations is as follows:

(in million EUR)	Pensions 2019	2018	Other 2019	2018
Present value of funded defined-benefit obligation	(278.1)	(247.8)	(98.5)	(85.8)
Fair value of plan assets	231.0	207.0	25.9	21.2
Net employee benefit liability	**(47.1)**	**(40.8)**	**(72.5)**	**(64.6)**

Movement in the present value of the defined benefit obligation (in million EUR)	Pensions 2019	2018	Other 2019	2018
At the beginning of the period	**(247.8)**	**(224.3)**	**(85.8)**	**(63.7)**
Acquisition through business combinations	0.0	(19.0)	0.0	(17.1)
Current service cost	(12.6)	(9.1)	(8.3)	(4.5)
Interest cost/income	(3.7)	(3.2)	(1.5)	(1.2)
Contributions from plan participants	(1.2)	0.3	0.0	2.2
Cost of early retirement	(0.0)	(0.1)	0.0	0.0
Including remeasurement gains/(losses) in OCI and in statement of profit or loss, arising from:				
Changes in demographic assumptions	0.0	(0.5)	0.0	0.0
Changes in financial assumptions	(23.8)	2.2	(6.5)	0.9
Changes from experience adjustments	0.9	6.4	1.3	0.6
Taxes on contributions paid during the year	0.0	(0.7)	0.0	0.0
Past service cost	0.0	0.0	(0.7)	0.0
Payments from the plan	10.3	15.1	3.0	0.2
Settlements	0.0	0.0	0.0	0.0
Transfers	0.0	(14.9)	0.0	(3.2)
At the end of the period	**(278.1)**	**(247.8)**	**(98.5)**	**(85.8)**

Movements in the fair value of the plan assets (in million EUR)	Pensions 2019	Pensions 2018	Other 2019	Other 2018
At the beginning of the period	**207.0**	**203.1**	**21.2**	**0.6**
Acquisition through business combinations	0.0	0.1	0.0	14.8
Interest income	3.0	3.1	0.1	0.0
Remeasurement gains/losses in OCI arising from:				
Return of plan assets (excluding interest income on plan assets)	17.6	(10.1)	0.4	(0.2)
Contributions from employer	11.9	11.1	7.7	5.3
Contributions from plan participants	1.2	1.3	0.0	0.0
Benefit payments	(9.7)	(16.3)	(3.4)	(2.5)
Transfers	0.0	14.9	0.0	3.2
At the end of the period	**231.0**	**207.0**	**25.9**	**21.2**

Amounts recognised in Profit and Loss or OCI (in million EUR)	Pensions 2019	Pensions 2018	Other 2019	Other 2018
Service cost				
Current service cost	(12.6)	(9.1)	(3.6)	(4.5)
Cost of early retirement	0.0	(0.1)	0.0	0.0
Past service cost	0.0	0.0	(0.7)	0.0
Settlements	0.6	0.0	0.1	0.1
Actuarial gains/(losses) on defined benefit obligation	0.0	0.0	(0.0)	0.8
Net interest on the net defined benefit liability/(asset)	**(0.7)**	**(0.1)**	**(1.9)**	**(1.2)**
Interest cost on defined benefit obligation	(3.7)	(3.2)	(1.5)	(1.2)
Interest income on plan assets	3.0	3.1	0.1	0.0
Other	0.0	(0.2)	(0.4)	(0.3)
Defined benefit costs recognised in profit or loss	**(12.7)**	**(9.5)**	**(6.1)**	**(2.2)**
Actuarial gains(losses) on defined obligation arising from:				
1/ Changes in demografic assumptions	0.0	(0.5)	0.0	0.0
2/ Changes in financial assumptions	(23.8)	2.2	(6.5)	0.7
3/ Changes from experience adjustments	0.9	6.4	1.3	0.0
Return on plan assets (excluding interest income on plan assets)	17.6	(10.1)	0.4	(0.2)
Remeasurements of net defined-benefit (liability)/asset recognised in Other Comprehensive Income (OCI)	**(5.4)**	**(2.0)**	**(4.9)**	**0.5**
Total	**(18.1)**	**(11.6)**	**(11.0)**	**(4.5)**

(in million EUR)	2019	2018
Breakdown of defined-benefit obligation by type of plan participants	**(376.6)**	**(333.6)**
Active plan participants	(293.7)	(251.8)
Terminated plan participants with def.-benefit entitlements	(18.8)	(15.1)
Retired plan participants and beneficiaries	(64.1)	(66.7)
Breakdown of defined-benefit obligation by type of benefits	**(376.6)**	**(333.6)**
Retirement and death benefits	(291.4)	(253.7)
Other post-employment benefits (medical and tariff reductions)	(70.5)	(65.0)
Seniority payments	(14.6)	(14.8)

When determining the appropriate discount rate, the Group considers the interest rates of corporate bonds in currencies consistent with the currencies of the post-employment benefit obligation with at least an 'AA' rating or above, as set by an internationally acknowledged rating agency, and extrapolated as needed along the yield curve to correspond with the expected term of the defined-benefit obligation.

A stress test is performed annually. This test verifies that the minimum funding requirements are covered to deal with 'shocks' with probabilities of occurrence of 0.5%.

The members (mostly) contribute to the financing of the retirement benefits by paying a personal contribution.

The annual balance of the defined-benefit lump sum is financed by the employer through a recurrent allowance expressed as a percentage of the total payroll of the participants. This percentage is defined by the aggregate cost method and is reviewed annually. This method of financing involves smoothing future costs over the remaining period of the plan. The costs are estimated on a projected basis (taking into account salary growth and inflation). The assumptions related to salary increase, inflation, employee turnover and age term are defined on the basis of historical data from the Company. The mortality tables used are those corresponding to the observed experience within the financing vehicle and take into consideration expected changes in mortality. The Group calculates the net interest on the net defined-benefit liability (asset) using the same high-quality bond discount rate (see above) used to measure the defined-benefit obligation (net interest approach). These assumptions are challenged on a regular basis.

Exceptional events (such as modification of the plan, change of assumptions and overly short coverage terms) can eventually lead to outstanding payments from the sponsor.

The defined-benefit plans expose the Company to actuarial risks such as investment risk, interest-rate risk, longevity risk and salary risk.

Investment risk

The present value of the defined-benefit plan liability is calculated using a discount rate determined based on high-quality corporate bonds. The difference between the actual return on assets and the interest income on plan assets is included in the remeasurements component (OCI). Currently the plan has a relatively balanced range of investments, as shown below:

Fair value of the plan assets per major category	2019	2018
Investments quoted in an active market	**73.17%**	**73.54%**
Shares - Eurozone	13.64%	14.40%
Shares - outside Eurozone	19.10%	19.34%
Government bonds - Eurozone	1.46%	0.96%
Other bonds - Eurozone	26.01%	25.67%
Other bonds – outside Eurozone	12.96%	13.17%
Unquoted investments	**26.83%**	**26.46%**
Qualifying insurance contracts	8.50%	7.72%
Property	2.34%	2.54%
Cash and cash equivalents	3.10%	3.01%
Other	12.88%	13.19%
Total (in %)	**100.00%**	**100.00%**

Due to the long-term nature of the plan liabilities, it is considered appropriate that a reasonable portion of the plan assets be invested in equity securities to leverage the return generated by the fund. In Germany, all plan assets are invested in insurance agreements.

Interest risk

A decrease in the bond interest rate will increase the plan liability. However, this will be partially offset by an increase in the return on the plan's assets, of which approximately 95% is now invested in pension funds with an expected return of 3.3%.

Longevity risk

The present value of the defined-benefit plan liability is calculated based on the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability. The prospective mortality tables from the IA/BE have been used in Belgium and the 2018 Heubeck tables in Germany.

Salary risk

The present value of the defined-benefit plan liability is calculated based on the future salaries of plan participants. As such, an increase in the salary of the plan participants will increase the plan's liability.

ACTUARIAL ASSUMPTIONS

(in % and years)	2019 Belgium	2018 Belgium	2019 Germany	2018 Germany
Discount rate				
- Pensions - defined-benefit plans and cash balance - best off plans	0.64%	1.39%	1.20%	2.00%
- Pensions - defined-contribution plans	1.02%	1.72% to 1.79%	-	-
- Other	1.04%	1.80%	1.20%	2.00%
Expected average salary increase (excluding inflation)	1.00%	1.00%	1.75%	1,75%
Expected inflation	1.75%	1.75%	2.00%	2.00%
Expected increase in health benefits (including inflation)	2.75%	2.75%	2.25%	2.25%
Expected increase in tariff advantages	1.75%	1.75%	-	-
Average assumed retirement age				
- Employee	63	63	65	65
- Manager	65	65	65	65
Life expectancy in years of a pensioner retiring at age 65 at closing date:*				
Life expectancy for a 65-year-old male	19.9	19.9	20.2	20.1
Life expectancy for a 65-year-old female	23.6	23.6	23.7	23.6

**Mortality tables used: IABE in Belgium, 2018 Heubeck in Germany*

(in years)	2019 Belgium	2018 Belgium	2019 Germany	2018 Germany
Weighted average duration of the defined-benefit obligation	9.0	8.95	26.5	23.90
Weighted average duration of the defined-contribution plans	9.7	16.82	n.r.	n.r.
Weighted average duration of the post-employment benefits other than pensions	13.5	13.47	13.2	12.47

In Germany, the liability of the defined-contribution plans is completely covered by the plan assets. Therefore, no weighted average duration is necessary and thus not calculated.

The actual return on plan assets in % for 2019 was in the range of 3.0% to 19.0% (compared with a range of -2.49% to -7.75% in 2018).

Below is an overview of the expected cash outflows for the DB plans:

Future expected cash outflows (per bucket)	< 12 months	1-5 years	6-10 years
- Pensions	(4.0)	(18.7)	(21.4)
- Other	(4.4)	(18.6)	(18.5)
Total (in million EUR)	**(8.4)**	**(37.3)**	**(39.9)**

There is some degree of uncertainty linked to the above expected cash outflows which can be explained by the following factors:

- Differences between assumptions and actual data can occur, e.g. retirement age and future salary increase;
- The expected cash outflows shown above are based on a closed population and therefore do not incorporate future new hires;
- Future premiums are calculated based on the last known aggregate cost rate, which is reviewed on an annual basis and varies depending on the return on plan assets, the actual salary increase as opposed to the assumptions, and unexpected changes in the population.

SENSITIVITY ANALYSIS

Effect on defined benefit obligation (in million EUR)	Belgium Increase (+) / decrease	Germany Increase (+) / decrease
Impact on the net defined-benefit obligation of an increase in:		
Discount rate (0.5% movement)	15.2	4.8
Average salary increase - excl. inflation (0.5% movement)	(8.0)	(1.9)
Inflation (0.25% movement)	(4.7)	n.r.
Increase in healthcare benefits (1.0% movement)	(4.4)	n.r.
Increase in tariff advantages (0.5% movement)	(0.0)	n.r.
Life expectancy of pensions (1 year)	(3.0)	(1.3)

REMEASUREMENTS OF POST-EMPLOYMENT BENEFIT OBLIGATIONS

(in million EUR)	2019	2018
Cumulative amount at 1 January	(24.6)	(22.1)
Acquisition through business combinations	(0.0)	(0.7)
Recognised in the period	(6.2)	0.6
Cumulative amount at 31 December	**(30.7)**	**(22.1)**

The above remeasurements of post-employment benefits include 50Hertz Transmission (Germany). The cumulative amount includes a net €3.1 million cumulative remeasurement for 50Hertz Transmission (Germany).

REIMBURSEMENT RIGHTS (BELGIUM)

As described in Note 6.6, a non-current asset (within other financial assets) is recognised as reimbursement rights linked to the defined-benefit obligation for the population benefitting from the interest scheme and medical plan liabilities and tariff benefits for retired Elia employees. Each change in these liabilities equally affects the corresponding reimbursement rights under non-current other financial assets.

The change in reimbursement rights is presented below:

Movement in the present value of reimbursement rights (in million EUR)	Pensions 2019	Pensions 2018	Other 2019	Other 2018
At the beginning of the period	**(25.1)**	**(28.0)**	**(27.1)**	**(25.6)**
Current service cost	3.1	3.3	1.6	1.2
Interest cost/income	(0.3)	(0.3)	(0.5)	(0.5)
Actuarial gains(/losses) on defined obligation arising from:				
1) Changes in demographic assumptions	0.0	0.0	0.0	0.0
2) Changes in financial assumptions	(1.5)	0.2	(3.5)	0.4
3) Changes from experience adjustments	0.7	(0.3)	(0.5)	(2.6)
Taxes on contributions paid during the year	0.0	0.0	0.0	0.0
At the end of the period	**(23.1)**	**(25.1)**	**(30.0)**	**(27.1)**

The sum of Pensions (€23.1 million) and Other (€30.0 million) reimbursement rights amounted to €53.1 million in 2019 (2018: € 52.2 million), which reconciles with the reimbursement rights listed in Note 6.6.

6.15. Provisions

(in million EUR)	Environment	Elia Re	Easement provision	Dismantling obligations	Employee benefits	Other	Total
Balance at 1 January 2018	14.6	8.1	0.0	0.0	0.0	2.6	25.3
Acquisition through business combinations	3.4	0.0	15.0	66.8	1.5	4.8	91.6
Increase in provisions	0.7	1.3	0.0	2.4	0.0	0.3	4.7
Reversals of provisions	(0.7)	(1.3)	(2.9)	0.0	(0.1)	(0.3)	(5.3)
Utilisation of provisions	(2.3)	(0.1)	(1.1)	0.0	0.0	(0.2)	(2.7)
Discounting of proviosions	(0.3)	0.0	(0.1)	0.3	0.0	0.0	(0.1)
Balance at 31 December 2018	**15.3**	**8.0**	**12.0**	**69.5**	**1.4**	**7.2**	**113.4**
Long-term portion	10.8	8.0	6.0	69.5	0.0	2.6	96.9
Short-term portion	4.5	0.0	6.0	0.0	1.4	4.5	16.5
Balance at 1 January 2019	15.3	8.0	12.0	69.5	1.4	7.2	113.4
Increase in provisions	0.9	1.1	0.0	37.2	0.1	0.4	39.7
Reversals of provisions	(2.4)	(1.6)	(5.9)	(0.1)	(0.0)	(0.4)	(10.4)
Utilisation of provisions	(1.8)	(4.2)	(0.1)	0.0	(0.1)	(0.2)	(6.4)
Discounting of provisions	0.0	0.0	0.0	1.6	0.0	0.0	1.6
Balance at 31 December 2019	**12.0**	**3.3**	**6.0**	**108.2**	**1.5**	**7.0**	**137.9**
Long-term portion	8.8	3.3	0.0	108.2	0.0	2.0	122.3
Short-term portion	3.2	0.0	6.0	0.0	1.5	4.9	15.6

The Group has recognised provisions for the following:

Environment: The environmental provision provides for existing exposure with respect to land decontamination. The €12.0 million provision mainly relates to the Belgian segment, with only a €2.3 million provision relating to the German segment. The decrease in the Belgian segment explains the decrease in provision from €15.3 million at the end of 2018 to €12.0 million as at 31 December 2019.

More specifically for the Belgian segment, Elia has conducted soil surveys on over 200 sites in Flanders in accordance with contractual agreements and Flemish legislation. Significant soil contamination was found on a number of sites, with this being mainly attributable to historical pollution arising from earlier or nearby industrial activities (gas plants, incinerators, chemicals, etc.). In the Brussels-Capital and Walloon Regions, Elia also carried out analyses and studies to detect contamination at a number of substations and a number of plots occupied by pylons for overhead power lines. Based on the analyses and studies it conducted, Elia has made provisions for possible future soil remediation costs in line with the relevant legislation.

Environmental provisions are recognised and measured based on an expert appraisal bearing in mind BATNEEC (Best Available Techniques Not Entailing Excessive Costs) as well as on the circumstances known at the end of the reporting period. The timing of the settlement is unclear but for the premises where utilisations occur, the underlying provision is classified as a short-term provision.

Elia Re: An amount of €3.3 million is included at year-end for Elia Re, a captive reinsurance company. €2.1 million of this is linked to claims for overhead lines, and €1.2 million to electrical installations. The expected timing of the related cash outflow depends on the progress and duration of the respective procedures.

Easement provisions: The easement provision relates to payments likely to be made to landowners as a compensation for overland lines crossing their property. These easement rights are recognised within the German segment for overland lines built by the former owners of 50Hertz Transmission, with exposure resulting from section 9 of the German Land Register Amendment Act (GBBerG.). The estimates are based on the value of claims filed or on the estimated amount of the risk exposure. The expected timing of the related cash outflow depends on the progress and duration of the claim filed. A re-assessment of the remaining expected payments in 2019 led to a partial reversal of the provision through profit orand loss in 2019.**Dismantling provisions:** As part of the Group's CAPEX programme, the Group is exposed to decommissioning obligations; most of which are related to offshore projects. These provisions take into account the effect of discounting and the expected cost of dismantling and removing the equipment from sites or from the sea. The carrying amount of the provision as at 31 December 2019 was €108.2 million. The increase is mainly to do with a recognition of provisioins related to the MOG project in Belgium and adjustment for discounting of the provision.The Group has applied a case-by-case approach to estimate the cash outflow needed to settle the liability.

Employee benefits: See Note 6.14, for more details of these short-term employee benefits.

'**Other**' consists of various provisions for litigation to cover likely payment where legal proceedings have been instituted against the Group by a third party or where the Group is involved in legal proceedings. These estimates are based on the value of claims filed or on the estimated level of risk exposure. The expected timing of the related cash outflow depends on the progress and duration of the associated proceedings.

No assets have been recognised in connection with the recovery of certain provisions.

6.16. Other non-current liabilities

(in million EUR)	2019	2018
Investment grants	83.8	85.8
Non-current deferred income	129.8	129.8
Other	0.5	0.6
Total	**214.1**	**216.2**

Of the total investment grants, €80.3 million relates to 50Hertz Transmission (Germany). The grants are released in profit and loss when entitlement to them is acquired.

Other non-current liabilities remained stable. The deferred income relates to up front payment for the last mile connection,. At the end of 2019, a liability of €87.4 million was recognised within Elia Transmission (Belgium) and a liability of €42.4 million within 50Hertz Transmission (Germany).

6.17. Trade and other payables

(in million EUR)	2019	2018
Trade debts	542.8	602.4
VAT and other taxes	4.1	19.4
Remuneration and social security	35.2	31.3
Dividends	1.2	1.2
Levies	618.5	1,137.7
Other	111.3	137.9
Accrued liabilities	43.8	59.2
Total	**1,356.9**	**1,989.1**

The amount for levies can be split into levies related to 50Hertz Transmission (€538.1 million) and levies related to Elia Transmission (€80.4 million).

The levies for Elia Transmission decreased compared to previous year (2018: €108.5 million). The levies include federal levies, which totalled €41.3 million at 31 December 2019 (down from €43.4 million in 2018). Levies for the Walloon government have decreased to €20.9 million, from €45.9 million at the end of 2018. The remaining balance consists of federal green certificates (€12.3 million) and strategic reserves (€5.5 million).

The levies for 50Hertz Transmission decreased compared to previous year (2018: €1,029.2 million) and mainly consist of EEG (€433.9 million), KWK (€39.3 million), §19StromNEV (€51.1 million) and offshore contributions (€11.4 million).

6.18. Financial instruments – fair values

The following table shows the carrying amounts and fair values of financial assets and liabilities, including their levels in the fair-value hierarchy.

(in million EUR)	Carrying amount					Fair value			
	Fair Value through P&L	Fair Value through OCI	Financial assets at amortised Cost	Financial liabilities at amortised Cost	Total	Level 1	Level 2	Level 3	Total
31 December 2018									
Other financial assets	7.0	27.7			34.7	7.0		27.7	34.7
Trade and other receivables			736.0	0.0	736.0				
Cash and cash equivalents			1,789.3	0.0	1,789.3				
Assets held to hedge long-term borrowings		(2.9)			(2.9)		(2.9)		(2.9)
Unsecured financial bank loans and other				(1,076.9)	(1,076.9)		(1,076.9)		(1,076.9)
Unsecured bond issues				(5,318.0)	(5,318.0)		(5,603.1)		(5,603.1)
Trade and other payables				(1,989.0)	(1,989.0)				
Total	**7.0**	**24.8**	**2,525.3**	**(8,383.9)**	**(5,826.8)**	n.r	n.r	n.r	n.r
31 December 2019									
Other financial assets	7.0	28.8			35.8	7.0		28.8	35.8
Trade and other receivables			490.3		490.3				
Cash and cash equivalents			975.0		975.0				
Assets held to hedge long-term borrowings		(4.4)			(4.4)		(4.4)		(4.4)
Unsecured financial bank loans and other				(1,030.4)	(1,030.4)		(1,030,4)		(1,030.4)
Unsecured bond issues				(5,316.0)	(5,316.0)		(5,857,6)		(5,857.6)
Trade and other payables				(1,356.9)	(1,356.9)				
Total	**7.0**	**24.4**	**1,465.3**	**(7,703.3)**	**(6,206.6)**	n.r	n.r	n.r	n.r

The above tables do not include fair-value information for financial assets and liabilities not measured at fair value, such as cash and cash equivalents, trade and other receivables, and trade and other payables, as their carrying amount is a reasonable approximation of fair value.The fair value of finance lease liabilities is not required to be disclosed.

Fair value is the amount for which an asset could be exchanged or a liability settled in an arm's-length transaction. IFRS 7 requires, for financial instruments that are measured in the balance sheet at fair value and for financial instruments measured at amortized cost for which the fair value has been disclosed, the disclosure of fair-value measurements by level in the following fair value measurement hierarchy:

- **Level 1:** The fair value of a financial instrument that is traded in an active market is measured based on quoted (unadjusted) prices for identical assets or liabilities. A market is considered active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's-length basis.
- **Level 2:** The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. These maximise the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to assess the fair value of an instrument are observable, either directly (i.e. as prices) or indirectly (i.e. derived from prices), the instrument is included in level 2.
- **Level 3:** If one or more of the significant inputs used in applying the valuation technique is not based on observable market data, the financial instrument is included in level 3. The fair value amount included under 'Other financial assets' has been determined by referring to either (i) recent transaction prices, known by the Group, for similar financial assets or (ii) valuation reports issued by third parties.

The fair value of financial assets and liabilities, other than those presented in the above table, approximates to their carrying amounts largely due to the short-term maturities of these instruments.

FAIR-VALUE HIERARCHY

The fair value of 'sicavs' falls into level 1, i.e. valuation is based on the listed market price on an active market for identical instruments.

The fair value of interest-rate swaps, loans and bond issues falls into level 2, which entails valuation being based on input from other prices than the stated prices, where these other prices can be observed for assets or liabilities. This category includes instruments valued on the basis of listed prices for identical or similar instruments on markets that are deemed less than active; or other valuation techniques arising directly or indirectly from observable market data.

ESTIMATE OF FAIR VALUE

Derivatives

Brokers' statements are used for valuations of the interest-rate and foreign-currency rate swaps. The statements are controlled using valuation models or techniques based on discounted cash flows. The models incorporate various inputs including the credit quality of counterparties and interest-rate curves at the end of the reporting period. As at 31 December 2019, the counterparty risk is considered close to zero as a result of the negative market value of the IRS. The Group's own non-performance risk has been estimated to be close to zero as well.

Interest-bearing loans

The fair value is calculated on the basis of the discounted future redemptions and interest payments.

6.19. Leasing

THE GROUP AS A LESSEE

The Group mainly leases buildings, cars and optical fibers. It has also some rights to use (portions) of land and overhead lines. The valuation period used is according to the contractual term. Where no fixed term has been set and an ongoing extension is subject to the contract, the relevant department has assumed a termination date. In the event that the lease contract contains a lease extension option, the Group assesses whether it is reasonably certain of exercising the option and makes its best estimate of the termination date.

All lease contracts were previously classified as operating leases under IAS 17.

Information about leases for which the Group is a lessee is presented below.

Right-of-use assets

Right-of-use assets are presented separately within 'Property, plant and equipment and break down as follows, with the discounted lease liability for comparison. Additionally, the split between current and non-current lease liabilities is given:

(in million EUR)	Use of land and overhead lines	Building / office rentals	Cars	Optical fibers	Other	Total
At 1 January	40.2	28.6	11.7	10.1	4.2	94.8
Additions	1.7	0.8	6.2	0.4	0.8	9.8
Depreciations	(1.2)	(3.1)	(5.3)	(3.8)	(2.8)	(16.3)
Derecognition of right-of-use assets	0.0	0.0	(0.3)	0.0	0.0	(0.3)
At 31 December	40.7	26.3	12.3	6.7	2.1	88.1

The right-of-use assets are briefly described below:

- The use (portions) of land and overhead lines constitutes a right for the Group to use a well identified piece of land to construct on someone's property. Only the contracts where the Group has the full right to control the use of the identified asset are in scope.
- The Group leases buildings and offices in which corporate functions are performed.
- The Group has car leasing contracts which are used by the employees for business and private activities.
- The Group leases optical fibres to transmit data. Only cables that are well identified are in scope.
- Other lease contracts: printer lease contracts and strategic reserves contracts. Strategic reserves are contracts where the Group has the right to control the use of a power plant to keep the balance in the electricity network

The Group has only lease contracts with fixed lease payments and assesses whether it is reasonable that a lease contract will be extended. If so, the lease contract is valued as if the extension would be exercised.

Lease liabilities

Information concerning the maturity of the contractual undiscounted cash flows is given below:

Maturity analysis - contractual undiscounted cash flows (in million EUR)	2019
< 1 year	20.9
1-5 years	32.5
> 5 years	66.9
Total undiscounted lease liabilities at 31 December	120.4
Lease liabilities in the statement of financial position at 31 December	88.8
Current	14.1
Non-current	74.7

The discount rate used to discount the lease liabilities is the Group's best estimate for the weighted average incremental borrowing rate and ranges from 0.26% to 2.94%. The Group made use of the practical expedients, i.e. a single discount rate per group of contracts, summarised per their duration.

The Group has assessed the extension options concluded in the lease contracts and considers that these extension options are reasonably certain to be executed. Therefore, the Group has considered the lease contract as if the extension option is exercised in the lease liability.

The Group has no lease contracts with variable payments nor residual value guarantees. The Group did not commit to any lease that is not yet commenced.The Group has no contracts which include contingent rental payments, and no purchase options were agreed in the significant lease contracts. Furthermore, these significant lease contracts do not include any escalation clauses or restrictions that are significant to the use of the respective asset.

Amounts recognised in profit and loss

The following amounts were recognised in profit and loss for the financial year:

(in million EUR)	2019
Depreciation expense of right-of-use assets	16.3
Interest on lease liabilities	2.0
Variable lease payments not included in the measurement of lease liabilities	0.0
Expenses relating to short-term leases	0.1
Expenses relating to low-value assets	0.2
Total recognised in profit and loss	**18.6**

A total of €18.6 million in lease expenses was recognised in the income statement in 2019.

In 2018, the following amounts were recognised in profit and loss (under previous standard IAS 17):

(in million EUR)	2018
Use of land	0.3
Buildings	4.4
Cars, IT equipment and others	11.9
Total	**16.6**

The total cash outflow for leases amounted to €16.3 million in 2019.

THE GROUP AS A LESSOR

The Group leases out optical fibers, land and buildings presented as part of 'Property, plant and equipment'. Leasing is only an ancillary business. Rental income is presented under 'Other income'.

Contracts that do not relate to separately identifiable assets or under which the customer cannot directly the use of the asset or does not obtain substantially all the economic benefits associated with the use of the asset do not constitute a lease. The new lease definition led to the exclusion of some telecommunication equipment. Figures for previous year have been adjusted accordingly in the following tables below.

The Group has classified these leases as operating leases as they do not transfer substantially all the risks and rewards incidental to the ownership of the assets.

The following table sets out a maturity analysis of lease payments, showing the undiscounted lease payments to be received after the reporting date and considering the best estimate of the contractual term:

(in million EUR)	< 1 year	1–5 years	> 5 years
Telecom	15.9	6.4	4.3
Land and buildings	0.3	0.0	0.0
Balance at 31 December 2018	16.2	6.4	4.3
Telecom	15.6	2.9	3.8
Land and buildings	0.1	0.1	0.1
Balance at 31 December 2019	15.7	3.0	3.9

The Group recognized €16.3 million in rental income in 2019 (2018: €17.7 million).

(in million EUR)	2019	2018
Telecom	16.0	16.7
Land and buildings	0.3	1.0
Total	**16.3**	**17.7**

6.20. Accruals and deferred income

(in million EUR)	2019	2018
Accruals and deferred income	28.1	19.3
Deferral account from settlement mechanism Belgian regulatory framework	559.3	532.9
Deferral account from settlement mechanism German regulatory framework	502.5	444.5
Total	**1,089.9**	**996.7**

The movements in deferral account from settlement mechanism are as follows :

(in million EUR)	Regulatory claims	Regulatory obligations	total
Opening balance	45.0	(1,022.4)	(977.4)
Increase	18.7	(246.5)	(227.7)
Reversal	(36.3)	79.5	43.2
Utilisation	0.00	110.5	110.5
Discounting	0.00	(10.4)	(10.4)
Closing balance	**27.5**	**(1,089.3)**	**(1,061.8)**

In the Elia Transmission segment, the deferral account from settlement mechanism (€559.3 million) increased compared to year end 2018 (€532.9 million). The increase in deferreal account from settlement mechanism encompasses deviations in the current year from the budget approved by the regulator (+€136.7 million), the settlement of net surpluses from prior tariff period (-€110.6 million) and the review of the regulator on previous year' settlement mechanism (+€0.3 million). The operating excess, in relation to the budget of the costs and revenues authorised by the regulator, must be returned to the consumers and therefore does not form part of the revenues. The operational surplus compared to the budget is primarily a result of the lower regulated net profit (€3.3 million), higher tariff sales (€1.2 million), increased cross-border revenues (€10.1 million), lower costs for ancillary services (€109.4 million) and lower financial charges (€11.3 million). This was partly offset by higher taxes compared to the budget (€11.1 million).

In the 50Hertz Transmission segment, the deferral accounts from settlement mechanism (€502.5 million) strongly increased compared to year end 2018 (€444.5 million). New liabilities from FSV Redispatch amounting to €75..8 million and €23.3 million from RES curtailment (§14/15 EEG Redispatch) as well as new assets amounting to €32.1 million from FSV balancing energy are included. Overall, the deferral accounts strongly increased despite the significant increase in Redispatch liabilities mainly due to 2017 issues which are consumed in 2019 (y+2). For this reason, the deferral account from settlement mechanism increased in total by €58.0 million compared to year-end 2018.

The release of the deferral account is determined in the tariff setting process. The amounts on the deferral account are recognized on a yearly basis and the release depends on the source of the deferral, some are released in T+1, other in T+2 and some in a longer period.

The future release of deferral account from settlement mechanism to the future tariffs is set out in the table below (situation at 31 December 2019):

(in million EUR)	Belgian regulatory framework	German regulatory framework
To be refunded to the tariffs in the current regulatory period*	431.4	403.3
To be refunded to the tariffs in the next regulatory period (or after)	127.9	99.2
Total regulatory deferral account	**559.3**	**502.5**

**Belgium: from 2020 to 2023 ; Germany: from 2019 to 2022*

7. Group structure

7.1. Subsidiaries, joint ventures and associates

RESTRUCTURING OF THE GROUP

Elia carried out an internal reorganisation at the end of 2019 with a view to separating its regulated activities in Belgium, i.e. the ownership and operation of the high- and very high-voltage transmission network in Belgium (including its stake in Nemo Link) plus the debt raised for this purpose, from its non-regulated activities and its regulated activities outside Belgium, including the underlying cash flows and related debts.

The reorganisation sought to enable the Elia Group to continue implementing its investment strategy, especially following the application of the new tariff methodology in 2020.

In this context, Elia Transmission Belgium SA/NV, was therefore incorporated as a public limited company by Elia System Operator SA/NV and Publi-T SCRL on 31 July 2019.

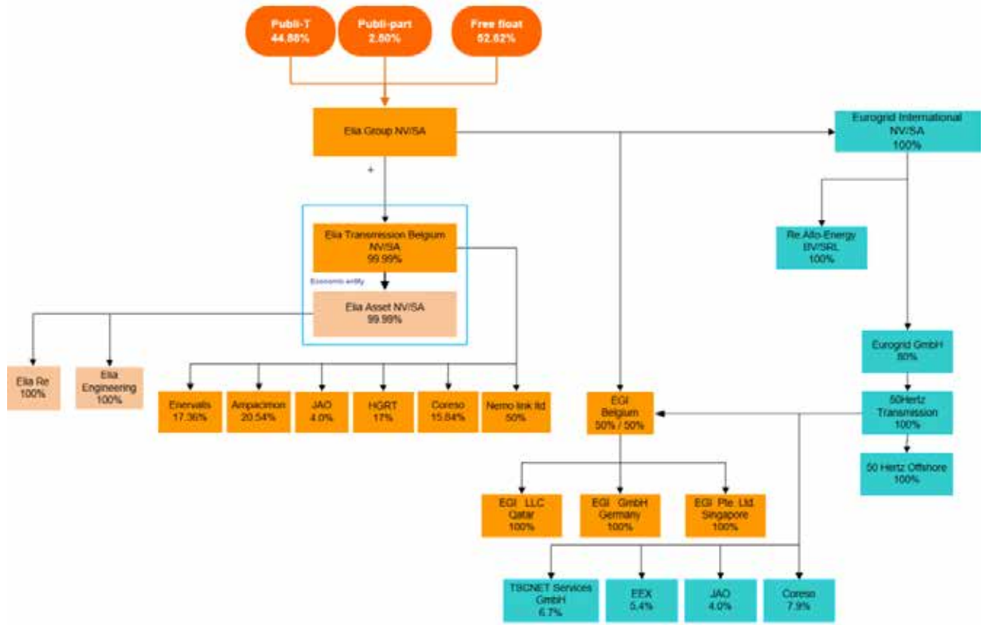
The transfer of the regulated business (regulated assets and liabilities) from Elia System Operator NV/SA to Elia Transmission Belgium NV/SA was completed and the new shares were delivered to Elia Group NV/SA with effect from just before midnight 31 December 2019.

Elia Transmission Belgium NV/SA has been designated as Belgian TSO at federal and regional level on 31 December 2019 (retroactive designation). Once these designations were obtained, the articles of association of Elia System Operator were amended to change the name of the entity to Elia Group.

As a result of the reorganization, Elia Group NV/SA was transformed into a holding company ("Elia Group") on 31 December 2019. It holds stakes in various subsidiaries including Elia Transmission Belgium NV/SA and other subsidiaries such as Eurogrid International (which covers the activities of 50Hertz, the German TSO) and Elia Grid International, the group's consulting company.

The transaction was treated as a transaction between shareholders and is neutral in terms of the Group's financial performance.

OVERVIEW OF GROUP STRUCTURE



SUBSIDIARIES

Elia Group NV/SA has direct and indirect control of the subsidiaries listed below.

In June 2019, KfW stepped out of the shareholdership of Eurogrid International SA. its shares were acquired by Elia System Operator NV/SA. In return, KfW acquired 20% of the shares of Eurogrid GmbH from Eurogrid International SA. Eurogrid GmbH is the direct subsidiary of Eurogrid International SA and the direct holding entity of 50 Hertz Transmission GmbH.

Other than a € 2.5 million payment made to KfW to compensate for any assets held at the Belgian holding entity only, the transaction was treated for as a transaction between shareholders and is neutral in terms of the Group's financial performance.

The company Re.Alto-Energy BV/SRL was founded in August 2019 as a direct subsidiary of Eurogrid International NV/SA. It is building a platform to enable users to exchange energy data and services.

All the entities keep their accounts in euros (except E-Offshore A LLC, Atlantic Grid Investment A Inc. and Atlantic Grid A LLC, whose accounts are held in US dollars) and have the same reporting date as Elia System Operator NV/SA (except Eurogrid International NV/SA).

Name	Country of	Headquarters	Stake % 2019	2018
Subsidiaries				
Elia Transmission Belgium NV/SA	Belgium	Bd de l'Empereur 20, 1000 Brussels	99.99	-
Elia Asset NV/SA	Belgium	Bd de l'Empereur 20, 1000 Brussels	99.99	99.99
Elia Engineering NV/SA	Belgium	Bd de l'Empereur 20, 1000 Brussels	100.00	100.00
Elia Re SA	Luxembourg	Rue de Merl 65, 2146 Luxembourg	100.00	100.00
Elia Grid International NV/SA	Belgium	Bd de l'Empereur 20, 1000 Bussels	90.00	90.00
Elia Grid International GmBH	Germany	Heidestraße 2, 10557 Berlin	90.00	90.00
Elia Grid International LLC	Qatar	Office 905, 9th Floor, Al Fardan Office Tower, Westbay - Doha	90.00	90.00
Elia Grid International Pte. Ltd.	Singapore	20 Collyer Quay #09-01, Singapore 049319	90.00	-
Eurogrid International NV/SA	Belgium	Bd de l'Empereur 20, 1000 Brussels	100.00	80.00
Eurogrid GmbH	Germany	Heidestraße 2, 10557 Berlin	80.00	80.00
50Hertz Transmission GmbH	Germany	Heidestraße 2, 10557 Berlin	80.00	80.00
50Hertz Offshore GmbH	Germany	Heidestraße 2, 10557 Berlin	80.00	80.00
Re.Alto-Energy BV/SRL	Belgium	Bd de l'Empereur 20, 1000 Brussels	100.00	-
E-Offshore A LLC	U.S.	874, Walker Road, Suite C, 19904 Dover, Delaware	-	80.00
Atlantic Grid Investment A Inc	U.S.	1209 Orange Street, 19801 Wilmington,	-	80.00
Investments accounted for using the equity-method – Joint Ventures				
Nemo Link Ltd.	United Kingdom	Strand 1-3, London WC2N 5EH	50.00	50.00
Investments accounted for using the equity-method – Associates				
H.G.R.T S.A.S.	France	1 Terrasse Bellini, 92919 La Défense Cedex	17.00	17.00
Coreso NV/SA	Belgium	Avenue de Cortenbergh 71, 1000 Brussels	22.16	22.16
Ampacimon SA	Belgium	Rue de Wallonie 11, 4460 Grâce-Hollogne	20.54	20.54
Enervalis NV	Belgium	Centrum-Zuid 1111, 3530 Houthalen-	17.36	12.47
Investments accounted for using IFRS9 - other shareholdings				
JAO SA	Luxembourg	2, Rue de Bitbourg, 1273 Luxembourg Hamm	7.20	8.28
Atlantic Grid A LLC	U.S.	4445, Willard Av, Suite 1050, 20815 Chevy	-	7.46
European Energy Exchange (EEX)	Germany	Augustusplatz 9, 0409 Leipzig	4.32	4.16
TSCNET Services GmbH	Germany	Dingolfinger Strasse 3, 81673 Munich	5.36	6.16

8. Other notes

8.1. Financial risk and derivative management

PRINCIPLES OF FINANCIAL RISK MANAGEMENT

The Group aims to identify each risk and set out strategies to control the economic impact on the Group's results.
The Risk Management Department defines the risk-management strategy, monitors the risk analysis and reports to management and the Audit Committee. The financial risk policy is implemented by determining appropriate policies and setting up effective control and reporting procedures. Selected derivative hedging instruments are used depending on the assessment of the risk involved. Derivatives are used exclusively as hedging instruments. The regulatory framework in which the Group operates significantly restricts their effects on profit or loss (see the section 'Regulatory framework and tariffs'). The major impact of increased interest rates, credit risk, etc. can be settled in the tariffs, in accordance with the applicable legislation.

CREDIT RISK

Credit risk encompasses all forms of counterparty exposure, i.e. where counterparties may default on their obligations to the Company in relation to lending, hedging, settlement and other financial activities. The Company is exposed to credit risk from its operating activities and treasury activities. As regards its operating activities, the Group has a credit policy in place, which takes into account customer's risk profiles. The exposure to credit risk is monitored on an ongoing basis, resulting in a request to issue bank guaranties from the counterparty for some major contracts.

At the end of the reporting period there were no significant concentrations of credit risks. The maximum credit risk is the carrying amount for each financial asset, including derivative financial instruments.

(in million EUR)	2019	2018
Loans and receivables – long term	2.3	177.0
Loans and receivables – short term	488.0	558.9
Cash and cash equivalents	975.0	1,789.3
Immediately claimable deposits	7.0	7.1
Interest-rate swaps used for hedging:		
Liabilities	(4.4)	(2.9)
Total	**1,467.9**	**2,529.5**

The movement in the allowance for impairment in respect of loans and receivables during the year was as follows:

(in million EUR)	Bad debtors	Impairment losses	Remaining balance
Opening balance	1.7	(1.3)	0.4
Changes during the year	168.6	(168.5)	0.1
Balance at 31 December 2018	**170.3**	**(169.8)**	**0.5**
Opening balance	170.3	(169.8)	0.5
Changes during the year	29.4	(29.3)	0.1
Balance at 31 December 2019	**199.6**	**(199.1)**	**0.5**

Almost all bad debtors are related to outstanding receivables linked to the regulatory levies in Germany. If the debtor goes into bankruptcy, 50Hertz Transmission is compensated by the regulator for the incurred loss.

The Group believes that the unimpaired amounts overdue by more than 30 days are still collectible, based on historical payment behaviour and extensive analysis of customer credit risk, including underlying customers' credit ratings, when available. The credit quality of trade and other receivables is assessed based on a credit policy.

IFRS 9 requires the Group to impair financial assets based on a forward-looking expected credit loss (ECL) approach.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

An impairment analysis is performed at each reporting date using a provision matrix to measure expected credit losses. The provision rates are based on days past due for all customers. No segmentation of customers is performed as all customers show similar loss patterns. Intercompany trade receivables are excluded as there is no credit risk. In addition, trade receivables connected with a pending commercial dispute are excluded to avoid double provisioning (provision for risks and charges).

The provision rates are based on the payment profiles of sales over a period of 36 months before 31 December 2018 or 31 December 2019 respectively and the corresponding historical credit losses experienced within this period. As the sales and payment profile of the Group's customers has remained very stable over the years, the Group considers historical credit losses to be a good proxy for future (expected) credit losses.

Subsequently, a loss given default is calculated as the percentage of the amount of trade receivables that is not covered by a bank guarantee.The total outstanding amount of trade receivables covered by a bank guarantee totals €30.2 million.The loss given default is multiplied by the outstanding trade receivables.

On that basis, the loss allowance as at 31 December 2019 was determined as follows for trade receivables:

31 December 2018	Not past due	0-30 days past due	31-60 days past due	61 days - 1 year	1 year - 2 years	> 2 year	Total
Expected loss rate	0.0%	1.4%	6.0%	10.8%	72.2%	100.0%	
Carrying amount - trade receivables	406.7	3.6	0.5	20.8	0.3	0.2	432.2
Loss given default	91.2%	83.3%	78.8%	78.0%	86.1%	78.0%	
Loss allowance	**0.1**	**0.1**	**0.0**	**1.7**	**0.2**	**0.2**	**2.3**

31 December 2019	Not past due	0-30 days past due	31-60 days past due	61 days - 1 year	1 year - 2 years	> 2 year	Total
Expected loss rate	0.0%	0.6%	8.2%	12.3%	67.9%	100.0%	
Carrying amount - trade receivables	465.3	16.4	1.4	3.8	0.8	0.2	488.0
Loss given default	93.9%	92.6%	93.3%	92.6%	93.0%	92.2%	
Loss allowance	**0.1**	**0.1**	**0.1**	**0.4**	**0.5**	**0.2**	**1.5**

CURRENCY RISK

The Group is not exposed to any significant currency risk, either from transactions or from exchanging foreign currencies into euro, since it has no material foreign investments or activities and less than 1% of its costs are expressed in currencies other than the euro.

LIQUIDITY RISK

Liquidity risk is the risk that the Group may be unable to meet its financial obligations. The Group limits this risk by constantly monitoring cash flows and ensuring that there are always sufficient credit-line facilities available.

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of bank loans, confirmed and unconfirmed credit facilities, commercial paper programs, etc. For medium- to long-term funding, the Group uses bonds. The maturity profile of the debt portfolio is spread over several years. The Group Treasury frequently assesses its funding resources taking into account its own credit rating and general market conditions.

Bond issuances realised in 2013, 2014, 2015, 2017, 2018 and 2019 and loan contracts signed with EIB and other banks in 2019, proves that the Group has access to different sources of funding.

(in million EUR)	Face Value	Closing balance	Expec-ted cash out-flows	6 months or less	6-12 months	1-2 years	2-5 years	> 5 years
Non-derivative financial liabilities	**8,406.0**	**8,384.0**	**(9,372.5)**	**(2,709.8)**	**(45.6)**	**(619.0)**	**(1,537.7)**	**(4,460.4)**
Unsecured bond issues	5,340.0	5,318.0	(6,212.1)	(592.5)	(41.2)	(607.6)	(1,014.6)	(3,956.2)
Unsecured financial bank loans and interest	1,076.9	1,076.9	(1,171.3)	(128.2)	(4.4)	(11.4)	(523.1)	(504.2)
Trade and other payables	1,989.1	1,989.1	(1,989.1)	(1,989.1)	0.0	0.0	0.0	0.0
Derivative financial liabilities	**n.r.**	**2.9**	**(2.9)**	**(0.3)**	**(0.3)**	**(0.6)**	**(1.7)**	**0.0**
Interest-rate swaps used for hedging	n.r.	2.9	(2.9)	(0.3)	(0.3)	(0.6)	(1.7)	0.0
Total at 31 December 2018	**8,406.0**	**8,386.9**	**(9,375.4)**	**(2,710.1)**	**(45.9)**	**(619.6)**	**(1,539.4)**	**(4,460.4)**
Non-derivative financial liabilities	**7,755.2**	**7,774.0**	**(8,588.9)**	**(1,894.7)**	**(547.2)**	**(102.3)**	**(1,580.2)**	**(4,389.5)**
Unsecured bond issues	5,340.0	5,315.7	(6,119.8)	(73.2)	(541.2)	(95.1)	(1,518.9)	(3,891.5)
Unsecured financial bank loans and interest	1,050.4	1,093.6	(1,104.3)	(531.7)	(6.0)	(7.2)	(61.3)	(498.0)
Trade and other payables	1,356.9	1,356.9	(1,356.9)	(1,356.9)	0.0	0.0	0.0	0.0
Derivative financial liabilities	**n.r.**	**4.4**	**(4.4)**	**(4.4)**	**0.0**	**0.0**	**0.0**	**0.0**
Interest-rate swaps used for hedging	n.r.	4.4	(4.4)	(4.4)	0.0	0.0	0.0	0.0
Total at 31 December 2019	**7,747.4**	**7,770.7**	**(8,585.5)**	**(1,966.3)**	**(547.2)**	**(102.3)**	**(1,580.2)**	**(4,389.5)**

Details of the used and unused back-up credit facilities are set out below:

(in million EUR)	Maturity	Available amount	Average basic interest	Amount used	Amount not used
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	75.0	35.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0,0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0,0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0,0	110.0
Confirmed credit line	08/07/2021	110.0	Euribor + 0.30%	0,0	110.0
Confirmed credit line	08/07/2021	100.0	Euribor + 0.30%	0,0	100.0
Straight Loan EGI	unlimited	2.5	Eurribor + 0.75%	0.0	2.5
Confirmed credit line	24/03/2022	750.0	Euribor + 0,275%	0.0	750.0
Confirmed credit line	unlimited	150.0	av. 1M-Euribor +0.275%	0.0	150.0
Confirmed credit line	14/12/2026	150.0	0.90%	150.0	0.0
Total		**1,702.5**		**225.0**	**1,477.5**

INTEREST-RATE RISK

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to its long-term debt obligations with floating interest rates.
The Group manages its interest rate risk by having a balanced portfolio of fixed- and variable-rate loans and borrowings. To manage this, the Group could engage in interest-rate swaps, which would entail the Group agreeing to exchange, at specified intervals, the difference between fixed- and variable-rate interest amounts calculated based on an agreed notional principal amount. These swaps are allocated to hedge underlying debt obligations. As at 31 December 2019, interest-rate swaps were outstanding to cover a nominal debt amount of € 300 million.

The table (see Note 6.13) shows the average interest rate..

SENSITIVITY ANALYSIS

Changes in interest rates will not affect the consolidated result in the short or long term as the Group operates within a regulatory framework where the consequences of fluctuations in financial expenses are mainly recovered in tariffs, except for the items which are directly recognised through OCI.

FAIR VALUE SENSITIVITY ANALYSIS FOR INTEREST RATE SWAPS

A change of 100 basis points in interest rates would have increased (decreased) other comprehensive income by the amounts shown below:

(in million EUR)	100 bp increase	100 bp decrease
Interest rate swaps - Impact in equity	7.1	(6.8)

HEDGING ACTIVITIES AND DERIVATIVES

The Group is exposed to certain risks relating to its ongoing business operations. The primary risk managed using derivative instruments is interest rate risk.

All financial derivatives entered into by the Group relate to an underlying transaction or forecast exposure, depending on the expected impact on the income statement, and if the IFRS 9 criteria are met, the Group decides on a case-by-case basis whether hedge accounting will be applied.

Derivatives not designated as hedging instruments

The Group had no derivatives not designated as hedging instruments.

Derivatives designated as hedging instruments

In 2018, the Group hedged the interest rate risk linked to the acquisition of a 20% stake in 50Hertz Transmission (Germany) for which a bridge loan was initially put in place. To cover the potential exposure to interest rate risk, the Group entered into a pre-hedge interest rate swap agreement in June 2018 to lock in market interest rates at the moment of the issuance of the € 300 million senior bond. The Group applied hedge accounting as the derivative transaction met the requirements under IFRS 9. With the settlement of the transaction in September 2018, the portion of the gain or loss on the derivative was recognised within hedging reserves and had an impact of €5.7million.

These hedging reserves are recycled into profit and loss over the lifetime of the underlying hedged instrument, i.e. the senior bond with 10-year maturity. In 2019, an amount of €0.6 million was recycled into profit and loss.

Three interest rates swaps for a total nominal value of €300 million have been concluded for the loan with Publi-Part (€42.1 million) and for loans with third parties (“Other loans” , €453.6 million) to hedge the Euribor interest rate risk on these loans. All three interest-rate swaps are designated as cash flow hedges under IFRS 9. The negative net fair value of these interest rate swaps at 31 December 2019 is €4.4 million.

CAPITAL RISK MANAGEMENT

The purpose of the Group's capital-structure management is to maintain the debt and equity ratios related to the regulated activities as close as possible to the recommended level set by the relevant regulatory frameworks.

The Company's dividend guidelines involve optimising dividend payments while bearing in mind that self-financing capacity is needed to carry out its legal mission as transmission system operator, finance future CAPEX projects and, more generally, implement the Group's strategy.

The Company offers its employees the opportunity to subscribe to capital increases that are exclusively reserved for them.

8.2. Commitments and contingencies

CAPITAL-EXPENDITURE COMMITMENT

As at 31 December 2019, the Group had a commitment of €1,558.4 million relating to the purchase contracts for the installation of property, plant and equipment for further grid extensions.

OTHER CONTINGENCIES AND COMMITMENTS

As at 31 December 2019, the Group had a commitment of €182.2 million relating to purchase contracts for general expenses, maintenance and repair costs.

Having received approval from the Walloon government and from the CREG, on 22 June 2015 Elia entered into an agreement with Solar Chest for the sale of Walloon green certificates with a total value of €275 million, of which €221 million was settled in 2015 and a total of €48 million was settled in 2016. Solar Chest's mission is to buy, hold and sell Walloon green certificates for periods of five, six and seven years. In accordance with legislation, Solar Chest realised in September 2019 an auctioning and 615.400 green certifictes were sold to different marketparticipants, resulting in a revenue of € 40 million. At the end of each period (30 June 2020, 30 June 2021 and 30 June 2022 respectively), any unsold certificates will be bought back by Elia. CREG confirmed and guaranteed to Elia that at the end of each reservation period, the cost and any expense for repurchase of non-marketable certificates may be recovered fully through the tariffs for levies, and as a consequence the potential repurchase by Elia will have no impact on the Company's financial performance.

In September 2017, Elia sold 2.8 million green certificates to the Walloon Region (i.e. the Walloon Agency for Air and Climate, or AwAC) leading to a net cash inflow of €176.2 million. This was a result of the Decree of 29 June 2017 amending the Decree of 12 April 2011 relating to the organisation of the regional electricity market and the Decree of 5 March 2008 relating to the creation of the Walloon Agency for Air and Climate. The green certificates transferred by Elia can be gradually resold by AwAC as from 2022, taking into account the market conditions that exist for green certificates at that time. The legislation also envisages the green certificates being held by the AwAC for a period of up to nine years, after which Elia is required to buy back any unsold certificates. These repurchase commitments will have no impact on Elia's financial performance, as the cost and expense for the repurchase will be fully recovered through the tariffs for levies.
In November 2018, Elia sold another €0.7 million in green certificates to the Walloon Region (i.e. the Walloon Agency for Air and Climate, or AwAC) which resulted in a net cash inflow of €43.3 million. Similarly as for the transaction in September 2017, Elia might be required to buy back a portion of the certificates sold as from 2023. Any repurchase will be covered through the tariffs for levies. There have been no transaction with the AwAC in 2019.

8.3. Related parties

CONTROLLING ENTITIES

The core shareholder of Elia Group is Publi-T and remained unchanged from 2018. Other than the yearly dividend payment and the capital increase (see note 6.12.1) , no transactions occurred with the core shareholder in 2019.

The shareholder structure of the Group can be found in the activity report, pg.151 and note 7.1.

TRANSACTIONS WITH KEY MANAGEMENT PERSONNEL

Key management personnel include Elia's Board of Directors and Elia's Management Committee. Both Elia's Board of Directors and Elia's Management Committee have a significant influence across the entire Elia Group.

At 50Hertz Transmission (Germany), key management personnel include Eurogrid International NV's Board of Directors, who are responsible for monitoring the activities of 50Hertz Transmission (Germany). Key management personnel also include the Board of Management of 50Hertz Transmission and the Supervisory Board, which was established in the German segment.

The members of Elia's Board of Directors are not employees of the Group. The remuneration for their mandate is detailed in the Corporate Governance Statement forming part of this annual report (see remuneration report pg.127-128). Eurogrid International NV's Board of Directors are not remunerated.

The other members of key management personnel are hired as employees. The components of their remuneration are detailed below (i.e. excluding the directors who are not employees).

The names of the key management personnel are included in the corporate governance report, pg. 114-115.

Key management personnel did not receive stock options, special loans or other advances from the Group during the year.

(in million EUR)	2019	2018
Short-term employee benefits	**5.1**	**4.8**
Basic remuneration	3.0	4.1
Variable remuneration	2.2	0.7
Post-employment benefits	**0.7**	**0.7**
Other variable remuneration	**2.1**	**1.2**
Total gross remuneration	**8.0**	**6.7**
Number of persons (in units)	13	12
Average gross remuneration per person	0.6	0.6
Number of shares (in units)	**19,216**	**24,331**

TRANSACTIONS WITH JOINT VENTURES AND ASSOCIATES

Transactions between the Company and subsidiaries that are related parties were eliminated during consolidation and therefore are not recognised in this note.

Transactions with joint ventures and associates (as defined in section 7.1.) were not eliminated, and therefore details of transactions with other related parties are shown below:

(in million EUR)	2019	2018
Transactions with joint ventures and associates	**1.4**	**6.5**
Sales of goods	2.2	2.5
Purchases of goods	(4.1)	(2.5)
Interest and similar revenue	3.2	6.5
Outstanding balances with joint ventures and associates	**0.6**	**196.6**
Long-term debtors	0.0	174.7
Trade debtors	0.7	10.5
Trade debts	(0.1)	(0.2)
Accruals and deferred income	0.0	(11.6)

Prior to the acquisition of the additional 20% stake in 50Hertz Transmission (Germany), all transactions with the companies making up the German segment were disclosed in this Note. As the additional 20% stake gave the Elia Group control over this segment, the entities within the 50Hertz Transmission (Germany) segment are now subsidiaries and are thus no longer included.

In June 2019, Nemo Link Ltd. incorporated the loan with its shareholders, National Grid and Elia System Operator, into its share capital. The outstanding long-term receivables and related accrued interests are therefore reflected in the book value of the stake in Nemo Link Ltd.. See Note 6.5 for more info regarding this transaction. See also Note 8.2 which details the guarantees issued by Elia System Operator for its joint venture Nemo Link Ltd.

TRANSACTIONS WITH SHAREHOLDERS

The Group also has an outstanding loan with its shareholder PubliPart for an amount of €42.1 million. We refer to Note 6.13 for more details.

TRANSACTIONS WITH RELATED PARTIES
In addition, Elia's Management Committee also assessed whether transactions occurred with entities in which they or members of the Board of Directors exercise a significant influence (e.g. positions as CEO, CFO, vice-presidents of the Management Committee, etc.).

There were some significant transactions in 2019 with various distribution system operators (Sibelga, Eandis), which are customers of Elia Group. All these transactions took place in the normal course of Elia's business activities.The total value of realised sales was €4.6 million and related to regulated sales contracts with a predefined price by the regulator. The total value of expenses amounted to €2.3 million. As at 31 December 2019, there was an outstanding trade-receivable position of €0.3 million and an outstanding trade-debt position of €0.5 million.

8.4. Subsequent events

Covid-19 crisis

In the context of the Covid-19 crisis, Elia, as a TSO, has an important societal role. Elia closely works with the authorities to ensure the continuation of its activities, keeping the lights on and providing business continuity for all its customers.

At the date of the approval of the annual accounts and the annual report by the Board of Directors, it is too early to provide an accurate assessment of the impact of Covid-19 on the Group's operations, the financial results and the liquidity position in 2020.

In general, most part of Elia's cash flows and financial performance are ensured though a regulated framework. This prevents that Covid-19 has a major impact on Elia. Potential drops in revenues could temporally affect the liquidity needs, but these are being closely monitored. Moreover, such drops in revenue are in general 100% recoverable through future tariffs. Therefore, Elia currently does not anticipate a material impact on the 2020 financial performance. However, other impacts, for example in terms of delays in the execution of investment projects, are likely, although to date these delays have not been evaluated as having a significant impact on profitability. For 2019, as the impairment test of the goodwill in section 6.3 of the annual report is based on long term forecasted figures and cash flows, Elia currently considers that the potential consequences of this crisis would not lead to other conclusions.

8.5. Miscellaneous

Impact of the United Kingdom leaving the European Union

The Group has conducted an analysis of the potential impact on the Group's financial statements in the event of a hard or a soft Brexit. The most significant risk identified related to its joint venture Nemo Link Ltd.

The Group's analysis concluded that Nemo Link Ltd is prepared for both a soft and a hard Brexit scenario. A soft Brexit would see the UK remain in the Internal Energy Market (IEM), whereas a hard Brexit would see it leave the IEM.

The Group has successfully completed a consultation resulting in the approval by both regulators of the IEM access rules for the event that a soft Brexit occurs. Similarly, non-IEM access rules have been sent out for consultation for the event that a hard Brexit occurs. Although an approved Brexit deal was concluded between UK and the EU, effective 31 January 2020, a hard Brexit may still occur if the two parties do not reach an agreement by the end of 2020.

From the all feedback obtained and the analysis performed, the overall conclusion is that Nemo Link would remain operational under both a soft and a hard Brexit. Profitability on the investment would also remain largely unaffected due to the cap and floor mechanism (see Note 9.3), which provides certainty regarding the company's cash flows over a 25-year span.

Other than the risk identified above, the Group expects Brexit to have a very limited effect on the consolidated financial statements.

8.6. Services provided by the auditors

The General Meeting of Shareholders appointed as joint auditors KPMG Bedrijfsrevisoren BCVBA (represented by Mr. Alexis Palm) and Ernst & Young Bedrijfsrevisoren BCVBA (represented by Mr. Patrick Rottiers) for the audit of the consolidated financial statements of Elia System Operator NV/SA and the audit of the statutory financial statements of Elia System Operator NV/SA, Elia Asset NV/SA, Elia Engineering NV/SA, Elia Grid International NV/SA and Eurogrid International NV/SA.

50Hertz Transmission (Germany) appointed Ernst & Young GmbH for the audit of the consolidated financial statements of Eurogrid GmbH and the statutory financial statements of 50Hertz Transmission GmbH and 50Hertz Offshore GmbH. KPMG GmbH was appointed for the audit of Elia Grid International GmbH.

The following table sets out the fees of the joint auditors and their associates in connection with services delivered with respect to the financial year 2018:

in EUR	Belgium	Germany	Total
Statutory audit	306.434	281.913	588.347
Audit related	291.621	8.410	300.031
Income tax	4.260	0	4.260
Indirect tax	2.953	0	2.953
Other advisory	182.236	8.410	190.646
Total	**787.504**	**298.733**	**1.086.237**

9. REGULATORY FRAMEWORK AND TARIFFS

9.1. Regulatory framework in Belgium

9.1.1. Federal legislation

The Electricity Act, which forms the general basis, lays down the core principles of the regulatory framework governing Elia's activities as a transmission system operator in Belgium.

This Act was heavily amended on 8 January 2012 by the transposition at federal level of the 3rd package of European directives. These changes ensure that the Electricity Act:
- sets out the unbundling of transmission operations from generation, distribution and supply activities;
- sets out in greater detail the rules for operating and accessing the transmission system;
- redefines the transmission system operator's legal mission, mainly by expanding it to the offshore areas over which Belgium has jurisdiction; and
- strengthens the role of the regulatory authority, particularly as regards determining transmission tariffs.

A number of royal decrees provide more details of the regulatory framework applying to the transmission system operator, particularly the Royal Decree on the Federal Grid Code. Similarly, the decisions passed by the Commission for Electricity and Gas Regulation (CREG) supplement these provisions to form the regulatory framework within which Elia operates at federal level.

9.1.2. Regional legislation

Belgium's three regions are primarily responsible for the local transmission of electricity through grids with a voltage of 70 kV or less on their respective territory. The regional regulators are in charge of the non-tariff aspects of local transmission-system regulation, while setting and monitoring tariffs falls under federal jurisdiction.

The Flemish Region, the Brussels-Capital Region and the Walloon Region have also transposed into their legislative framework the provisions of the 3rd European package applying to them. The regional decrees have been supplemented by various other rules and regulations on matters such as public service obligations, renewable energy and authorisation procedures for suppliers.

9.1.3. Regulatory agencies

As required by EU law, the Belgian electricity market is monitored and controlled by independent regulators.

FEDERAL REGULATOR
The CREG is the federal regulator, and its powers with regard to Elia include:
- approving the standardised terms in the three main contracts used by the company at the federal level: the connection contract, the access contract and the ARP contract;
- approving the capacity allocation system at the borders between Belgium and neighbouring countries;
- approving the appointment of the independent members of the Board of Directors;
- determining the tariff methodology to be observed by the grid operator when calculating the various tariffs applying to grid users;
- certifying that the grid operator actually owns the infrastructure it operates and that it meets the regulatory requirements for independence from generators and suppliers.

REGIONAL REGULATORS
Operation of electricity grids with voltages of 70 kV and less falls under the jurisdiction of the respective regional regulators. Each of them may require any operator (including Elia if it operates such grids) to abide by any specific provision of the regional electricity rules on pain of administrative fines or other sanctions. However, the regional regulators do not have the power to set tariffs for electricity transmission systems, as tariff setting falls within the exclusive remit of the CREG for these grids.

9.1.4. Tariff setting

TARIFF REGULATIONS
On 18 December 2014, the CREG adopted a decree setting out the calculation methods used to establish tariffs applying to users of electricity grids performing a transmission function. Elia used this methodology as a basis for its tariff proposal for 2016-2019, which was submitted on 30 June 2015. This tariff proposal, adjusted following the discussions between Elia and the CREG in the course of the second half of 2015, was approved by the regulator on 3 December 2015.

TARIFF REGULATIONS APPLYING IN BELGIUM
As the operator of grids performing a transmission function (covering the transmission grid and the local and regional transmission grids in Belgium), Elia makes most of its income from the regulated tariffs charged for use of these grids (tariff income), which are approved in advance by CREG. As of 1 January 2008, the prevailing tariff regulation mechanisms have provided for approved tariffs being set for four-year periods, barring specific circumstances.

The tariff mechanism is based on amounts recognised in accordance with Belgian accounting regulations (BE GAAP). The tariffs are based on budgeted costs minus a number of sources of non-tariff income. These costs are then divided based on an estimate of the volumes of electricity taken off the grid and, in the case of some costs, based on estimated volumes of electricity injected into the grid, in accordance with the terms of the tariff methodology drawn up by the CREG.

The costs taken into account include the forecast value of the authorised remuneration of the invested capital, an estimate of the amounts allocated to Elia in the form of performance incentives and the predicted values of various cost categories. These costs are subdivided into three groups: controllable costs, for which Elia is offered a financial incentive to improve its efficiency levels; non-controllable costs, over which Elia has no influence and for which the deviations from the budget are completely allocated to the calculation of future tariffs; and influenceable costs, to which a hybrid rule applies (see the information provided below with regard to controllable and non-controllable costs and income and influenceable costs).

FAIR REMUNERATION

Fair remuneration is the return on capital invested in the grid. It is based on the average annual value of the regulatory asset base (RAB), which is calculated annually, taking into account new investments, divestments, depreciations and changes in working capital.

In this context, fair remuneration is calculated based on a formula that allocates a different return to equity accounting for up to 33% of the RAB (Part A) and to equity exceeding this ratio (Part B).
This formula is as follows:

Fair remuneration = A + B where:

- A = [33% x average RAB of the year n x [(OLO n) + (beta x risk premium)] x illiquidity premium]; plus
- B = [(S – 33%) x average RAB x (OLO n + 70 base points)]; where:
- OLO n is the interest rate for Belgian 10-year linear bonds for the year in question;
- S = consolidated capital and reserves/average RAB, in accordance with Belgian accounting standards (BE GAAP);
- beta (β) is calculated based on Elia share prices, compared with the BEL 20 index, over a three-year period; the value of beta cannot be lower than 0.53:
- the risk premium is fixed at 3.5%;
- the illiquidity premium is fixed at 1.10.

PART A

The rate of remuneration (in %) as set by the CREG for year 'n' is equal to the sum of the risk-free rate, i.e. the average rate of Belgian 10-year linear bonds and a premium for share-market risk, weighted using the applicable beta factor.

The reference ratio of 33% is applied to Elia's average regulatory asset base (RAB) to calculate Elia's reference equity.

By means of this ratio, the CREG encourages the proportional share between equity and regulatory asset base to be as close as possible to 33%. As a consequence, Part B (applicable to the reference equity exceeding 33% of the RAB) is remunerated at a lower rate.

PART B

If the actual proportional share of Elia's actual equity exceeds the reference ratio, the surplus amount is balanced out with a rate of remuneration calculated as follows: [(OLO n + 70 base points)].

The Electricity Act also provides for the possibility of the regulator setting higher remuneration rates for capital that is invested to finance projects of national or European interest (see 'Other incentives' below).

Non-controllable costs and revenues
This category of costs and revenues over which Elia has no direct control is not subject to the incentive mechanisms offered by CREG, and is allocated in its entirety to the calculation of the revenue to be covered by tariffs. The tariffs are set on the basis of the forecast values of these costs, and the difference from the actual values is allocated ex post to the tariff calculation for the subsequent period.

The main non-controllable costs are: depreciation of property, plant and equipment, ancillary services (except for the reservation costs of ancillary services excluding black start, which are referred to as 'influenceable costs'), costs related to line relocation imposed by a public authority, and taxes. They also include financial charges to which the embedded debt principle applies. As a consequence, all actual and reasonable financial costs related to debt financing are included in the tariffs.
Some revenues are also non-controllable. These include cross-border congestion revenues and financial revenues.

Controllable costs and revenues
The costs and revenues over which Elia has direct control are subject to incentive regulation mechanisms, meaning that Elia is encouraged to reduce these costs and increase these revenues. Therefore, Elia's efficiency efforts (and conversely any inefficiency) are divided equally between Elia profits and future tariffs (50% each).

Influenceable costs
The reservation costs of ancillary services, except for black start, are categorised as 'influenceable costs', meaning that Elia's profits are partially affected (to the tune of 15%) by increases and reductions in these costs, within certain limits (ranging from -€2 million to €6 million).

Other incentives

The tariff predefined by the regulator includes, besides the fair remuneration, all the incentives listed below. In case Elia would not perform on these incentives as set by the regulator, the amount of these incentives attributable to Elia will be decreased. The impact is reflected in the deferred revenues which will generate future tariff decreases – see description settlement mechanism below.

- *Market integration:* This incentive consists of three components: (i) enhancement of Belgium's import capacity; (ii) increase in social welfare generated by regional market coupling: both elements only have a positive impact on the net profit, with a maximum of €6 million for import capacity and a maximum of €11 million for social welfare (pre-tax). (iii) the profit (dividends and capital gains) resulting from Elia's financial participation in various other companies contributing to market integration (CASC, Coreso, HGRT, APX-ENDEX) - This is shared between Elia (40%) and future tariffs reductions (40%).

- *Investment program:* This incentive is linked to three objectives: (i) Elia's ex ante/ex post justification of the costs involved in each investment (this objective contributes to €2.5 million to pre-tax profits); (ii) adherence to the planned dates for commissioning of the Stevin, Brabo, ALEGrO and fourth phase-shifting transformer (PST) projects (€1 million pre-tax per project commissioned on time); and (iii) production of a list of selected strategic projects, especially investments aimed at consolidating European integration (the "mark-up' incentive). The mark-up is calculated based on the actual cumulative amounts spent, whereby it must however be borne in mind that there are annual and project caps on amounts invested and that the incentive is calculated on the basis of the actual amounts invested. The mark-up applies in full when the OLO rate is 0.5% or less. It is reduced if the OLO rate is greater than 0.5% and decreases to 0 for an OLO rate of 2.16% or more. It should be noted that 10% of the mark-up amount obtained for each project must be repaid if the project is not completed by the stipulated deadlines or if the availability levels provided by the project after commissioning are unsatisfactory.

- *Continuity of supply*: Elia is entitled to an incentive calculated based on the Average Interruption Time (AIT) measured in the course of a year. The allocated sum is capped at €2 million (pre-tax).

- *Innovation:* This incentive is calculated based on the total costs incurred in obtaining innovation subsidies, up to a maximum sum corresponding to 50% of the amount of subsidies received or €1 million (pre-tax).

- *Discretionary incentive:* Each year, CREG sets the objectives Elia is expected to meet to receive this incentive. These mainly relate to the implementation of projects and mechanisms aimed at balancing supply and demand on the electricity market. This incentive contributes to the profit to the tune of up to €2 million (pre-tax).

Regulatory framework for the Modular Offshore Grid

ON 29 March 2018, the CREG approved the tariff methodology to include specific rules applicable to the investment in the Modular Offshore Grid. The main features are (i) a specific premium risk to be applied to this investment, (ii) the depreciation rate applicable to MOG assets, (iii) certain costs specific to the MOG being classified differently to the costs for onshore activities, (iv) the setting of the level of the costs will be defined based on the characteristics of the MOG assets and finally (v) dedicated incentives relative to management and operation of the offshore assets.

Regulatory deferral account: deviations from budgeted values

On a yearly basis, the actual volumes of electricity transmitted may differ from the forecast volumes. If the transmitted volumes are higher (or lower) than those forecast, the deviation is booked to an accrual account during the year in which it occurs . These deviations from budgeted values (a regulatory debt or a regulatory receivable) are accumulated, and will be included in the the tariff setting for the subsequent tariff period.Regardless of deviations between the forecast parameters for tariffs setting (Fair remuneration, Non-controllable elements, Controllable elements, Influencable costs, Incentive components, Cost and revenue allocation between regulated and non-regulated activities) and effective incurred costs or revenues related to these parameters, the CREG takes yearly a final decision as to whether the incurred costs/revenue are deemed reasonable to be borne by the tariffs. This decision may result in the rejection of elements incurred and, in the event that such elements incurred are rejected, the amount will not be taken into account for the setting of tariffs for the next period. Despite the fact that Elia can ask for a judicial review of any such decision, if this judicial review were to be unsuccessful, a rejection may well have an overall negative impact Elia's financials.

Cost and revenue allocation between regulated and non-regulated activities

The tariff methodology for 2016-2019 features a mechanism enabling Elia to develop activities outside the Belgian regulated perimeter and whose costs are not covered by grid tariffs in Belgium. This methodology establishes a mechanism to ensure that the impact on Belgian grid users of Elia's financial participation in other companies which the CREG does not consider part of the RAB (such as stakes in regulated or non-regulated activities outside Belgium, for example its shareholding in 50Hertz or EGI) is neutral.

Public service obligations

In its role as TSO, Elia is subject to various public service obligations imposed by Government and/or regulation mechanisms. Public authorities/regulation mechanisms identify public service obligations in various fields (such as promotion of renewable energy, green certificates , strategic reserves, social support, fees for the use of the public domain, offshore liability) to be executed by TSOs. Costs incurred by grid operators in respect of those obligations are fully covered by tariff 'levies' as approved by the regulator. The amounts outstanding are reported as levies (see notes 6.9 for other receivables and 6.17 for other payables).

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9.2. Regulatory framework in Germany

9.2.1. Relevant legislation

The German legal framework is laid down in various pieces of legislation. The key law is the German Energy Act (*Energiewirtschaftsgesetz* – EnWG), which defines the overall legal framework for the gas and electricity supply industry in Germany. The EnWG is supported by a number of laws, ordinances and regulatory decisions, which provide detailed rules on the current system of incentive regulation, accounting methods and grid access arrangements, including:

- the Ordinance on Electricity Network Tariffs (*Verordnung über die Entgelte für den Zugang zu Elektrizitätsversorgungsnetzen* (*Stromnetzentgeltverordnung* – StromNEV)), which establishes, inter alia, principles and methods for the grid-tariff calculations and other obligations applying to grid operators;

- the Ordinance on Electricity Network Access (*Verordnung über den Zugang zu Elektrizitätsversorgungsnetzen (Stromnetzzugangsverordnung* – StromNZV), which, inter alia, sets out further detail of how to grant access to the transmission systems (and other types of grids) by way of establishing the balancing amount system (*Bilanzkreissystem*), the scheduling of electricity deliveries, control energy and other general obligations, e.g. congestion management (*Engpassmanagement*), publication obligations, metering, minimum requirements for various types of contracts and the duty of certain system operators to manage the balancing amount system for renewable energy;

- the Ordinance on Incentive Regulation (*Verordnung über die Anreizregulierung der Energieversorgungsnetze (Anreizregulierungsverordnung* – ARegV)), which sets out the basic rules for incentive regulation for TSOs and other system operators (as set out in more detail below). It also describes in general terms how to benchmark efficiency, which costs are included in the efficiency benchmarking, how to determine inefficiency and how this translates into yearly targets for efficiency growth.

9.2.2. Regulatory agencies in Germany

The regulatory agencies for the energy sector in Germany are the Bundesnetzagentur (BNetzA, or Federal Network Agency) in Bonn for grids to which over 100,000 grid users are directly or indirectly connected and the specific regulatory authorities in the various federal states for grids to which fewer than 100,000 grid users are directly or indirectly connected. The regulatory agencies are, inter alia, in charge of ensuring non-discriminatory third-party access to grids and monitoring the grid-use tariffs levied by the TSOs. 50Hertz Transmission and 50Hertz Offshore are subject to the authority of the Federal Network Agency.

9.2.3. Tariff setting in Germany

The current regulation mechanism is established in Germany by the ARegV. Under the ARegV, grid tariffs are defined to generate a pre-defined 'revenue cap' as determined by the Federal Network Agency for each TSO and for each regulatory period. The revenue cap is principally based on the costs of a base year, and is fixed for the entire regulatory period, except when it is adjusted to account for specific cases provided for in the ARegV. The grid operators are not allowed to retain revenue in excess of their individually determined revenue cap. Each regulatory period lasts five years, with the third regulatory period starting on 1 January 2019 and ending on 31 December 2023. Tariffs are public and cannot be the subject of negotiations with customers. Only certain customers (under certain set circumstances laid down in the relevant legislation) are allowed to agree to individual tariffs under Article 19 of the StromNEV (for example, in the case of sole use of a grid asset). The Federal Network Agency has to approve such individual tariffs.

For the purposes of the revenue cap, the costs incurred by a grid operator fall into two categories as follows:

- Permanently non-influenceable costs (PNIC): These costs are fully integrated into the 'revenue cap' and are fully recovered by the grid tariffs, albeit usually with a two-year time lag. They include return on equity, imputed trade tax, cost of debt, depreciation and operational costs (currently at a fixed rate of 0.8% of the capitalised investment costs of the respective onshore investments) for what are called investment measures. The cost of debt related to investment measures is currently capped at the lower value of the actual cost of debt and the cost of debt as calculated in accordance with published Federal Network Agency guidelines. Since 2012, the costs associated with these investment measures have been based on forecast values. The differences between the forecast values and the actual values are reflected in the deferral account from settlement mechanism. In addition, PNIC include costs relating to ancillary services, grid losses and redispatch costs, as well as European initiatives and income from auctions. These costs and income are included in the revenue cap based on a procedural regulation mechanism set by the Federal Network Agency in accordance with Article 11(2) of the ARegV (FSV). The regulation process relating to ancillary services and grid losses costs gives the system operator an incentive to outperform the planned costs through bonus/malus mechanisms. Since the revision of the ARegV in 2016, also costs for the curtailment of renewable energy sources to relieve grid congestion are based on forecast values. Moreover, costs resulting from European projects of common interest (PCI) where a cost contribution of Germany has been decided can be included as PNIC, albeit with a two-year time lag.

- Temporary non-influenceable costs (TNIC) and influenceable costs (IC): These costs include return on equity, depreciation, cost of debt, imputed trade tax and other operational expenses and are subject to an incentive mechanism as set by the Federal Network Agency, which features an efficiency factor (only applicable to IC), a productivity improvement factor and an inflation factor (applicable to both TNIC and IC) over a five-year period. In addition, the current incentive mechanism provides for the use of a quality factor, but the criteria and implementation mechanism for this factor for TSOs are yet to be defined by the Federal Network Agency. The various defined factors give the TSOs the medium-term objective of eliminating what are deemed to be inefficient costs. As regards the cost of debt, the permitted cost of debt related to influenceable costs needs to be shown to be marketable;

As for return on equity, the relevant laws and regulations set out the provisions relating to the permitted return on equity, which is included in the TNIC/IC for assets belonging to the regulatory asset base and the PNIC for assets approved in investment measures. In 2016, the BNetzA determined the return on equity applicable for the third and current regulatory period (2019-2023); the values were significantly down from the second regulatory period, namely to 5.12% (instead of 7.14%) for investments made before 2006 and 6.91% (instead of 9.05%) for investments made since 2016. The return on equity is calculated before corporate tax and after imputed trade tax.

Separately from the revenue cap, 50Hertz is compensated for costs incurred related to its renewable energy obligations, including EEG and CHP/KWKG obligations and offshore liabilities. For this purpose, various surcharges (levies) have been implemented that are subject to specific regulatory mechanisms aimed at a balanced treatment of costs and income.

CHANGES IN TARIFF REGULATIONS

In 2016, a revision of the ARegV entered into force implementing various relevant changes, especially regarding the regulatory system for distribution system operators. However, TSOs are also affected as the revised ARegV changes several aspects relevant to PNIC such as the methodology for determining replacement portions in new investment measures (the status quo will be preserved for investment measures that had already been approved or applied for before entering into force of the revision), the consideration of costs from the curtailment of renewable energy sources based on forecast values, and the consideration of PCI costs. Moreover, the revised ARegV substantiates the methodologies that can be applied to measure the individual efficiency of the four German TSOs, only allowing an international benchmark or a relative reference grid analysis to be used for this purpose.

By 31 December 2019, 50Hertz had obtained approval for 68 of the 86 active applications for approval of investment measures submitted since 2008. As of 31 December 2018, 34 applications had reached the end of their term.

Based on the total requested investment measure volume of approx. € 10.9 billion, the approved investment measure volume for the same date amounts to € 8.6 billion.

TARIFFS

Grid access tariffs were calculated based on the respective revenue cap and published on 11 December 2019 for 2020. They have increased by an average of 7% from 2019. One key driver for lowering the tariffs was the removal of the offshore costs from the revenue cap mechanism into a new offshore tariff (see section below). Furthermore, 50Hertz has actively and successfully advanced with its grid extension projects; the commissioning of new lines made it possible to lower costs for redispatch and for curtailment of renewables and thus offset for the persistently high costs of grid expansion and allow a decrease in tariffs.

In recent years, the grid access tariffs of the four German TSOs have developed differently. This has mainly been driven by the different volumes of renewable energies installed in the control areas, leading to significantly higher tariffs in those control areas with higher levels of renewable energies. In July 2017, the Act for Modernisation of Grid Tariffs (*Netzentgeltmodernisierungsgesetz* – NEMoG) came into force. The NEMoG envisages the gradual harmonisation of the grid access tariffs of the four German TSOs as of 2019, culminating in uniform transmission tariffs in 2023. Moreover, the NEMoG eliminates ‘avoided grid fees' (vNNE) for volatile RES generation and creates a new system for offshore grid connections, shifting the related costs from the revenue cap tariffs to an offshore revenue based on a fully pass through mechanism from 2019.

9.3. Regulatory framework for the Nemo Link interconnector

The key features of the NemoLink Ltd. regulatory framework can be summarised as follows:

- A specific regulatory framework will be applicable to the Nemo Link interconnector from the date of operation. The framework is part of the new tariff methodology issued on 18 December 2014 by the CREG. The cap and floor regime is a revenue-based regime with a term of 25 years. The national regulators of the UK and Belgium (OFGEM and the CREG respectively) will determine the levels of the cap and floor ex-ante and these will remain largely fixed for the duration of the regime. Consequently, investors will have certainty about the regulatory framework during the lifetime of the interconnector.

- Once the interconnector becomes operational, the cap and floor regime will start. Every five years the regulators will assess the cumulative interconnector revenues (net of any market-related costs) over the period against the cumulative cap and floor levels to determine whether the cap or floor is triggered. Any revenue earned above the cap would be returned to the TSO in the UK (National Electricity Transmission System Operator or 'NETSO') and to the TSO in Belgium on a 50/50 basis. The TSOs would then reduce the grid charges for grid users in their respective countries. If revenue falls below the floor then the interconnector owners would be compensated by the TSOs. The TSOs will in turn recover the costs through grid charges. National Grid performs the NETSO role in the UK and the Issuer, the Belgian TSO, in Belgium.

- Each five-year period will be considered separately. Cap and floor adjustments in one period will not affect the adjustments for future periods, and total revenue earned in one period will not be taken into account in future periods.

- The high-level tariff design is as follows:

Regime length	25 years
Cap and floor levels	Levels are set at the start of the regime and remain fixed in real terms for 25 years from the start of operation. Based on applying mechanistic parameters to cost-efficiency: a cost of debt benchmark will be applied to costs to deliver the floor, and an equity return benchmark to deliver the cap.
Assessment period (assessing whether interconnector revenues are above/below the cap/floor)	Every five years, with within-period adjustments if needed and justified by the operator. Within-period adjustments will let operators recover revenue during the assessment period if revenue is below the floor (or above the cap) but will still be subject to true-up at the end of the five-year assessment period.
Mechanism	If revenue is between the cap and floor, no adjustment is made. Revenue above the cap is returned to end customers and any shortfall of revenue below the floor requires payment from grid users (via grid charges).

The cap and floor levels for Nemo Link will be decided when final project costs are known and will then be set for the length of the regime.

JOINT AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

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1930 Zaventem
Belgium

EY Bedrijfsrevisoren BV
De Kleetlaan 2
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Belgium

Joint auditors' report to the general meeting of Elia Group NV/SA for the year ended 31 December 2019

As required by law, we report to you as joint statutory auditors of Elia Group NV/SA (the "Company") and its subsidiaries (together the "Group"). This report includes our opinion on the consolidated statement of financial position as at 31 December 2019, the consolidated statement of profit or loss, the consolidated statement of profit or loss and comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year ended 31 December 2019 and the notes (all elements together the "Consolidated Financial Statements") and includes as well our report on other legal and regulatory requirements. These two reports are considered as one report and are inseparable.

We have been appointed as joint statutory auditors by the shareholders meeting of 16 May 2017, in accordance with the proposition by the Board of Directors following recommendation of the Audit Committee and on recommendation of the workers' council. Our mandate expires at the shareholders meeting that will deliberate on the annual accounts for the year ended 31 December 2019. The audit of the Consolidated Financial Statements of the Group was performed during respectively 19 consecutive years for KPMG Bedrijfsrevisoren CVBA and 18 consecutive years for EY Bedrijfsrevisoren BV.

Report on the audit of the Consolidated Financial Statements

Unqualified opinion

We have audited the Consolidated Financial Statements of Elia Group NV/SA, which consists of the consolidated statement of the financial position as at 31 December 2019, the consolidated statement of profit or loss, the consolidated statement of profit or loss and comprehensive income, the consolidated statement of changes in equity, and the consolidated statement of cash flows for the year ended 31 December 2019, and the notes, which show a consolidated balance sheet total of € 13,893.4 million and of which the consolidated income statement shows a profit for the year of € 309.1 million.

In our opinion the Consolidated Financial Statements of the Group give a true and fair view of the consolidated net equity and financial position as at 31 December 2019, as well as its consolidated results and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards as adopted by the European Union ("IFRS") and with applicable legal and regulatory requirements in Belgium.

Basis for the unqualified opinion

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the Consolidated Financial Statements" section of our report.

We have complied with all ethical requirements that are relevant to our audit of the Consolidated Financial Statements in Belgium, including those with respect to independence.

We have obtained from the Board of Directors and the officials of the Company the explanations and information necessary for the performance of our audit and we believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter – subsequent events – Covid-19

We draw attention to note 8.4 of the consolidated financial statements, which describes the possible effects of the Covid-19 crisis on the operations and financial situation of the Group. Our opinion is not modified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the Consolidated Financial Statements of the current reporting period.

These matters were addressed in the context of our audit of the Consolidated Financial Statements as a whole and in forming our opinion thereon, and consequently we do not provide a separate opinion on these matters.

Calculation of net result

Description

As described in the notes 3.3.17. 'Regulatory deferral accounts', 6.20 'Accruals and deferred income', 9.1.4

'Tariff Setting' and 9.2.3 'Tariff Setting in Germany' of the Consolidated Financial Statements, the net result of the Belgian and the German segments is determined by applying calculation methods set respectively by the Belgian federal regulator, the Commission for Electricity and Gas Regulation (the "CREG") and the German federal regulator, the Federal Network Agency (the "BNetzA") (together the "Tariff Mechanisms").

Those tariff mechanisms are based on calculation methods that are complex and require the use of parameters (average interest rate on governmental bonds, the Beta of Elia's share, return on equity, ...), accounting data of the regulated activities (the Regulated Asset Base, the regulated equity, capital expenditure ("CAPEX"), subsidies received) and external operating data (such as hourly import capacity, consumer and producer surpluses).

Both Tariff Mechanisms make a distinction between income and expenses based on the control that the Group has over the expenses and income in each segment. The first type are the non-controllable elements for which deviations are fully passed on to future tariffs. The second type are the controllable elements that the Group can control, and for which under-and overspending is (partly) attributable to the shareholders.

Therefore, the calculation methods of the Group's net result are complex and require judgement from management, more particularly related to the use of correct accounting data, operating data, and parameters imposed by the regulators. The use of incorrect accounting and operating data, and deviations in used assumptions, can have a material impact on the Group's net result.

How the matter was addressed in our audit

Amongst others, we have performed the following procedures:

- Assessing the design and evaluating the operating effectiveness of key controls relating to the calculation of the net result, including those related to (i) the completeness and accuracy of the underlying data used in the calculation and (ii) management review controls;
- Evaluating the adequate and consistent classification of income and expenses by nature (controllable and non-controllable) as described in the Tariff Mechanisms;
- Performing independent mathematical recalculations of the regulated results based on underlying internal documentation and external information, and taking into account the formulas as described in the Tariff Mechanisms;
- Reading and evaluating the accounting implications of communications and decisions taken by the CREG and the BNetzA;
- Assessing the adequacy of notes 3.3.17, 6.20, 9.1.4 and 9.2.3 of the Consolidated Financial Statements.

Capitalization of property, plant and equipment

Description

Given the current evolution in the electricity environment towards green energy production, Elia Group NV/SA has very significant investment projects ongoing to connect these new productions sites on Elia Group NV/SA's network. The timely and on-budget progress of these investment projects is one of the key performance goals for management as set by the Board of Directors. The progress of these network projects is equally a key performance indicator for investors as a key driver of their return on investment is the maintenance and expansion of the network. It is also an important quantitative and qualitative measure for the regulators. This is further explained and evidenced in Note 6.1 'PPE' and in Note 4 'Segment reporting' of the Consolidated Financial Statements.

These assets are classified as Property, Plant and Equipment ("PP&E"), with a total capital expenditure of € 1,286.3 million in 2019 and a net book value of € 9,445.6 million as at 31 December 2019 or 68.0% of total balance sheet.

Elia Group NV/SA's accounting policies describe that all maintenance expenses are considered to be operating expenses ("OPEX") and all new project or replacement investments are considered capital expenditure "CAPEX". As network projects can include both maintenance and investments, the classification as either OPEX or CAPEX requires judgement from management. Given this judgement, the importance of the amount of PP&E on the total balance sheet, and its relevance to the users of the financial statements as well as the prominence in Elia Group NV/SA's communication in press releases and in investor presentations on the progress on new projects, this matter is considered a key audit matter.

How the matter was addressed in our audit

Amongst others, we have performed the following procedures:

- Assessing the design and evaluating the operating effectiveness of key controls, including management review controls, over (i) the appropriate authorization of capitalization, (ii) the compliance of capitalization criteria used with the accounting policies and (iii) the correct classification of expenditure as CAPEX or OPEX;
- Assessing relevant IT application controls with the support of our IT specialists;
- Performing substantive analytical procedures on CAPEX and OPEX by comparing current year figures with the budgeted figures as approved by the regulator at the level of asset classes and projects;
- Testing a selection of additions to PP&E, including those under construction, and assessing whether the

expenditure met the criteria for capitalization under IFRS as adopted by the European Union and the Group's accounting policies and whether the CAPEX were allocated to the correct projects, including the assessment of management judgement in case of a project including both maintenance and investments;

- Assessing the adequacy of note 4 and 6.1 of the Consolidated Financial Statements.

Responsibilities of the Board of Directors for the preparation of the Consolidated Financial Statements

The Board of Directors is responsible for the preparation of the Consolidated Financial Statements that give a true and fair view in accordance with IFRS and with applicable legal and regulatory requirements in Belgium as well as internal controls relevant to the preparation of the Consolidated Financial Statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the Consolidated Financial Statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, and provide, if applicable, information on matters impacting going concern, The Board of Directors should prepare the financial statements using the going concern basis of accounting, unless the Board of Directors either intends to liquidate the Company or to cease business operations, or has no realistic alternative but to do so.

Our responsibilities for the audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the Consolidated Financial Statements are free from material misstatement, whether due to fraud or error, to express an opinion on these Consolidated Financial Statements based on our audit. Reasonable assurance is a high level of assurance, but not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered to be material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Consolidated Financial Statements.

As part of an audit, in accordance with ISAs, we exercise professional judgment and we maintain professional scepticism throughout the audit. We also perform the following tasks:

- Identification and assessment of the risks of material misstatement of the Consolidated Financial Statements, whether due to fraud or error, the planning and execution of audit procedures to respond to these risks and obtain audit evidence which is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting material misstatements is larger when these misstatements are due to fraud, since fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtaining insight in the system of internal controls that are relevant for the audit and with the objective to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- Evaluating the selected and applied accounting policies, and evaluating the reasonability of the accounting estimates and related disclosures made by the Board of Directors as well as the underlying information given by the Board of Directors;
- Conclude on the appropriateness of Board of Director's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to event or conditions that may cast significant doubt on the Company or Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the Consolidated Financial Statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on audit evidence obtained up to the date of the auditor's report. However, future events or conditions may cause the Company or Group to cease to continue as a going concern;
- Evaluating the overall presentation, structure and content of the Consolidated Financial Statements, and of whether these financial statements reflect the underlying transactions and events in a true and fair view; and
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee within the Board of Directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We provide the Audit Committee within the Board of Directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated to the Audit Committee within the Board of Directors, we determine those matters that were of most significance in the audit of the Consolidated Financial Statements of the current period

and are therefore the key audit matters. We describe these matters in our report, unless the law or regulations prohibit this.

Report on other legal and regulatory requirements

Responsibilities of the Board of Directors

The Board of Directors is responsible for the preparation and the content of the Board of Director's report and other information included in the annual report.

Responsibilities of the joint auditors

In the context of our mandate and in accordance with the additional standard to the ISAs applicable in Belgium, it is our responsibility to verify, in all material respects, the Board of Director's report and other information included in the annual report, as well as to report on these matters.

Aspects relating to Board of Director's report and other information included in the annual report

In our opinion, based on specific work performed on the Board of Director's report, the Board of Director's report is consistent with the Consolidated Financial Statements for the same financial year and has been prepared in accordance with article 3:32 of the Code of companies and associations (former article 119 of the Belgian Company code).

In the context of our audit of the Consolidated Financial Statements, we are also responsible to consider whether, based on the information that we became aware of during the performance of our audit, the Board of Director's report and other information included in the annual report, being:

- Key figures 2019 (pg 152) included in the Activity report
- Management discussion (pg 153-164) included in the Activity report

contain material misstatements, or information that is incorrectly stated or misleading. In the context of the procedures carried out, we did not identify any material misstatements that we have to report to you. In addition, we do not express any form of reasonable assurance regarding the individual elements included in the annual report.

The non-financial information required by article 3:32 §2 of the Code of companies and associations is included in the chapter Sustainability reporting of the annual report. The Group has prepared this non-financial information based on the Global Reporting Initiative Standards ("GRI"). In accordance with art 3:80 §1, 1st paragraph, 5° of the Companies' and Associations' Code, we do not comment on whether this non-financial information has been prepared in accordance with the Global Reporting Initiative Standards mentioned in the board of directors' annual report on the consolidated financial statements.

Independence matters

We, and our respective networks, have not performed any services that are not compatible with the audit of the Consolidated Financial Statements and we have remained independent of the Company and the Group during the course of our mandate.

The fees for additional services that are compatible with the audit of the Consolidated Financial Statements intended by article 3:65 of the Code of companies and associations have been correctly disclosed and detailed in the disclosures to the Consolidated Financial Statements.

Other communications

- This report is consistent with our additional report to the Audit Committee as specified in article 11 of the regulation (EU) nr. 537/2014.

Brussels, 14 April 2020

The joint statutory auditors

EY Bedrijfsrevisoren BV
represented by

Patrick Rottiers
Partner*
*Acting on behalf of a BV

KPMG Bedrijfsrevisoren CVBA
represented by

Alexis Palm
Partner

Alexis Palm (Authentication)
Digitally signed by Alexis Palm (Authentication)
Date: 2020.04.14 13:59:50 +02'00'

INFORMATION ABOUT THE PARENT COMPANY

Extracts from the statutory annual accounts of Elia System Operator NV/SA, drawn up in accordance with Belgian accounting standards, are given hereafter in abbreviated form.

Pursuant to Belgian company legislation, the full financial statements, the annual report and the joint auditors' report are filed with the National Bank of Belgium.

These documents will also be published on the Elia website _and can be obtained on request from Elia System Operator NV/SA, Boulevard de l'Empereur 20, 1000 Brussels, Belgium. The joint auditors issued an unqualified opinion.

Statement of financial position after distribution of profits

ASSETS (in million EUR)	2019	2018
FIXED ASSETS	3,312.5	4,690.3
Financial fixed assets	3,312.5	4,690.3
Affiliated companies	3,312.5	4,560.9
Participating interests	3,312.5	4,560.9
Other enterprises linked by participating interests	0.0	129.4
Participating interests	0.0	129.2
Other participating interests	0.0	0.2
CURRENT ASSETS	161.4	2,397.2
Amounts receivable after more than one year	0.0	174.9
Trade receivables	0.0	0.0
Other amounts receivable	0.0	174.9
Inventories and contracts in progress	2.5	6.9
Contracts in progress	2.5	6.9
Amounts receivable within one year	45.3	2,052.0
Trade debtors	3.2	221.4
Other amounts receivable	42.1	1,830.6
Investments	0.0	0.0
Cash at bank and in hand	108.7	143.1
Deferred charges and accrued income	4.9	20.4
TOTAL ASSETS	3,473.9	7,087.5

EQUITY AND LIABILITIES (in million EUR)	2019	2018
CAPITAL AND RESERVES	2,310,9	1,868.3
Capital	1,712.3	1,521.8
Issued capital	1,712.3	1,521.8
Share premium account	259.1	14.3
Reserves	175.4	175.4
Legal reserve	173.0	173.0
Untaxed reserve	2.4	2.4
Profit carried forward	164.0	156.7
PROVISIONS, DEFERRED TAXES	0.0	0.4
Provisions for risks and charges	0.0	0.4
Other risks and charges	0.0	0.4
LIABILITIES	1,163.0	5,218.8
Amounts payable after one year	998.3	3,648.1
Financial debts	998.3	3,648.1
Subordinated debentures	699.9	699.9
Unsubordinated debentures	298.4	2,142.3
Credit institutions	0.0	310.0
Other loans	0.0	495.8
Amounts payable within one year	161.9	875.1
Current portion of amounts payable after more than one year	0.0	500.0
Financial debts	0.0	50.0
Credit institutions	0.0	50.0
Other loans	0.0	8.3
Trade debts	2.2	252.3
Suppliers	2.2	242.9
Advances received on contracts in progress	3.5	9.4
Amounts payable regarding taxes, remuneration and social security costs	1.2	9.2
Taxes	0.5	0.6
Remuneration and social security	0.6	8.6
Other amounts payable	155,0	156.7
Accrued charges and deferred income	2.8	594.3
TOTAL EQUITY AND LIABILITIES	3,473.9	7,087.5

Income statement

(in million EUR)	2019	2018
OPERATING INCOME	751.5	922.7
Turnover	743.3	908.0
Increase/(decrease) in inventories of finished goods, works and contracts in progress	(1.4)	2.0
Other operating income	9.6	12.7
OPERATING CHARGES	(646.9)	(840.0)
Services and other goods	(608.7)	(798.7)
Remuneration, social security costs and pensions	(36.0)	(41.2)
Amounts written off stocks, contracts in progress and trade debtors: appropriations/(write-backs)	(2.1)	(0.1)
Provisions for liabilities and charges: appropriations/(uses and write-backs)	0.0	0.0
Other operating charges	(0.0)	(0.0)
OPERATING PROFIT	104.6	82.7
Financial income	**118.6**	**221.9**
Income from financial fixed assets	111.7	212.3
Income from current assets	6.6	9.6
Non-recurring financial income	0.0	0.0
Financial charges	**(97.8)**	**(102.5)**
Debt charges	(97.2)	(93.8)
Other financial charges	(0.6)	(8.7)
Non-recurring financial charges	0.0	0.0
PROFIT FOR THE PERIOD BEFORE TAXES	125.4	202.2
Income taxes	**(2.2)**	**(0.6)**
Income taxes	(2.2)	(0.6)
PROFIT FOR THE PERIOD	123.3	201.6
Transfer to untaxed reserves	(0.0)	(0.7)
PROFIT FOR THE PERIOD AVAILABLE FOR APPROPRIATION	123.3	200.9

Financial terms or Alternative Performance Measures

The Annual Report contains certain financial performance measures that are not defined by IFRS and are used by management to assess the **financial and operational performance of the Group**. The main alternative performance measures used by the Group are explained and/or reconciled with our IFRS measures (Consolidated Financial Statements) in this document.

The following APM's appearing in the Annual Report are explained in this appendix:

- Adjusted items
- Adjusted EBIT
- Adjusted net profit
- Capex (Capital Expenditures)
- EBIT
- EBITDA
- EBITDA / gross interest
- Equity attributable to the owners of the company
- Financial Leverage
- Free cash flow
- Net debt / EBITDA
- Net finance costs
- Net financial debt
- Regulatory Asset Base (RAB)
- Return on Equity (adj) (%)
- Share capital and reserves per share

Adjusted items

Adjusted items are those items that are considered by management not to relate to items in the ordinary course of activities of the Group. They are presented separately as they are important for the understanding of users of the consolidated financial statements of the performance of the Group and this compared to the returns defined in the regulatory frameworks applicable to the Group and its subsidiaries. Adjusted items relate to:

- Income and expenses resulting from a single material transaction not linked to current business activities (e.g. change in control in a subsidiary)
- changes to the measurement of contingent considerations in the context of business combinations;
- Restructuring costs linked to the corporate reorganisation of the Group (i.e. reorganisation project to isolate and ring-fence the regulated activities of Elia in Belgium from the non-regulated activities and regulated activities outside Belgium
- Regulatory settlements linked to previous regulatory period in Germany

Prior to 2019, the adjusted items included the offshore commissioning effect and energy bonus at the level of 50Hertz. This is no longer presented separately as an Adjusted item in 2019 but directly included in the adjusted EBIT

Adjusted EBIT

Adjusted EBIT is defined as EBIT excluding the adjusted items.
EBIT (Earnings Before Interest and Taxes) = adjusted result from operating activities, which is used to compare the operational performance of the Group over the years.

The adjusted EBIT is calculated as total revenue less costs of raw materials, consumables and goods for resale, services and other goods, personnel expenses and pensions, depreciations, amortizations and impairments, changes in provisions and other operating expense and plus the share of equity accounted investees – net and plus or minus adjusted items

Adjusted net profit

Adjusted net profit is defined as net profit excluding the adjusted items.The adjusted net profit is used to compare the performance of the Group over the years.

CAPEX (Capital Expenditures)

CAPEX (Capital Expenditures) = Acquisitions property, plant and equipment and intangible assets minus proceeds from sale of such items. Capital expenditures, or CAPEX, are investments realised by the Group to acquire, upgrade, and maintain physical assets (such as property, buildings, an industrial plant, technology, or equipment) and intangible assets. CAPEX is an important metric for the Group as it affects its Regulatory Asset Base (RAB) that serves as basis for its regulatory remuneration.

EBIT

EBIT (Earnings Before Interest and Taxes) = result from operating activities, which is used for the operational performance of the Group. The EBIT is calculated as total revenue less costs of raw materials, consumables and goods for resale, services and other goods, personnel expenses and pensions, depreciations, amortizations and impairments, changes in provision and other operating expense and plus the share of equity accounted investees.

EBITDA

EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisations) = results from operating activities plus depreciations, amortization and impairment plus changes in provisions plus share of profit of equity accounted investees. EBITDA is used as a measure for the operational performance of the Group, thereby extracting the effect of depreciations, amortization and changes in provisions of the Group. EBITDA excludes the cost of capital investments like property, plant, and equipment.

EBITDA / Gross interest

EBITDA / Gross interest = EBITDA (see definition above) divided by the pre-tax interest charges. The EBITDA-to-interest coverage ratio expresses to what extent the operational performance enables to pay off annual interest expenses.

Equity attributable to the owners of the company

Equity attributable to ordinary shareholders and hybrid security holders, but excluding non-controlling interests.

Financial Leverage

Financial Leverage (D/E) = net financial debt divided by shareholders' equity (where both metrics include non-controlling interests and hybrid instruments). The Financial Leverage provides an indication of the extent to which the Group uses financial debt to finance its operations relative to equity financing. It is hence considered by investors as an indicator of solvency.

Free cash flow

Free cash flow = Cash flows from operating activities minus cash flows from investment activities. Free cash flow provides an indication of the cash flows generated by the Group.

Net debt / EBITDA

Net debt / EBITDA = Net financial debt divided by EBITDA (see definition stated above).The net debt / EBITDA ratio provides an indication of the number of years it would take for the Group to pay back its interest-bearing debt net of cash based on its operational performance.

Net finance costs

Represents the net financial result (finance costs minus finance income) of the company.

Net financial debt

Net Financial Debt = Non-current and current interest-bearing loans and borrowings (incl. lease liability under IFRS 16) minus cash and cash equivalents. Net financial debt is an indicator of the amount of interest-bearing debt of the Group that would remain if readily available cash or cash instruments were used to repay existing debt.

Regulatory Asset Base (RAB)

Regulatory asset base (RAB) is a regulatory concept and an important driver to determine the return on the invested capital in the TSO through regulatory schemes. The RAB is determined as follows: RAB_i (initial RAB determined by regulator at a certain point in time) and evolves with new investments, depreciations, divestments and changes in working capital on a yearly basis using the local gaap accounting principles applicable in the regulatory schemes. In Belgium when setting the initial RAB, a certain amount of revaluation value (i.e. goodwill) was taken into account which evolves from year to year based on divestments and/or depreciations.

Return on Equity (adj.) (%)

Return on Equity (RoE adj.) = Net profit attributable to ordinary shareholders divided by equity attributable to ordinary shareholders. The return on equity is adjusted to exclude the accounting impact of hybrid securities in IFRS (i.e. exclude the hybrid security from equity and consider the interest costs as part of comprehensive income). The RoE adj. provides an indication of the ability of the Group to generate profits relative to its invested equity.

Share capital and reserves per share

Equity attributable to owners of the Company - Equity attributable to ordinary shares as a percentage of the number of shares outstanding