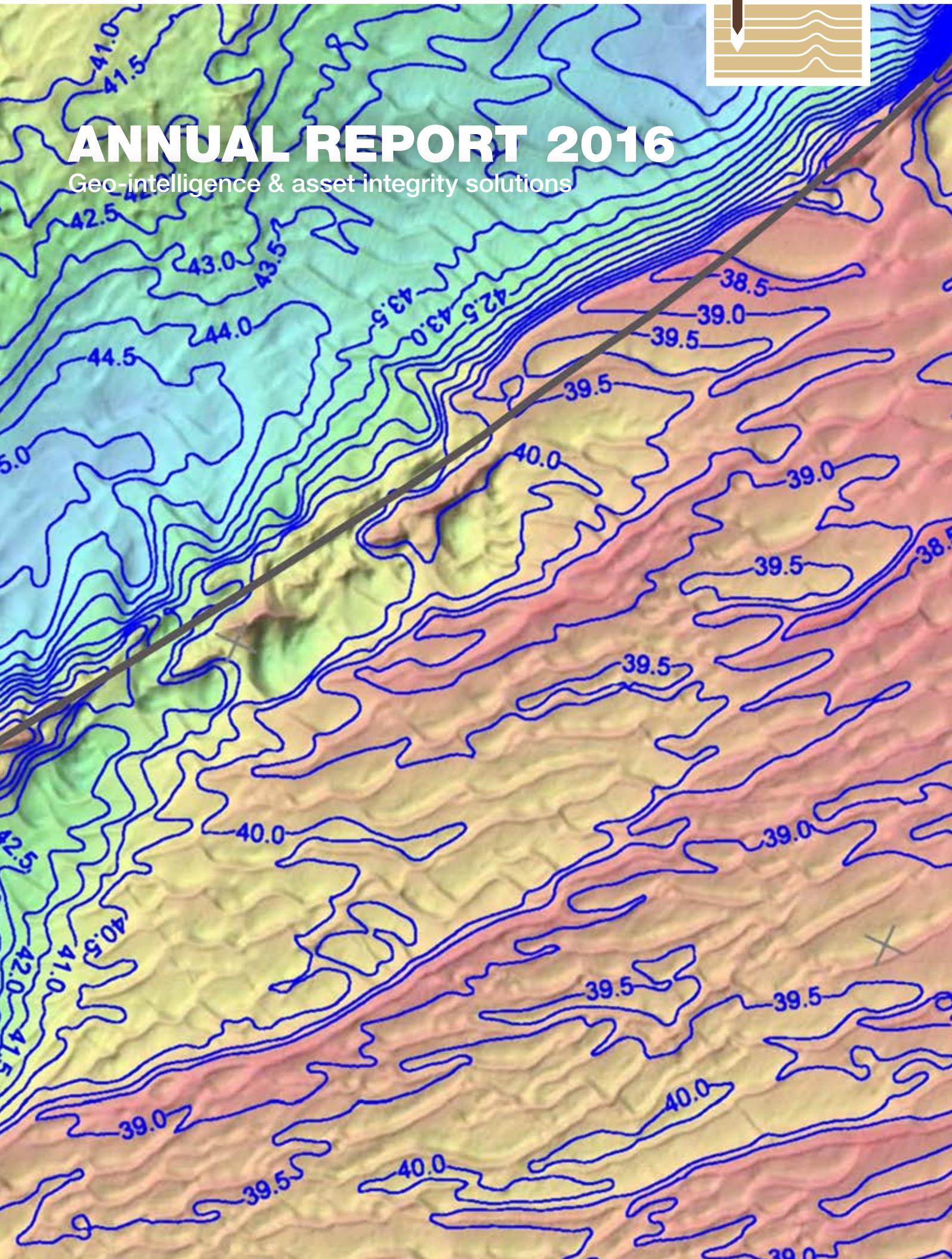
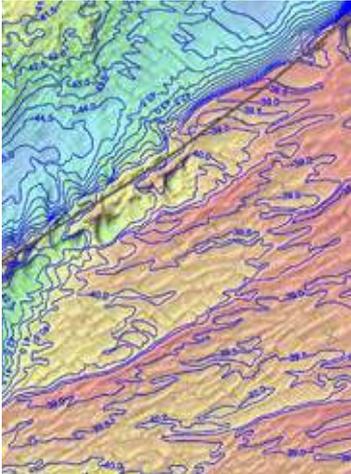




# ANNUAL REPORT 2016

Geo-intelligence & asset integrity solutions





### On the cover of this report

The cover shows part of an underwater chart of one of our client's pipelines and surrounding sea floor. In this example of our asset integrity services, we map seabed topography and the exact location and condition of our clients' assets. By analysing the acquired data and providing related advice, we assist our clients with the optimal operation and maintenance of their large facilities and infrastructure – like for example this pipeline.

### Throughout this report

Throughout this report we showcase recent examples of site characterisation and asset integrity projects undertaken for our diverse client base, throughout the world, in both land and marine environments.

Fugro's site characterisation services – the determination of ground and environmental conditions of building sites – are applied by our clients in the planning and development phases of large building and infrastructure projects in support of safe, efficient and sustainable development. Fugro also provides these services to support the exploration and development of natural resources.

Fugro's asset integrity solutions – inspection and monitoring of the condition of existing constructions and infrastructure and provision of related maintenance services – are applied in the operational and production phases of our client's assets, to reduce operational risk and optimise utilisation and longevity.

By providing these solutions, Fugro contributes to a safe and liveable world.

### Cautionary statement regarding forward-looking statements

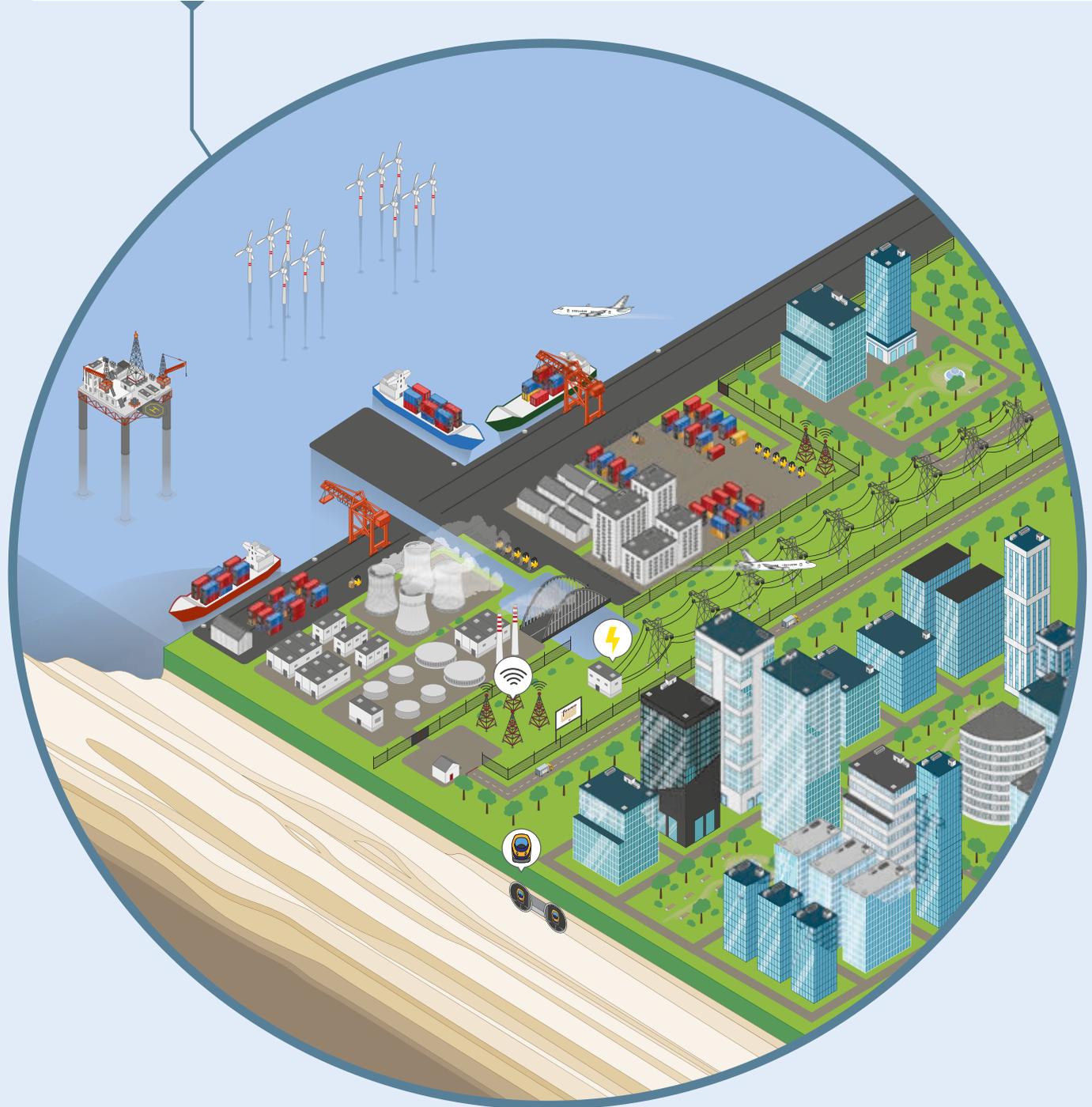
This annual report may contain forward-looking statements. Forward-looking statements are statements that are not historical facts, including (but not limited to) statements expressing or implying Fugro's beliefs, expectations, intentions, forecasts, estimates or predictions (and the assumptions underlying them). Forward-looking statements necessarily involve risks and uncertainties. The actual future results and situations may therefore differ materially from those expressed or implied in any forward-looking statements. Such differences may be caused by various factors including, but not limited to, developments in the oil and gas industry and related markets, currency risks and unexpected operational setbacks. Any forward-looking statements contained in this annual report are based on information currently available to Fugro's management. Fugro assumes no obligation to make a public announcement in each case where there are changes in information related to, or if there are otherwise changes or developments in respect of, the forward-looking statements in this annual report.

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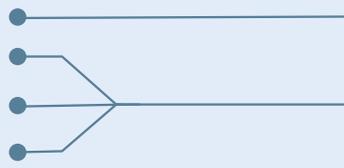
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# FUGRO AT A GLANCE

## Our clients' assets



- Plan & design
- Construction
- Operation & maintenance
- Decommission



## Asset life cycle

# We deliver geo-intelligence and asset integrity solutions



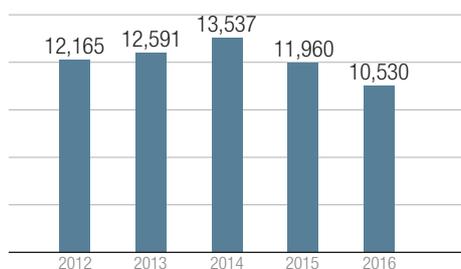
## Our business lines

## KEY FIGURES

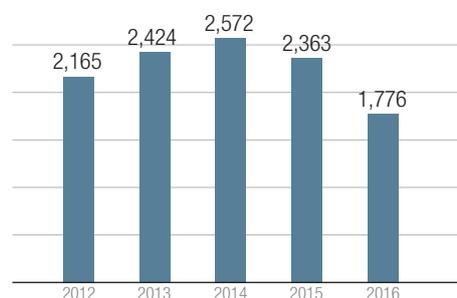
(x EUR million)	2016	2015
Revenue	1,775.9	2,363.0
- reported growth	(24.8%)	(8.1%)
- currency comparable growth*	(22.7%)	(17.3%)
EBITDA (excluding exceptional items)*	189.5	353.0
EBIT (excluding exceptional items)*	8.5	113.1
EBIT	(218.7)	(249.9)
EBIT margin (excluding exceptional items)*	0.5%	4.8%
EBIT margin*	(12.3%)	(10.6%)
Net result	(308.9)	(372.5)
Backlog next 12 months*	1,169.6	1,323.4
- reported growth	(11.6%)	(16.0%)
- currency comparable growth	(11.6%)	(20.4%)
Cash flow from operating activities after investments	186.1	314.7
Capex	92.5	160.5
Capital employed*	1,341.2	1,689.7
Return on capital employed*	(0.7%)	3.9%
Net debt/EBITDA*	1.1	1.6
Earnings per share (x EUR 1)	(3.82)	(4.60)
Dividend per share for year under review (x EUR 1)	0.00	0.00
Number of employees (at year-end)	10,530	11,960
Lost time injury frequency (x million hours)	0.67	0.45

\* Refer to the glossary (page 190) for an overview of definitions.

### Number of employees



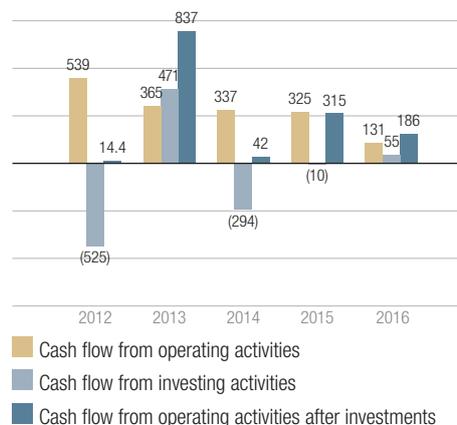
### Revenue



### EBIT (margin) excluding exceptional items



### Cash flow



The term 'shares' as used in this annual report should, with respect to ordinary shares issued by Fugro N.V., be construed to include certificates of shares (also referred to as 'share certificates' or 'depository receipts' for shares) issued by Stichting Administratiekantoor Fugro (also referred to as 'Foundation Trust Office' or 'Trust Office'), unless the context otherwise requires or unless it is clear from the context that this is not the case. In this Annual Report, Fugro N.V. is also referred to as 'the company' or 'Fugro'. Fugro N.V. and its subsidiary companies are together referred to as 'the Group'.

## MESSAGE FROM THE CEO



The downturn in our largest market, oil and gas services, continued unabated in 2016, with negative impact on work volumes and prices. We adapted our capacity and cost base, further strengthened our market positions and reorganised to serve clients better and more efficiently, while achieving satisfactory results in our building & infrastructure and power related activities. As a result, further supported by disposals, we again generated substantial cash flow from operating activities after investments and significantly reduced net debt.

Dear reader,

The oil and gas services market, from which we generate the majority of our revenue, declined sharply as our clients further reduced their spending in a continuing low oil price environment. Oil and gas company spending declined by around 25%, a similar decline as in 2015. This negatively impacted work volumes and pricing.

Cash generation continues to be our number one priority. We further strengthened market share, adapted our resource and cost base in line with demand, held back on investments and improved working capital. As a result cash flow from operations after investments was positive, also excluding the proceeds from asset disposals, and net debt was significantly reduced. To further strengthen the balance sheet, we successfully placed subordinated convertible bonds in October.

Even though we reduced our capacity in line with demand, this could not offset the price erosion in a challenging, oversupplied market. As a result EBIT (excluding exceptional items) declined and we ended 2016 just above breakeven.

Towards the end of the year the then main shareholder Boskalis significantly reduced its stake.

Operating responsibly is key to our long term success. Working safely is a priority in this regard. Sadly, we had to report a fatality in 2016, and we experienced a drop in safety performance, which we will address vigorously in 2017.

For our oil and gas services market we anticipate a further decline in our clients' spending for 2017, but less severe than in 2015 and 2016. This view is supported by gradual stabilisation of our backlog during the second half of 2016.

### MEASURES

In the second quarter of 2014, at the start of the downturn in the oil and gas market, Fugro initiated a programme of measures to reduce cost and to improve profitability and cash flow. We continued to implement cost reduction measures during 2016, also taking into account that we are likely dealing with a 'lower for longer' oil and gas services market.

Headcount was further reduced by 1,430 people (12% of total personnel) and the vessel fleet by 5. Capex expenditure was curtailed from EUR 161 million in 2015 to

EUR 93 million. We also managed to reduce working capital by reducing days revenue outstanding to 92 versus 102 at the end of 2015.

The positive cash flow from operating activities after investments resulted in a significant reduction of net debt from EUR 535 million to EUR 351 million. In addition, we supported our balance sheet by the placement of EUR 190 million subordinated convertible bonds. The proceeds were fully used for early repayment on the United States private placement loans. As the related bond amount and interest costs are excluded from the covenant ratios, this has resulted in additional headroom, in addition to reduced interest expense and increased financial flexibility.

## OUR ROLE IN SOCIETY

Our purpose is to be a long term sustainable company that contributes to a safe and liveable world.

Population growth and increasing wealth drive the positive long term outlook for our building & infrastructure, power, oil & gas and mining markets. This provides a solid foundation on which we can grow in a sustainable, responsible manner and continue to create value for all our stakeholders.

For Fugro, key elements to operating responsibly over the long term are:

- Operating from a solid financial base and generating adequate returns.
- Providing services that support sustainable development of the built environment and natural resources.
- Working safely and to high standards.
- Working with well trained, motivated, diverse and predominantly local employees.
- Operating with integrity.
- Building and leveraging our knowledge base.
- Minimising our environmental footprint.

## STRATEGY

In 2015 we announced that during 2016 we would align the organisation to improve client focus and efficiency and better leverage our technical capabilities and market positions. In the early phases of the life cycle of their assets and natural resource developments, clients now routinely seek integrated geo-intelligence based site characterisation services rather than separate services. We are seeing a similar development for asset integrity services in the later phases.

To more effectively provide these solutions, we decided to regroup the geotechnical, survey and subsea services activities into Marine and Land divisions, with each division having two business lines: Site Characterisation and Asset Integrity. This allows us to better leverage synergies between the services we provide, and, most importantly, provide a superior integrated service to our clients.

In 2016, we were not successful with implementing the planned portfolio changes due to the difficult oil and gas services market. In particular we halted the planned divestment of the Asia Pacific subsea services business to Shelf Subsea. Based on a review of our portfolio in light of the new business lines and divisions, we decided to integrate the subsea inspection, repair and maintenance services with other survey activities to become the core of the new Asset Integrity business line within the Marine division. For the installation and construction related activities, which do not fit our asset integrity solutions strategy, we will continue to pursue opportunities for partnership or divestment. Furthermore, we have decided to retain the Fugro Synergy and fully utilise the vessel for geotechnical operations instead of also supporting well services work.

In order to address the changing market, Fugro has reduced the number of divisions, and as a consequence has decided to adjust the size of the Board of Management accordingly. It has therefore been decided that Steve Thomson will not be nominated for reappointment at the annual general meeting in May 2017. On behalf of the Board of Management and all his colleagues, I want to thank Steve for his many contributions to building and shaping Fugro. Steve joined Fugro through an acquisition in 2000, joined the Executive Committee in 2006, and served the last 4 years as member of the Board of Management and Director of the Subsea Services and Geoscience divisions. We wish him all the best in pursuing his interests and career outside of Fugro.

In 2016 we have seen our investments in innovation pay off with the successful launch of a range of new innovative and proprietary solutions for marine and land survey as well as geotechnical applications and nodal seabed seismic data acquisition systems.

We will continue to pursue a better balance between the markets we serve by, over time, increasing revenues from markets other than oil and gas. This strategy is supported by continued rapid population growth, massive urbanisation in coastal areas and the energy transition. Sustainable development will require huge investments in infrastructure,

renewable power, water management and minerals; all areas where Fugro can provide its solutions. At the same time, we will continue to benefit for a long time from our activities in oil and gas. Global energy demand is of such a magnitude that the growth of renewables is, according to most predictions, not even able to cover energy demand growth in the medium term. Hence, energy from fossil fuels will continue to dominate for years to come.

### PRIORITIES FOR 2017

During the first half of 2017, the market for offshore related oil and gas services is expected to show a further significant decline. Towards the latter part of the year it is expected to bottom out as oil and gas companies move from a cost savings mode to cautious preparations for new investments. This is based on a more positive outlook on the oil market as the process of working excess supply out of the market has begun. This is caused by falling production as a result of years of underinvestment, supply discipline by OPEC and still increasing demand. In addition, significant price reductions and efficiency gains are being achieved throughout the supply chain. This makes projects, including offshore, economically feasible at significantly lower oil price levels. This is expected to spur project approvals.

Today, the overcapacity in the oil services market is still significant. Hence we are assuming a 'lower for longer' scenario and will continue to take measures as needed until market capacity comes into balance and prices start to improve.

In terms of strategy, we took a major step forward in 2016 with our move to a more client centric, effective organisation. In 2017 we will complete this transformation in order to reap the benefits in full. Further, we will put more emphasis on the next strategic phase, which is to create a platform for growth in our building & infrastructure, power and mining markets. Our objective is to develop a more balanced portfolio of activities over time, making us less dependent on the oil and gas services market.

Successful implementation of our strategy is the key to the long term, sustainable development of Fugro, which requires that we operate responsibly, from the perspective of all our stakeholders. In this report we take another step forward with improved reporting on key non-financial topics and responsibilities that are important to Fugro and our stakeholders. A key focus area for 2017 is to improve safety performance.

The challenging market circumstances that Fugro has been experiencing during the past three years have put a lot of pressure on everybody within the company. On behalf of the Board of Management I want to thank all Fugro colleagues for their dedication and perseverance. Even in this market, we have made significant progress in strengthening Team Fugro. No doubt 2017 will bring new opportunities to continue to build Fugro into an ever better company that contributes to a safe and liveable world.



Paul van Riel  
Chairman of the Board of Management  
Chief Executive Officer

## PROFILE

Fugro is the world's leading, independent provider of geo-intelligence and asset integrity solutions. We accumulate geo-intelligence by acquiring and analysing data on topography and the subsurface, soil composition, meteorological and environmental conditions, and by providing related advice. With our geo-intelligence and asset integrity solutions we support the safe, efficient and sustainable development and operation of large facilities and infrastructure and the exploration and development of natural resources. We work on land and in marine environments around the globe from a network of offices in around 60 countries.

### CONTRIBUTING TO A SAFE AND LIVEABLE WORLD

The world's population is increasing at a rapid rate and everyone aspires to at least reasonable living standards. This results in a continued growth of the built environment and demand for natural resources.

Most of the growth will take place in large urban centres increasing the need for smarter cities and industrial installations. It also increases the need for infrastructure for transport, trade, power, water and communications. New development is complemented by extending the life time of existing buildings and infrastructure. Urban development is taking place mostly on or near the coast where the majority of the world's population lives. This is happening in an environment of climate change and the very areas subject to most growth are also increasingly vulnerable to natural disasters. In particular we will need to protect low lying coastal areas. To maintain a safe and liveable world in the face of strong population and urban growth, sustainable development is a necessity.

### Fugro's services



Population growth and improving living standards drive up demand for energy, mineral resources and water. Exploration, development and production of these resources needs take place in a responsible manner. The impact of climate change must be mitigated and air pollution reduced which is driving the transition to renewables. This transition is underway but given the massive need for energy will take decades to accomplish and energy from fossil fuels will dominate in the meantime.

Our purpose is to contribute to a safe and liveable world by providing geo-intelligence and asset integrity solutions to support the sustainable development and management of the built environment and natural resources.

## OUR SERVICES

All of Fugro's services and solutions are based on geo-intelligence derived by acquiring bespoke data and providing analysis and advisory services:

- Acquisition: collection of spatially referenced data on topography and the subsurface, the subsurface, soil composition, meteorological, oceanographic and environmental conditions.
- Analytics: organisation of acquired data and adding value through testing, spatial referencing, processing, interpretation, management and hosting.
- Advice: provision of customised consulting services covering a wide spectrum of geo-engineering and asset integrity disciplines including foundation design, earthquake analysis, slope and wall stability, and the condition of installations and infrastructure.

To support providing asset integrity solutions, supplemental data and information on assets and their condition is acquired and combined with relevant geo-intelligence. Increasingly we provide tightly integrated services based on remote and automated solutions.

Our acquisition, analytics and advisory expertise is provided throughout the asset life-cycle of large and complex built assets: from planning, sustainable building and management to decommissioning. Similarly, Fugro provides these services for the exploration and development of natural resources.

In the early phases of the life cycle of their assets, clients now routinely seek integrated geo-intelligence based solutions to characterise the sites of potential large buildings and infrastructure. Geo-intelligence is also required in the exploration and production phases of natural resources.

Our asset integrity solutions are applied once building and development gets underway and during operation and maintenance through to decommissioning. In particular offshore, asset integrity solutions can be broad in scope, driven by the cost benefit of using a single vessel to provide a range of solutions from gathering of geo-intelligence to inspection, repair and maintenance of assets.

We serve clients in a range of markets both in land and marine environments supported from a global network of offices located in around 60 countries.

## OUR VALUES

### Client focus

We pro-actively seek to understand our client's needs. By closely understanding and delivering on the clients' requirements, we build win-win relationships. As an independent service provider, we have no further interest in our clients' projects and can therefore assure we provide our services on an impartial and confidential basis.

### Delivery excellence

We strive to deliver results safely, on time and within budget, thereby meeting or exceeding client requirements. We offer standardised, innovative and effective solutions.

### Team Fugro

We believe that our people make the difference and we recognise the immense strength of teamwork. We trust each other and promote open, constructive debate and feedback. Information is shared, internally and externally.

### Good citizenship

Regardless of background, gender, religion, political orientation or position, we treat people with integrity and respect. We put safety first, by understanding the risks associated with our work, are trained in safety requirements and work accordingly. We aim to be a good corporate citizen in the communities in which we work, minimising our impact on the environment. Each of us is responsible for learning about and adhering to the laws and regulations applicable to our work.

### OUR ORGANISATION AND RESOURCES

Fugro N.V. is a public limited liability company managed by the Board of Management under supervision of an independent Supervisory Board. In 2016, Fugro's activities were managed within four divisions: Geotechnical, Survey, Subsea Services and Geoscience. As of 2017, the activities are managed within three divisions: Land, Marine and Geoscience. Both the Land and Marine divisions are managed within five geographical regions and are organised in two main business lines, Site Characterisation and Asset Integrity. At group level, the company has corporate departments in place for IT, QHSSE, accounting & control, treasury, tax, insurance, internal audit, human resources, communications and legal.

We provide our services from a global network of 178 offices located in 59 countries.

#### People and expertise

- 10,530 employees
- 40 laboratories
- 15 research and development centres
- 32 consulting centres

### Operational assets

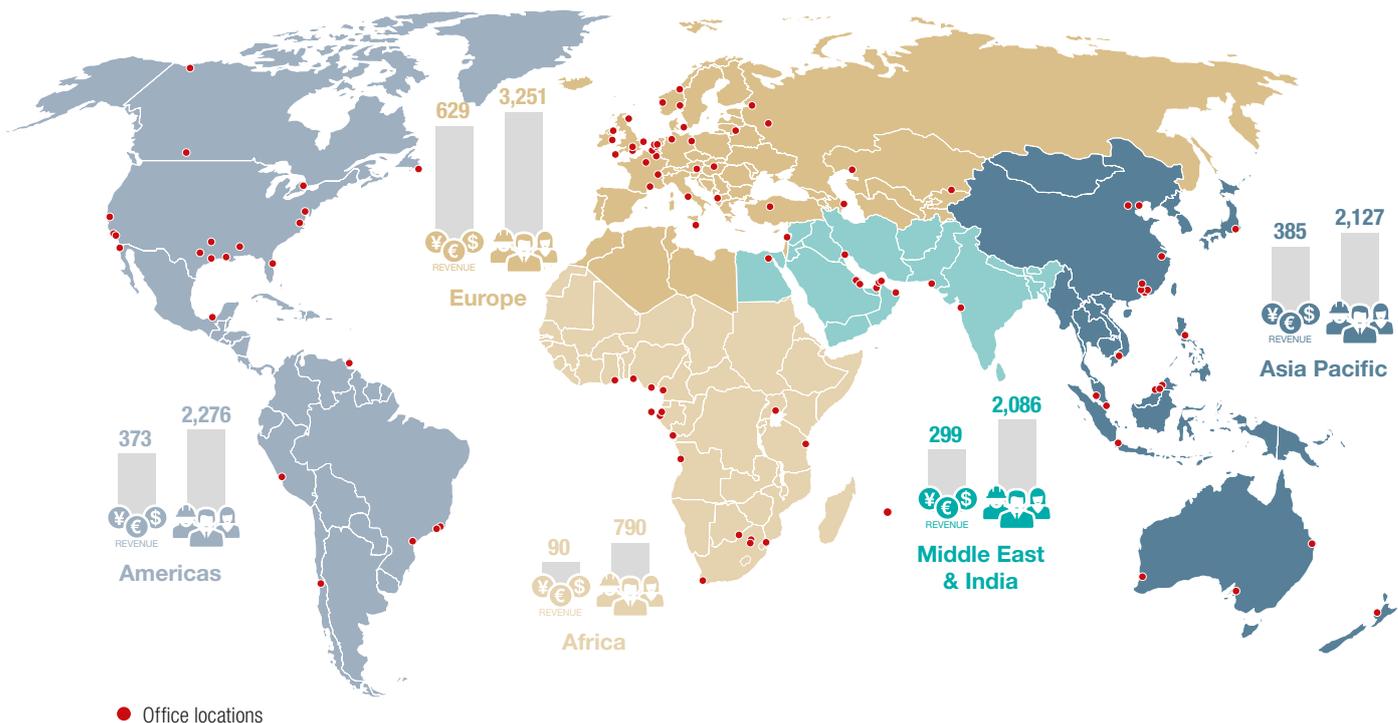
- 27 vessels\*
- 100 cone penetration testing (CPT) trucks
- 248 onshore and 18 offshore drilling rigs
- 30 jack-up platforms
- 5 autonomous underwater vehicles (AUVs)
- 125 remotely operated vehicles (ROVs)
- 23 diving systems
- 2,194 seabed seismic nodes
- 550 kilometres of sea bed cables

\* in addition Fugro uses 7 long term charters and 6 vessels under tri-partite agreements

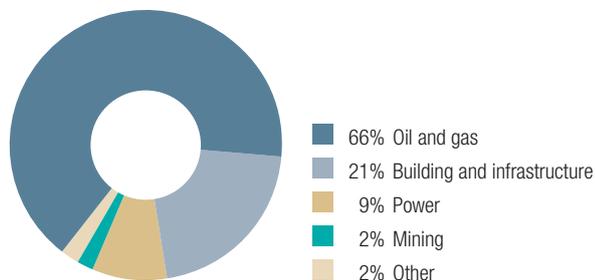
### OUR CLIENTS

Our main offshore clients are oil and gas companies, marine construction and installation contractors, wind farm developers and government agencies. Our main onshore and nearshore clients are large infrastructure, industrial installation and building developers, construction and installation contractors, government agencies, oil and gas companies and mining companies.

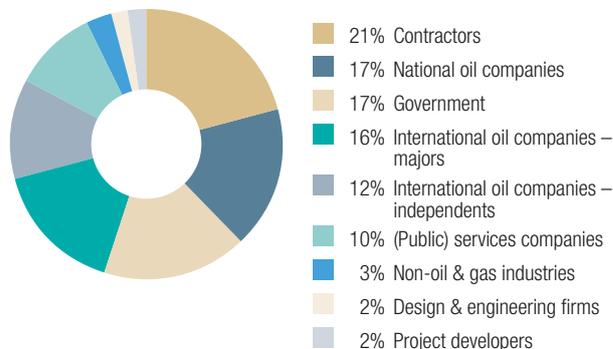
### Fugro's five regions: revenue, people, offices



### Revenue by market segment



### Revenue by client type



Our clients operate in different locations around the globe in varying environments. As many of our clients operate internationally, we aim to deliver consistent, standardised services across all geographies. We are experiencing an increase in demand for solutions based on large, integrated multi-disciplinary projects and long term framework agreements.

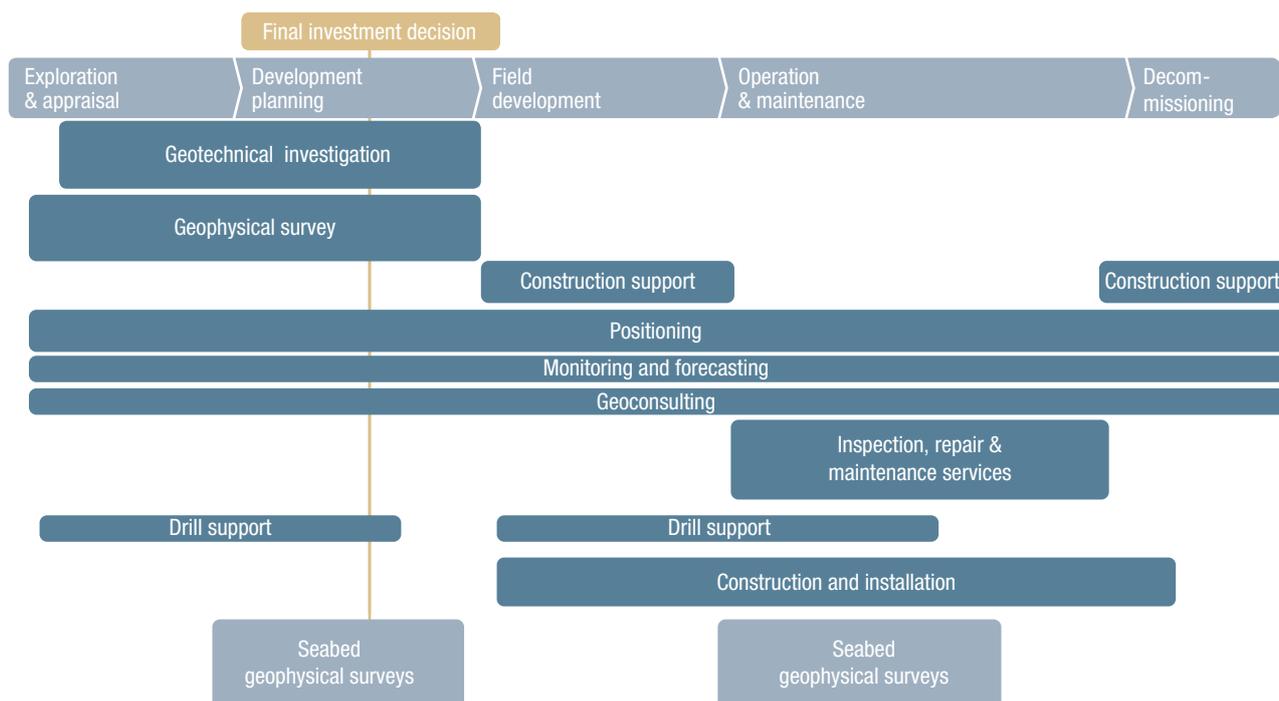
We have a large and diverse client base, and typically in any year there is no client that accounts for more than around 5% of total revenue.

### Oil and gas

Our largest client groups are the major international, other independent and national oil and gas companies.

In addition, we provide services to a diverse group of service providers such as construction & installation contractors and design & engineering companies. We have a balanced exposure to these client segments.

### Fugro's activities across life cycle of offshore oil & gas fields

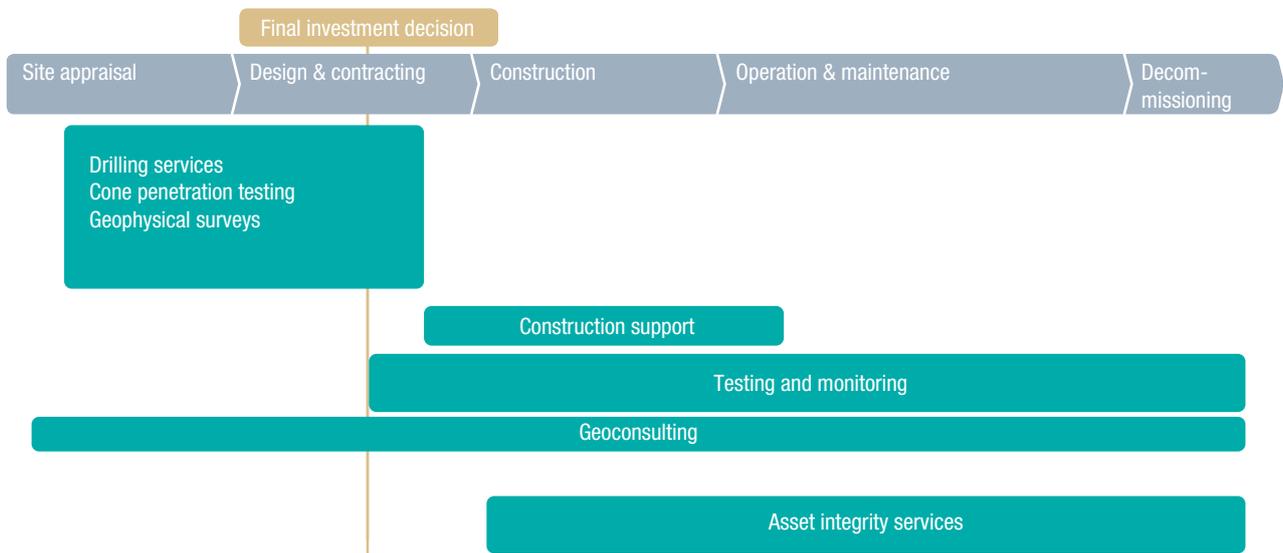


The majority of our revenue is in the upstream segment. We provide a range of services from exploration, through the initial feasibility and planning stages of a project to final investment decision, and then through development and production to eventual decommissioning of assets and infrastructure. In the downstream segment we provide services to support the construction and operation of LNG facilities, refineries and pipelines.

**Building and infrastructure**

Our main clients are government agencies, construction project developers, railroad companies, power companies, design & engineering contractors, construction & installation contractors and industrial companies. We provide our services to support them in optimising the design, construction, installation and operation of their large infrastructure, facilities and buildings. Our geo-intelligence

**Fugro's activities across life cycle of major building & infrastructure project (onshore)**

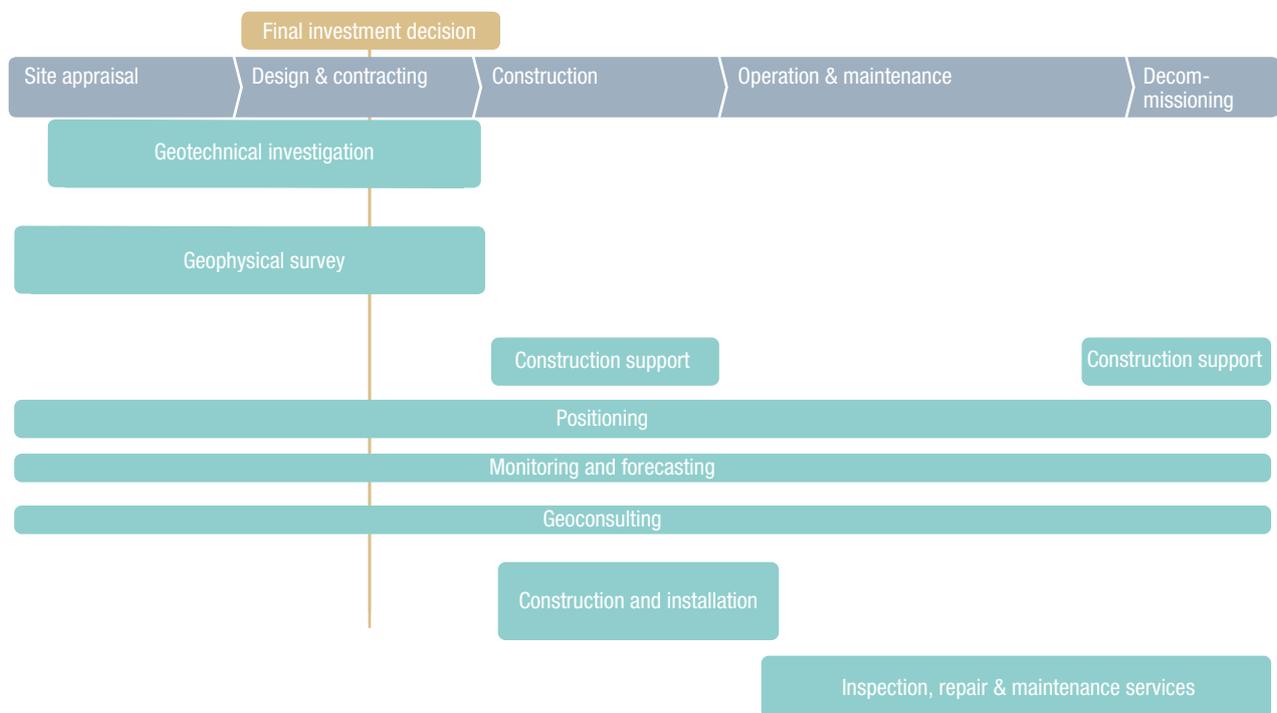


services help local, regional and national government agencies manage their urban planning, security and development of natural resources. In addition to these onshore and nearshore services, offshore we provide hydrographic charting, telecom route surveying and search services.

**Power**

In this market, our key clients currently are the offshore wind farm developers in North Western Europe. We are the largest provider of characterisation services for general site assessment, targeting the optimal location and foundation design for wind turbines and power cables. We also provide asset integrity services comprising specialist installation and construction support, performance monitoring and inspection services. Due to the widely supported push

**Fugro's activities across life cycle of offshore windfarm**



towards sustainable energy generation, the offshore wind farm market offers significant growth potential, also in other parts of the world.

Hydro, geothermal, nuclear and conventional power plants and infrastructure are niche markets for Fugro. Power distribution is a rapidly developing niche market where we offer innovative asset integrity solutions based on geospatial technology.

**Mining**

Fugro serves global and local mining companies, government agencies, construction contractors and design & engineering companies. Services that we offer are site characterisation, often with a focus on hydrogeology, and site inspection and monitoring. Our services are aimed at helping mining companies recover natural resources efficiently, safely and responsibly, and supporting remediation of mining areas as part of decommissioning.

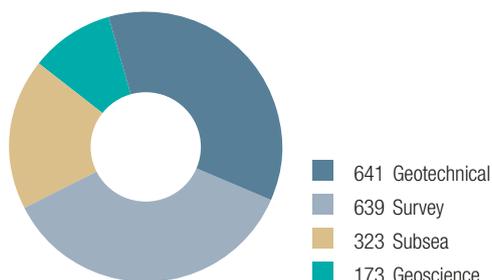


Fugro Synergy and Bucentaur working on the Borssele windfarm development, the Netherlands.

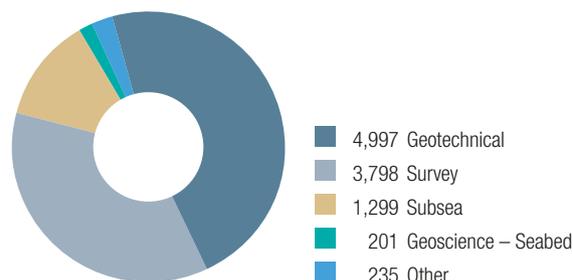
## OUR DIVISIONS

Up to and including 2016, Fugro organised its activities into four divisions: Geotechnical, Survey, Subsea Services and Geoscience. As of 2017, Fugro's activities are managed within three divisions: Land, Marine and Geoscience. For more details, see 'Strategy – strategic progress' and 'Strategy – divisional structure as of 2017'.

### Revenue (x EUR million)



### Employees



## GEOTECHNICAL

	Description	Value to our clients
<b>Site investigation</b>	<p>Drilling services, cone penetration testing, sampling, in-situ testing and logging of soil and rock layers.</p> <p>Offshore data acquisition takes place from drill ships and seafloor drills in water depths down to 3,000 metres and from jack-up platforms nearshore. Onshore data acquisition takes place from drill rigs and specialist vehicles.</p>	<p>Reliable and independent data on ground conditions at project sites to identify risks, reduce uncertainties in design, construction schedules and costs, and to ensure safety and reliability and sustainability of the constructed facilities.</p>
<b>Testing and monitoring</b>	<p>Laboratory testing of soil and rock samples, foundation testing, construction materials testing, inspection, instrumentation and monitoring, pavement management, water management and environmental and permitting support.</p>	<p>Additional information regarding a site, foundation performance and building materials to support management of risks specific to the client's development.</p>
<b>Geoconsulting</b>	<p>Integrated site characterisation based on geotechnical and survey data. Includes geohazard assessment, geo-data management, numerical analysis and geotechnical engineering. Support for asset integrity by combining geo-intelligence with information on condition of assets.</p>	<p>Reporting and risk assessment supports the client's project from planning and design through execution and into operation.</p>

## SURVEY

	Description	Value to our clients
<b>Geophysical surveys</b>	Mapping of the seabed and the geological features and hazards below in advance of construction of large marine installations and infrastructure and for hydrographic charting.	Critical to reduce cost and risk of installing structures on the seabed, by facilitating optimum site selection and design input for oil and gas facilities, pipelines, wind turbines, power and telecom cables.
<b>Positioning</b>	Subscription based service which enhances public satellite positioning data and the provision of positioning equipment, expertise and solutions to support a wide variety of marine operations.	Highly reliable, centimetre accurate 3D positioning services, available anytime and anywhere to make offshore operations more predictable, faster, safer and to reduce fuel consumption.
<b>Construction support</b>	The provision of survey systems and expertise to support offshore construction. Services are delivered from vessels, sub-sea platforms or remotely from onshore control centres.	Risk reduction, independent quality assurance and time and cost savings for construction contractors.
<b>Monitoring and forecasting/ Metocean measurement services</b>	The provision of systems and services to measure, analyse, model and predict meteorological, oceanographic and environmental conditions, mostly offshore.	Reliable information about current and predicted conditions is critical for planning, de-risking and optimising and safety of large construction projects and operations of large assets.
<b>Geospatial</b>	Services which capture, analyse, model and graphically represent geo-information in 3D in order to spatially map and document the Earth's surface and built environments.	Accurate up-to-date representations of Earth's surface and man-made structures for site assessment, engineering studies, construction, and asset management.

## SUBSEA SERVICES

	Description	Value to our clients
<b>Inspection, repair and maintenance services (IRM)</b>	Extensive range of inspection, add-on repair and maintenance services in water depths up to 3,000 metres. Executed by remotely operated vehicles on vessels or client's installations and/or by divers (up to 300 metres deep).	Maintaining high utilisation, extending the life time and reducing environmental risk of client's installations and infrastructure by keeping them operational and in good condition.
<b>Construction and installation</b>	Installation of light subsea infrastructure like flow lines, umbilicals, power cables, manifolds, spools and subsea tie-ins.	Safe, highly flexible and cost effective solutions, reducing overall project risk for the client.
<b>Drill support</b>	ROV based support of clients' exploration, completion and work-over drilling campaigns.	Supports safety and effectiveness of drilling operations.
<b>Tooling</b>	Design, manufacture and aftermarket support for ROV based subsea remote intervention equipment and solutions.	Provides cost efficiencies and more effective ROV operations for IRM and drill support.

## GEOSCIENCE

This division almost entirely consists of Fugro's 60% stake in Seabed Geosolutions (fully consolidated).

	Description	Value to our clients
<b>Ocean bottom nodes</b>	3D and 4D imaging (including processing and interpretation) in water depths up to 3,000 metres using individual nodes placed on the seabed, including the highly efficient Manta <sup>®</sup> nodes as per first half of 2017.	Supports the optimal development and production of oil and gas fields by providing high quality data on oil and gas reservoir characteristics and production, and potential geohazards.
<b>Ocean bottom cables</b>	3D and 4D imaging through sensor cables placed on the seabed in water depth up to 500 metres.	
<b>Shallow water cables</b>	3D and 4D imaging through sensor cables placed on the seabed in nearshore and shallow water environments.	



# Site characterisation services in practice Hong Kong international airport



The design and construction of major infrastructure projects call for reliable and accurate data. Fugro has the technology and expertise to collect and analyse the appropriate data to develop a feasible, structurally sound and safe design and construction plan.

Hong Kong International Airport, one of the world's busiest airports, built in the late 1990s on reclaimed land, is expanding to include a third runway. The Airport Authority selected Fugro to carry out the necessary site characterisation investigations. Fugro has been closely involved with this significant project from the beginning and has gained detailed knowledge of the local geology from its previous work experience at the existing airport and associated infrastructure. Since 2010, Fugro has undertaken six projects, involving the acquisition and extensive laboratory testing of soil samples, geophysical surveys, reporting and water quality monitoring at nearly 800 locations in the waters north of the present airport.

Since 2010 Fugro's projects have involved up to **8** vessels on site and

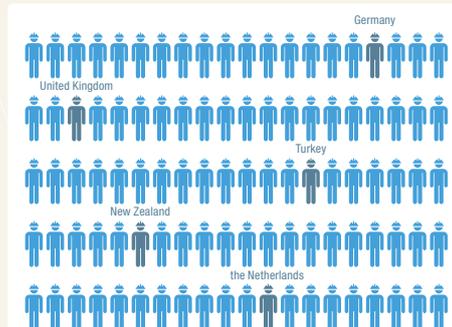


**345** marine cone penetration tests.

Total marine drill holes:



The Fugro team involved in the project of around **100** people is **95%** local Hong Kong Chinese, with the balance from the UK, Turkey, Germany, New Zealand and the Netherlands.



# STRATEGY

## TRENDS AND OPPORTUNITIES

### Oil and gas

The majority of Fugro's revenues are derived from the oil and gas market. Oil and gas are key components of the overall energy market, which is going through profound changes. The global demand for energy continues to grow rapidly due to a growing, increasingly wealthy population. On the supply side, driven by the energy transition, the mix of energy sources is changing. Though the demand for oil is predicted to continue to modestly increase for some time, the share of oil in the world energy supply is steadily being reduced by gas and renewable energy resources. Within the oil segment, the North American shale industry has the potential to play a significant role as a swing producer.

There is a clear, increasing commitment by many countries, companies and citizens to reduce carbon emissions to mitigate climate change resulting in a strong growth of renewables. Despite this, according to most predictions, growth in renewables is not able to keep up with global energy demand growth in the medium term. Hence, energy from oil and gas will continue to dominate for years to come.

The long term trend for the oil and gas market is strong, but the market is subject to volatility. Early 2014 the industry started to move from a phase with emphasis on reserve replacement (finding new oil and gas reservoirs) into a phase with emphasis on capital discipline. This was exacerbated by a steep drop in the oil price since of the second half of 2014 when it became clear that supply exceeded demand.

Although the oil price has recovered somewhat in the course of 2016, it is still much lower than it was before mid-2014, due to the supply surplus. The surplus came as a result of the successful development of shale oil in the United States

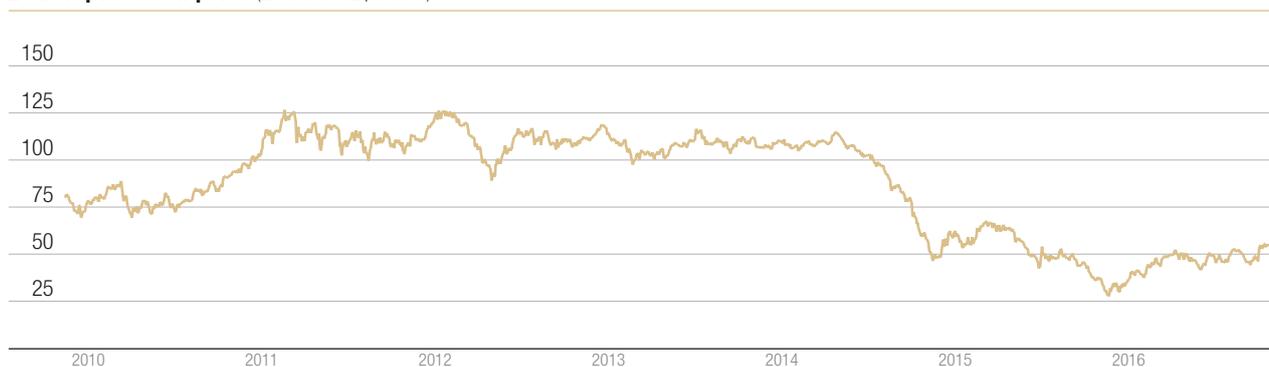
of America, continued high production from the OPEC countries in general and incremental production from Iran and Iraq.

In 2014 oil companies started reducing their capital and operational spending in reaction to the significantly lower oil price. This has resulted in a decline in spending of around 25% in 2015 followed by another 25% in 2016, leading to the first back-to-back decline since 1986/1987. For oil field services companies such as Fugro this has resulted in lower work volumes, with new projects being deferred or cancelled, and significant price pressure due to overcapacity. This impacts all sectors of the market including deep water where Fugro has a particularly strong market position and normally generates strong margins.

Depletion of producing oil and gas fields amounts to several million barrels per day on a production of around 98 million barrels per day, and the depletion rate is increasing due to more efficient reservoir production and reduced spending on maintaining production. The ongoing massive reduction in investments implies that insufficient new production is currently being developed to counter depletion. At the same time, demand for oil continues to grow, albeit modestly.

As a result, oil supply and demand started coming into balance in the course of 2016, and, together with the November OPEC announcement to introduce a production ceiling, this has resulted in a correction to the oil price in the second half of the year. The market still has a supply glut to work through, so the oil price and activity levels are not expected to increase significantly in the near term. However, the progressive impact of rebalancing should support a more robust oil price than during the past three years. This will reduce further cut-backs in oil and gas company budgets and eventually trigger an increase in spending.

**Development oil price** (Brent oil in USD per barrel)





3D scanning of an op mining pit, Usclas du Bosc, France.

The downturn has led to a strong drive to achieve efficiency gains and price reductions in the supply chain. As a result, both onshore and offshore projects are now economical at much lower oil prices than before. This is expected to spur project approvals, even in a 'lower for longer' oil price environment.

Shale oil production in North America is anticipated to pick up first as the market recovers, as the investment per well is low and production is quickly achieved. However, there is a limit to growth in the shale basins and shale oil is not low cost. Many reservoirs offshore, including deep water, have a development and production cost per barrel at the lower end of the cost range of shale oil, and have attractive, low cost production profiles following higher upfront investment. Consequently offshore activity levels, including deep water, are expected to increase again. Any recovery in high cost oil areas such as the Arctic and tar sands will however be quite subdued.

In 2017 oil and gas companies are expected to move from a cost saving mode in offshore to cautious preparations for new investments towards year end. For the first half of the year, Fugro expects a further significant decline in its oil and gas market, however less severe than in 2016. Fugro anticipates a bottoming out towards the latter part of the year. Until the oil and gas market recovers, the company will continue to adjust its resources and cost base in line with activity levels.

### **Building and infrastructure**

The second largest market for Fugro is the market for large infrastructure, industrial installations and buildings. The long term trends are supportive, with continuing population growth and urbanisation. As many population centres are located in deltas and other low lying coastal areas,

protection against hazards resulting from climate change and rising sea level will drive flood protection and coastal defence projects.

The building and infrastructure market generally follows the economic development in a region. With reduced energy costs adding to the financial stimulus programmes, OECD economies are gradually seeing some growth, in spite of the recent increase of overall political and institutional uncertainty. We anticipate continued growth in the Asia-Pacific region and some recovery in the Middle East. These areas of growth compensate for uncertainty in Africa, Russia and Brazil, where a key impediment to economic growth is lower government income from oil & gas and mineral resources. We anticipate a recovery in spending on building and infrastructure in these areas once prices for oil, gas and mineral resources recover.

An emerging and increasingly important sub market relates to Fugro services for its non-energy related maritime clients. This includes port and harbour surveys, hydrography for the production of sea charts, Law of the Sea survey and consultancy, accurate positioning for large cruise vessels and container ships, telecom cable surveys and search and recovery operations following ship or aircraft calamities at or over sea. The OECD expects this market to show steady growth towards 2030, especially in relation to the ocean leisure industry.

### **Power**

Sustainable energy, which is generated from a wide range of sources, is a growing market. Following the 2015 United Nations climate summit in Paris, we expect further increasing investment in the use of low-carbon energy. Fugro is already active in several of these segments including wind (especially offshore), hydro, geothermal,

nuclear and tidal. Government incentives have been needed to get these markets going, but many renewable resources already are, or will soon be, competitive, as technology and production scale bring costs down.

For Fugro the development of offshore wind farms currently represents the largest market opportunity in this sector. This market segment, which is still mostly concentrated in North West Europe, continues to provide opportunities. Other areas in which offshore wind development is starting up with significant projects include Asia Pacific and the USA.

Another developing market opportunity for Fugro in the power sector is the operational monitoring and maintenance of power distribution networks. Fugro provides services in this market using internally developed, leading edge geospatial solutions that can help operators to better manage their networks and reduce their operational cost.

### **Mining**

In this segment, Fugro offers geotechnical, environmental, geological and survey services to support development of mining facilities including open pit mines, tunnels, water & environmental management and tailing facilities.

The year 2016 saw a strong recovery of commodity prices indicating the bottom of the commodity cycle. Demand for most base materials (copper, nickel, zinc, aluminium) is expected to increase. Prices of precious metals (gold, silver, platinum and palladium) are anticipated to be subdued in the first half of 2017, but strengthen later. Raw materials (for example iron ore) are expected to stay on a downward trend due to ample supply.

### **Clients**

Many of Fugro's clients are increasingly global in nature. As part of their drive to cut costs and increase efficiency, they seek global standardisation of services and solutions. In particular, this is the case for our oil and gas clients. In the current low oil price environment they are under pressure to find ways to increase efficiency and reduce their cost levels. This standardisation drive not only concerns operations and technical deliverables, but also QHSSE (quality, health, safety, security and environment) and legal considerations.

We also see that our large clients increasingly seek integrated solutions rather than contracting for a series of separate services. This allows staff reduction on their side and lower project costs as suppliers can pass on part of the efficiency benefits gained with providing integrated services.

This is leading to an increase in size and complexity of projects. At the same time, projects are increasingly being awarded under framework contracts that support larger work volumes. Under these larger contracts there is a push to transfer risk to suppliers. To counter this, more time is being spent upfront on detailing specifications and deliverables to help control project risk, cost and timelines.

Another clear trend is that clients are open starting to embrace digital technology to increase efficiency and reduce overall project cost. The drive towards digitisation and increasing willingness of clients to accept the use of hosting services to deliver results are creating further opportunities to develop longer term business relationships.

Sustainability is increasingly relevant. We are experiencing this through increasing demand for our services from clients developing renewable energy resources and an increase in demand for environmental mapping and advisory services, either independently or as part of integrated site characterisation services. Similarly, clients seek asset integrity solutions to ensure environmentally sound and safe operation of their assets and to increase longevity. Clients are also increasing the sustainability requirements for their service providers, in particular regarding safety and the prevention of environmental incidents.

The trends towards standardisation of services and solutions, use of global standardised framework agreements, increasing complexity and scope of projects, digitisation and sustainability is benefiting Fugro. Standardisation is a key element of our strategy. Moreover, as leader in many of the market segments in which we operate as independent service provider, we are well positioned to deal with global clients and to undertake contracts with increased scope and complexity, covering the full asset life cycle.

### **Competition**

Our competitive position in key markets remains strong. Fugro does not have a comparable peer in its business. Each competitor is active only in a geographic and/or technology subset of Fugro's markets. Most competitors compete on price, as in the majority of its markets Fugro is the clear market leader in terms of technology, quality, safety, reliability and sustainability. In today's market circumstances, and in oil and gas services in particular, price is critical to winning work. However, some price differential is often still supported by clients in return for safe, dependable delivery meeting specifications.

In addition to price, there is always the risk that a competitor develops new technology and/or solutions that result in a superior service in terms of quality, efficiency or cost. Areas such as robotisation, sensing, positioning, data processing and analysis continue to develop quickly. As a general trend, even in a downturn, some competitors continue to invest in innovation and small start-ups will continue to emerge, although at a somewhat slower pace until the market picks up. Fugro remains alert to counter these developments.

It is expected that the market for oil and gas services will remain challenging for some time. The overcapacity in this market is causing strong price pressure and reduced utilisation of assets. This has led to the bankruptcy of some competitors, notably in the subsea services segment. This has resulted in some overall capacity reduction, but less than face value suggests as good vessels eventually tend to return to the market. Consolidation is taking place in the general oil and gas services market, but not (yet) in the specific market segments served by Fugro.

Protected local competition, mostly in developing economies, is another trend which has emerged in recent years. Typically this concerns lower end service providers that receive preferential treatment, in many cases to the level of practical or legal exclusion of international service providers. In certain countries the standard of service provided by local competitors is improving. Generally, the only avenue to continued business in such countries is through joint ventures and we anticipate growth in the use of joint ventures or other partnering arrangements to maintain a presence in those markets.

### Technology and innovation

Fugro utilises advanced technology and methods in the majority of its work. We are seeing remarkable developments in various technology fields relevant to Fugro. These include sensors, where improvements in sensitivity, speed, lower power consumption, miniaturisation and cost reduction enable ever increasing volumes of different kinds of data to be gathered with higher resolution and higher density. The immediate application is in improving and enhancing existing work processes. A good example is the development of Seabed Geosolutions' next generation Manta<sup>®</sup> nodes. Another example is the growing instrumentation of facilities and infrastructure, supporting cost effective asset integrity monitoring.

Another further area is remote operations and robotisation. Systems which reduce the need for on-site operators will increasingly be deployed, as for example is already the case with our office assisted remote services (OARS) solution replacing some offshore survey staff. At some point drones will start replacing manned aircraft as a platform for aerial data collection. At sea, autonomous underwater vehicles (AUVs) will increasingly take over work from remotely operated vehicles (ROVs). The first remotely operated vessels are available and at some point may start taking over from manned vessels.

All these developments will result in the acquisition of increasing volumes of different kinds of data and information. Handling all this data is increasingly being achieved by leveraging rapidly developing cloud technologies.

There is also a growing trend for companies, institutes and universities to collaborate on technology development and innovation to reduce cost and time to market. It is important for Fugro to develop the skills and know-how to effectively participate in such partnerships.

In the technology fields in which we work the number of patents is rising, requiring careful consideration when developing new technologies to apply for patents for novel technologies and applications and to ensure patents of others are not violated or that licensing agreements are put in place.

### Regulation

There is an inexorable drive, especially in the Western world, to implement increasingly detailed and more complex regulations and regulatory standards covering an ever broader scope of a company's activities. Current topics being expanded include, among others, the accounting standard IFRS, digital privacy protection, reporting standards and reporting on the role of companies in society. Increasingly, laws are applied transnationally, further adding to complexity, while penalties are increasing. These trends place a burden on companies to keep stepping up their procedures, controls, audits and training, which drives up the cost of operations.



*Analysing soil samples in one of Fugro's specialist labs.*

## OUR VISION AND MISSION

Our vision is to contribute to a safe and liveable world by being the world leading, independent provider of geo-intelligence and asset integrity solutions. These are critical to the sustainable development of natural resources and sustainable construction and operation of large facilities and infrastructure.

Our mission is to create value for all our stakeholders. At its core is market leadership: protecting and building it out further where we are leader and achieving it where we are not yet. We do so by:

- Being the preferred partner for our clients by being an independent services provider which assures the integrity and confidentiality of results.
- Safely and consistently delivering integrated quality solutions from a broad portfolio of services across the globe on time and on budget, with teams of motivated employees that apply world class, innovative and often proprietary technology and perform to high standards of professionalism and integrity.
- Being cost effective by operating from a global, efficiently organised office network with excellent staff and a well maintained, globally allocated pool of assets and resources.

In addition, we must restore profitability in our key oil and gas market by dealing with a 'lower for longer' environment and achieve a more stable financial performance by creating a more balanced portfolio between our energy, building & infrastructure, power and mining markets.

## STRATEGIC PROGRESS

Trends in our markets and business, technology, society and our vision and mission all shape Fugro's 'Building on Strength' strategy. Given the difficult circumstances in the oil and gas services market, our primary focus is on restoring profitability and improving cash flow and return on capital employed in this market. To achieve this we must adjust our portfolio and build on our strengths. At the same time we need to continue to develop our business in the other markets in which we operate.

### Portfolio

In 2015, Fugro announced its intent to find a partner for or divest (part of) the subsea activities, to seek options to reduce its stake or enter into partnership regarding Seabed Geosolutions and to exit the light well intervention market by selling the Fugro Synergy vessel.

In 2016, we were not successful with implementing the planned portfolio changes due to the difficult oil and gas services market. In particular we halted the planned divestment of the Asia Pacific subsea services business to Shelf Subsea. Based on a review of our portfolio in light of the new business lines and divisions, we decided to integrate the subsea inspection, repair and maintenance services with other survey activities to become the core of the new Asset Integrity business line within the Marine division. For the installation and construction related activities, which do not fit our asset integrity solutions strategy, we will continue to pursue opportunities for partnership or divestment.

We continue to be open to reducing our stake in Seabed Geosolutions or enter into an extended partnership. Seabed is investing to benefit from a growing seabed geophysical market mainly focused on oil and gas development and production. At the same time, Fugro is leveraging synergies with its marine activities related to the deployment of nodes from remotely operated vehicles.

We have decided to retain the Fugro Synergy and fully utilise the vessel for geotechnical operations instead of also supporting well services work.

### **Client focus and market leadership**

In the oil and gas market Fugro has a global market leadership position for marine survey and geotechnical services. Market shares are highest in specialist areas due to our capability to take on large, integrated projects, provide data management services and our particular strength in frontier environments such as deep water offshore projects. We hold leading or strong positions as survey and geotechnical services provider in many of our other marine markets. In the marine asset integrity space, Fugro holds strong regional positions in Asia-Pacific and Europe. Onshore Fugro is market leader in survey and geotechnical on a regional and local basis, and in our ability to provide integrated services to globally operating companies anywhere in the world.

Market leadership is a key strategic driver for Fugro and underpins long term value creation as market leaders generally enjoy superior through-the-cycle financial performance and are the most resilient in case of downturns.

Fugro's market leadership is predicated on being an independent services provider. Fugro provides geo- and asset integrity solutions. Data, information and advice regarding the construction site are vital to the costing and design during the development of infrastructure, large installations and other facilities. This information and advice can result in significant scope changes. Due to our position as independent service provider, our clients are assured that results are provided impartially and confidentially and with the further assurance there is no conflict of interest with respect to other parties involved in their projects. Data, information and advice on natural resource assessment and development must be provided impartially and confidentially. Furthermore, Fugro increasingly provides asset condition data and information during the asset construction and operational phases. This information can be used to

determine liability issues, as well as being used to derive corrective and maintenance requirements. It is clear that to avoid conflicts of interest, such services must be provided independently from parties involved in the construction and maintenance phases of a client's projects.

A further requirement to achieve market leadership is that we consistently meet client project requirements anywhere we operate. Clients want to be provided with quality services that are delivered safely, within budget, on time and meeting their specifications. Further, they want us to deliver consistently around the globe by operating to high technical, sustainability, integrity and business standards set for our industries and supplemented by theirs and our own. Often the technical requirements demand technology driven, innovative solutions.

Fugro has been successful in further strengthening its market leading positions in the current very competitive, oversupplied oil and gas services market. Going forward, our restructured organisation will further support our drive to focus on our clients and will allow us to protect and expand our market positions.

### **Organisation and employees**

Fugro is constantly adjusting its organisation to better support its clients in managing their projects in a sustainable, smart and cost effective way. Hence, we are refining our capacity to efficiently provide integrated geo-intelligence and asset integrity solutions spanning the range from data acquisition through to analysis and advice. To make the most of this opportunity and improve the efficiency of service delivery, Fugro has decided to regroup the geotechnical, survey and subsea services activities into Marine and Land divisions, with each division having two business lines: Site Characterisation and Asset Integrity.

The Site Characterisation business line supports the planning and design of new structures and infrastructure. It also supports the exploration and development of natural resources. The Asset Integrity business line supports asset life cycle management for new and existing structures and infrastructure, from construction to decommissioning.

The new divisional structure allows us to capture further synergies by having all marine assets under a single management structure, and similarly for land. While there are similarities in technology between the land and marine environments, the structure of the markets, type of clients and typical project sizes are different. The marine business

is a very international market with large, globally active clients. Resources in the marine environment must easily be moved from country to country or from region to region. Regional or even global management is key to optimising utilisation. The land business is a much more local business with predominantly local clients and land locked resources and offices. The Geoscience division remains unchanged.

As part of formation of the Marine and Land divisions, Fugro is merging operating companies into country organisations. This supports legal entity simplification by reducing the number of legal entities and further consolidation of support functions into shared service centers. This will result in cost efficiencies and improve the level of services we provide internally. We made significant steps with organisational simplification and the formation of shared service centres in 2016 and will continue during 2017. In some jurisdictions the process of closing legal entities is lengthy and may therefore continue into 2018.

People are Fugro's strength and future and it is a key priority to continuously develop their skills and capabilities across the company. Motivated and talented employees are essential for any organisation to function well. Our market leading positions, providing solutions based on large multi-disciplinary projects, global footprint, and our focus on internally developed technology and innovation, contribute to a unique, exciting work environment with many opportunities to develop professionally and managerially.

The 'Team Fugro' core value promotes a constructive and supportive working environment. We support employee motivation and engagement with an array of tools including in-house training by the Fugro Academy and increased groupwide communication through newsletters, town hall meetings and group wide collaboration tools. In the last two years we implemented a group wide talent identification programme which we are expanding in order to improve talent development on a group basis.

### **Asset base**

Fugro utilises an asset base consisting of a large pool of diverse data acquisition equipment, vessels, vehicles, laboratories plus IT resources and infrastructure. Our asset base is leading edge, well maintained and replaced when needed. Achieving delivery excellence relies on operating from a proper asset base, so that we can provide our services safely and reliably.

Vessels are a key component of our asset base. Fugro has an in-house vessel management organisation, targeting reliable, efficient and sustainable vessel operations against a single set of standards across the fleet. Since 2015 we have stepped up the rate with which owned vessels and vessels under long term charter are brought under central vessel management. The objective is to complete the transition to in-house vessel management in 2017.

Fugro cannot function without a proper, secure IT infrastructure, the development and maintenance of which is centrally coordinated. Increasingly IT is a client services enabler by supporting project work from multiple locations, remote services and long term data and information hosting for clients. Particular attention is paid to cyber security to protect client and employee data, to allow secure collaboration and to keep our networks up and running.

### **Technology leadership and innovation**

Fugro's leading market position is supported by its technology leadership. Fugro uses high-performance equipment, technologies, software and business processes. Much is developed in-house through research and development and innovation programmes, complemented as needed or when advantageous by working with clients, suppliers, research institutes and universities. Our technology development and innovation capabilities are a core strength of Fugro and essential to being able to achieve our strategic objectives.

Fugro has established a strong tradition in innovation since developing electric cone penetration testing in the 1960s. Other examples, such as the Starfix high accuracy global positioning system, our in-house designed and built remotely operated vehicles and fibre optic sensing tools demonstrate that Fugro continues to be an innovation leader in the markets in which it operates.

Fugro has stepped up its research and development and innovation efforts in recent years and this is now delivering concrete results. Fugro's recent programme to design purpose-built vessels equipped with our own proprietary technology is a good example. They provide Fugro with competitive and safety advantages. In addition, new vessels that replace older vessels add capacity while reducing per unit cost as they are more efficient than older vessels. They are also significantly more environmentally friendly and safe. These vessels will be the leaders in their class for years to come.



*Deployment of buoy for measuring waves and water currents.*

In 2016, Fugro launched several new technologies and innovations:

- To improve the efficiency of detecting unexploded ordnance (UXO) offshore, Fugro has introduced the GeoWing system. It is specifically designed to collect high resolution magnetic data, reducing both the requirement for re-work in the field and the number of false positive readings, thus minimising the number of potential targets that require further investigation.
- Fugro's new vision-based survey system 3Direct® offers a safe method of monitoring the offshore installation of monopiles and jackets in real time. It is fully automatic, providing accurate and continuous spatial measurements from video streams during operation and does not need tracking equipment on the structure. As a result, personnel do not need to access the jacket or monopile during installation, which results in a safer and more efficient process.
- NorthStar™ is an integrated marine management and advisory solution, created to improve the performance, efficiency and safety of clients' floating development and production assets such as floating production systems (FPSOs), drill rigs and drill ships. It integrates precise measurement of metocean conditions, assets' response and operational forecasting to ensure safe operations, improved asset management and overall asset integrity.
- Fugro WISON® MkV is a significant advancement in our downhole geotechnical testing toolkit. It uses Fugro EcoDrive fluid, consisting of 90% fresh water mixed with 10% vegetable base oil, to provide an environmentally friendly system.
- Seacalf 20c is a new generation full-size seabed cone penetrometer with coiled rods and a 20-ton continuous drive system. This upgrade provides significant productivity improvement and enhanced safety.
- Fugro completed the first commercial project using its novel XRF CPT technology, which measures concentration of metals versus depth and in real time, while simultaneously recording geotechnical parameters (soil density, type and stratification). XRF-CPT helps clients determine the exact volume, grade and composition of the metal bearing zones in mine waste residues or tailing ponds. This assists them in assessing the profitability of potential re-mining or in addressing environmental impact and remediation planning.
- Fugro has advanced the use of fiber optics for monitoring purposes. We have embedded Fugro's FAZTFiber™ high density strain sensing cable in asphalt for real-time detection of vehicle-induced road deformations. The cable is connected to a high-speed and high-precision sensor interrogator unit. This fiber optic solution enables cost effective, large-scale monitoring of road and traffic conditions and allows road asset managers to predict wear and tear of the roadway and optimise maintenance programmes.
- Seabed Geosolutions has developed the four-component Manta® ocean bottom nodes which can be deployed on large scale. The system leverages proprietary node technology, fully automated handling system and an innovative deployment method to allow efficient operation in up to 3,000 metres water depth. Manta® combines technologies to provide a cost-effective alternative to high-end streamer data acquisition. The nodes are expected to become available in the first half of 2017.

**Multi-market exposure**

In 2016, Fugro generated 66% of its revenue from the oil and gas services market. Within this market, over the last few years, Fugro has created a balanced exposure across the exploration, development, production and decommissioning life cycle. This is providing some cushion to the current strong downturn in the oil and gas services market.

All markets run in cycles, but these generally differ. Hence, to be more robust, it is desirable to create a better balance across multiple markets. Fugro aims to increase its business in the building & infrastructure, power, water and mining markets. The company will achieve this by investing more in these markets, on a relative basis, than in the oil and gas market. Also, once Fugro regains sufficient balance sheet strength to resume acquisitions, it is anticipated these will be biased towards these markets. Over time, these actions will result in the desired rebalancing.

**DIVISIONAL STRUCTURE AS OF 2017**

**Regrouping of activities to improve client focus and service delivery**

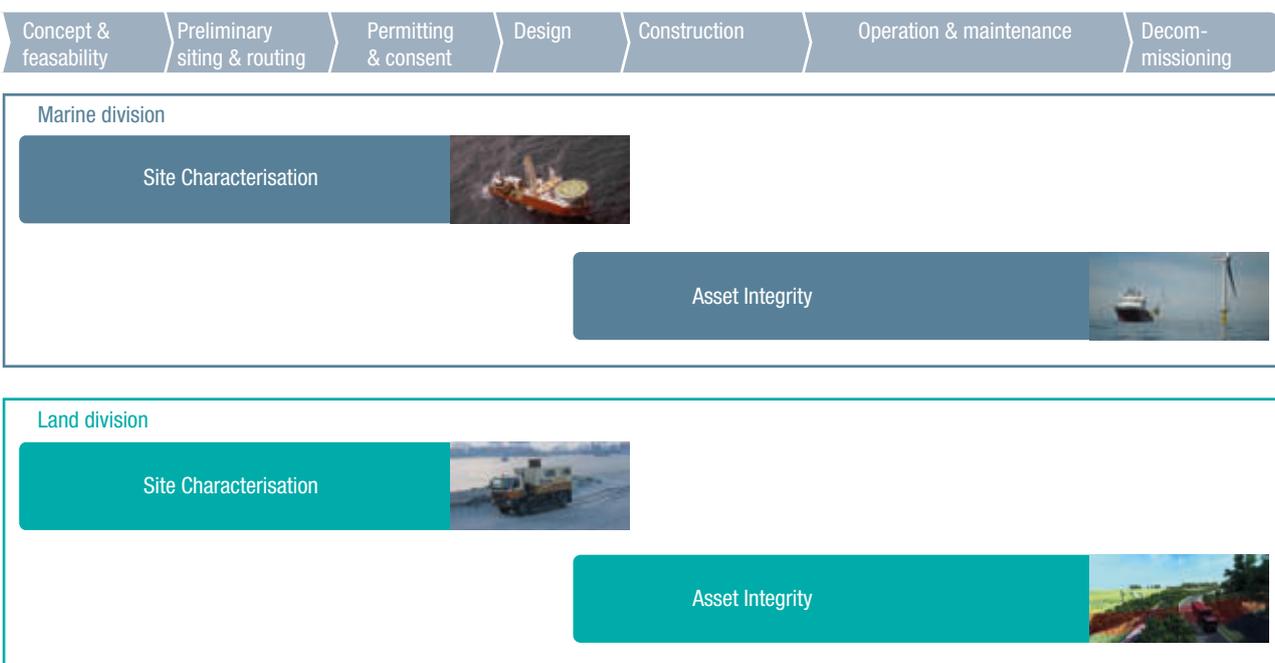
Fugro’s geotechnical, survey and subsea services were traditionally contracted separately. Increasingly clients require integrated solutions which Fugro is uniquely capable of providing as it has a very large portfolio of related services in-house. In 2016 Fugro decided to regroup the survey, geotechnical and subsea services activities into Marine and Land divisions, with each division having two business lines: Site Characterisation and Asset Integrity.

For more details, see ‘Strategy – Strategic progress’.

**Reporting structure as of 2017**

As from the first quarter of 2017, Fugro will report its results according to the new divisional set-up. The Geoscience division, primarily comprised of Fugro’s 60% stake in Seabed Geosolutions, will continue to be managed and reported as is.

**Fugro’s new business lines address the full life cycle of clients’ assets**



## MID-TERM TARGETS

In 2014 Fugro formulated mid-term targets, both for the group and per division.

Target range

<b>EBIT margin, group</b>	<b>8 – 12%</b>
Geotechnical division, onshore	8 – 11%
Geotechnical division, offshore	11 – 15%
Survey division	12 – 15%
Subsea Services division	6 – 9%
Seabed Geosolutions	5 – 10%
<b>Return on capital employed, group</b>	<b>8 – 12%</b>

Adjusted to the new divisional structure as per 2017, the targets are as follows:

Target range

<b>EBIT margin, group</b>	<b>8 – 12%</b>
Marine division	10 – 13%
Land division	8 – 11%
Seabed Geosolutions	5 – 10%
<b>Return on capital employed, group</b>	<b>8 – 12%</b>

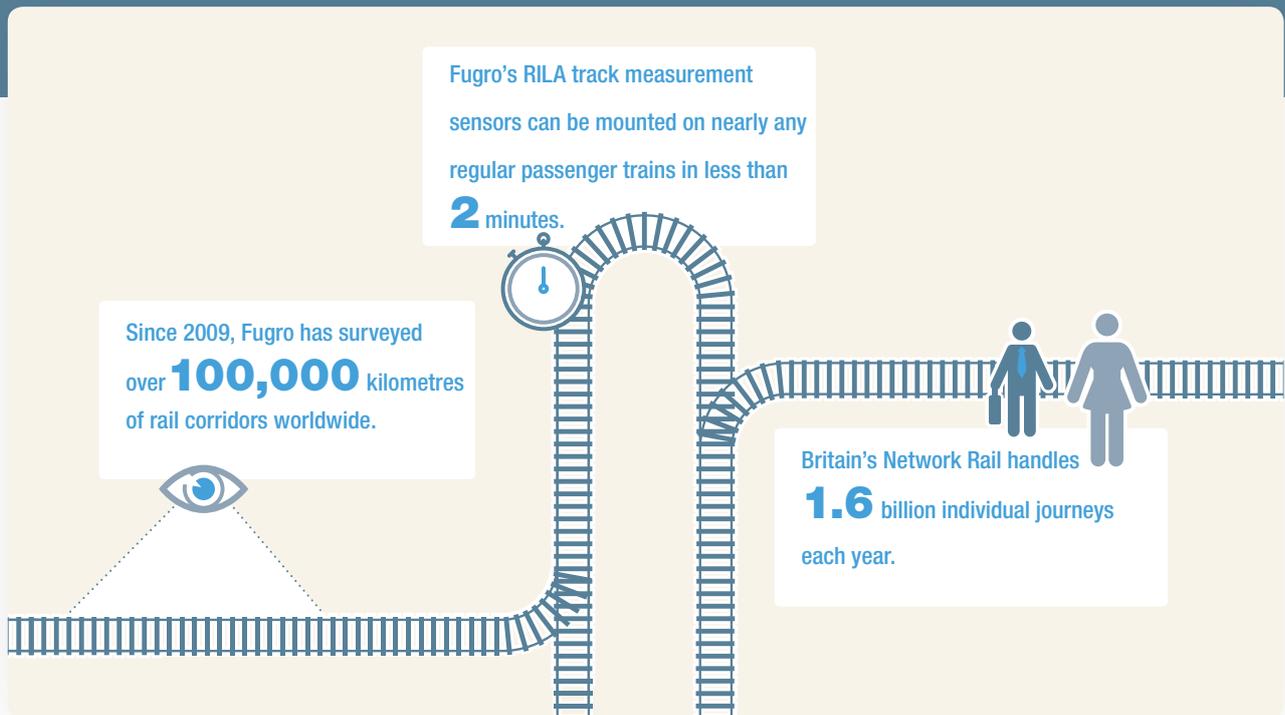
The timeframe in which Fugro will realise these targets is dependent on a recovery of the oil and gas market. In the current challenging market, Fugro will continue to focus on delivering positive cash flow. Reduced investment levels contribute to this objective. Until the oil and gas services market improves, the company will limit its capital expenditure to around EUR 100 million per year. This level can be maintained until market conditions improve and a good level of opportunities for organic growth returns. When the market improves, it is anticipated that Fugro's capital expenditures will gradually increase, however not to the level of the past few years as Fugro can benefit for a long period of time from its investments in new vessels between 2010 and 2014.

## Asset integrity services in practice

# Virtual network model

Fugro delivers railroad professionals with accurate, up-to-date information on the integrity of their networks, from sub-millimetre rail wear measurements to track bed condition and underlying geology. We deliver a 3D virtual model and analytics of the railway corridor to our clients' desktop, to support efficient decision making on engineering, design and construction operations, as well as asset maintenance.

Network Rail, operating over 32,000 kilometres of track, has contracted Fugro to survey its network throughout the United Kingdom to optimise its maintenance and track renewal operations. In 2016, Fugro supplied 3D rail information for more than 2,500 kilometres of network for the Great Western Route modernisation project. Throughout 2017, Fugro will supply track information on almost 400 kilometres of network in multiple locations, in support of Network Rail's high output track renewal projects.



# BUSINESS PERFORMANCE

## PERFORMANCE 2016 AND OUTLOOK 2017

### Summary

- Revenue decline of 22.7% on a currency comparable basis in line with the market; low oil price led to continued pressure on work volumes and pricing.
- Reduction of cost base and capacity in line with demand could not offset price erosion, leading to a decrease in EBIT (excluding exceptional items) to EUR 8.5 million.
- EUR 186.1 million cash flow from operating activities after investments, driven by cost savings, improved cash collection, curtailed capital expenditure and proceeds from asset disposals, resulting in significant net debt reduction.
- Impairment losses, onerous contract provisions, restructuring cost and other items totalling EUR 227.2 million.
- Proceeds of EUR 190 million subordinated convertible bond, which is excluded from covenants, were fully used for early repayments on United States private placement loans.
- Net debt/EBITDA of 1.1 versus covenant requirement of below 3.0.
- Backlog for the next 12 months down 11.6% on a currency comparable basis compared to a year ago and up by 7.3% compared to the third quarter of 2016.
- Outlook 2017: For the first half of the year, Fugro expects further significant decline in revenue, however less severe than in 2016, with ongoing margin pressure. Revenue decline bottoming out towards the latter part of the year. Positive cash flow for the full year.

### Highlights income statement

#### Revenue

<i>Revenue per division</i> (x EUR million)	2016	2015	Reported growth	Currency comparable growth
Geotechnical	640.6	740.4	(13.5%)	(11.1%)
Survey	638.8	835.8	(23.6%)	(21.6%)
Subsea Services	323.5	423.6	(23.6%)	(19.8%)
Geoscience	173.0	363.2	(52.4%)	(52.4%)
- of which Seabed Geosolutions	173.0	343.8	(49.7%)	(49.7%)
- of which other <sup>1</sup>	-	19.4	(100.0%)	(100.0%)
<b>Total</b>	<b>1,775.9</b>	<b>2,363.0</b>	<b>(24.8%)</b>	<b>(22.7%)</b>

<sup>1</sup> Mainly relates to multi-client data library, which was sold per 30 June 2015.

The revenue for the Survey division was well below last year mainly due to less construction support activity, a lower number of subscriptions for positioning services and pressure on rates for geophysical work. Subsea Services' revenue declined in the North Sea and Asia Pacific markets,

but grew in Brazil. The decline in revenue in Seabed Geosolutions was mainly driven by the idleness of two ocean bottom cable crews throughout the year. Last year included EUR 19.4 million multi-client data library revenues (Geoscience division), which was divested in June 2015.

<i>Revenue growth 2016</i>	Organic	Exchange rate	Acquisitions	Disposals/ deconsoli- dations	Total
	(22.7%)	(2.1%)	-	-	(24.8%)



Installation of Fugro weather system.

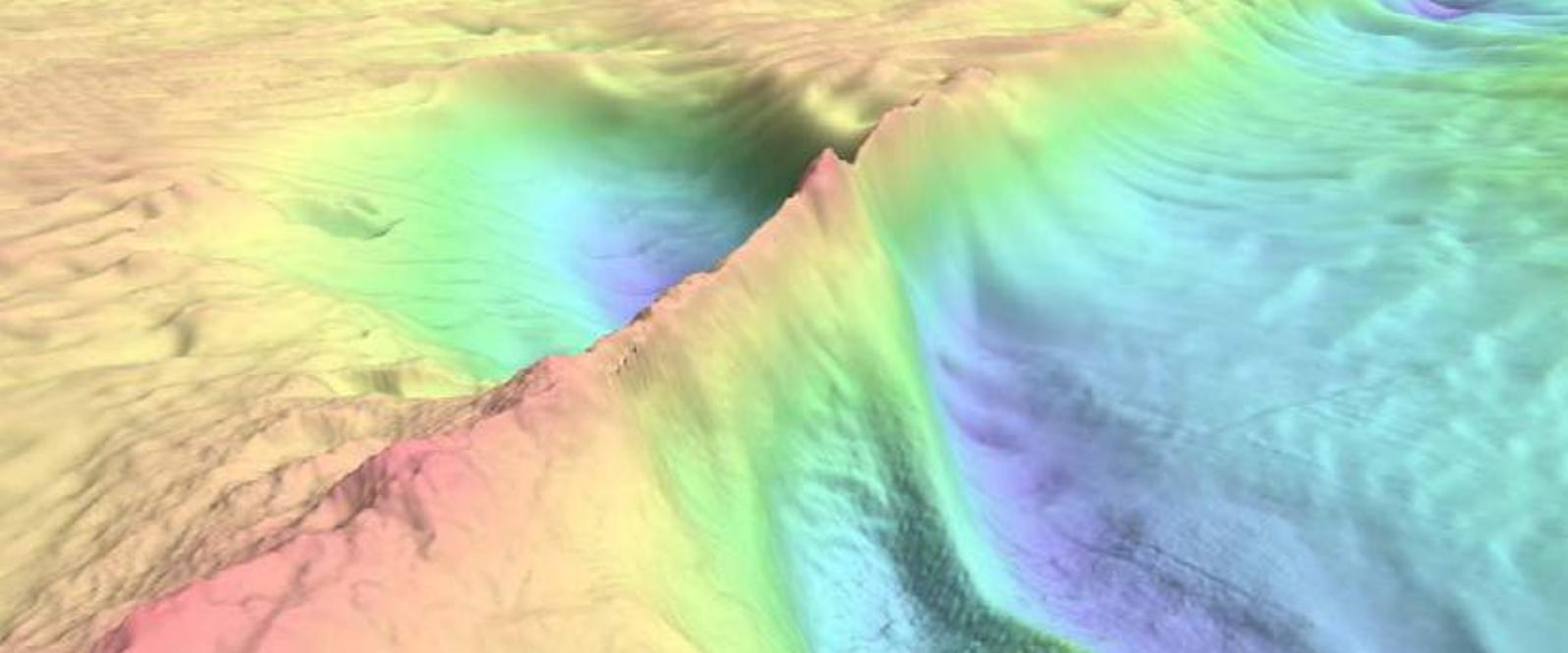
<b>Revenue by region</b> <sup>1</sup> (x EUR million)	2016	2015	Reported growth
Europe	629.0	779.6	(19.3%)
Americas	373.1	646.4	(42.3%)
Asia Pacific	384.8	520.4	(26.1%)
Middle East and India	299.2	299.1	(28.7%)
Africa	89.7	117.5	0%
<b>Total</b>	<b>1,775.9</b>	<b>2,363.0</b>	<b>(24.8%)</b>

<sup>1</sup> By region of origin.

## EBIT

<b>EBIT per division</b> (x EUR million)	2016				2015			
	Reported		Excluding exceptional items		Reported		Excluding exceptional items	
	EUR	Margin	EUR	margin	EUR	margin	EUR	margin
Geotechnical	(90.1)	(14.1%)	19.5	3.0%	(33.9)	(4.6%)	32.7	4.4%
Survey	(2.8)	(0.4%)	11.7	1.8%	79.0	9.5%	89.6	10.7%
Subsea Services	(88.1)	(27.2%)	(43.4)	(13.4%)	(289.7)	(68.4%)	(31.0)	(7.3%)
Geoscience	(37.7)	(21.8%)	20.7	12.0%	(5.3)	(1.5%)	21.8	6.0%
- of which Seabed Geosolutions	(12.6)	(7.3%)	17.2	9.9%	40.5	11.8%	23.1	6.7%
- of which other	(25.1)		3.5		(45.8)	(236.1%)	(1.3)	(6.7%)
<b>Total</b>	<b>(218.7)</b>	<b>(12.3%)</b>	<b>8.5</b>	<b>0.5%</b>	<b>(249.9)</b>	<b>(10.6%)</b>	<b>113.1</b>	<b>4.8%</b>

EBIT margin (excluding exceptional items) was slightly above break-even with losses in Subsea Services and a positive margin in the other divisions. Compared to last year, EBIT of all divisions declined as the ongoing reduction in activity levels and pricing could not be offset by cost saving measures.



3D model of seafloor with colours indicating in water depth, UK sector of North Sea.

**Exceptional items** (x EUR million)

	Geotechnical	Survey	Subsea	Geoscience	Of which Seabed Geosolutions	Of which other	Total
Gain/(loss)							
Onerous contract provision	(0.4)	(0.9)	(1.0)	8.4	8.4	–	6.1
Restructuring costs	(7.3)	(8.7)	(3.4)	(2.6)	(2.6)	–	(22.0)
Other	(4.5)	(1.4)	(0.7)	(12.0)	–	(12.0)	(18.6)
<b>EBITDA impact 2016</b>	<b>(12.2)</b>	<b>(11.0)</b>	<b>(5.1)</b>	<b>(6.2)</b>	<b>5.8</b>	<b>(12.0)</b>	<b>(34.5)</b>
Impairments	(97.4)	(3.5)	(39.6)	(52.2)	(35.6)	(16.6)	(192.7)
<b>EBIT impact 2016</b>	<b>(109.6)</b>	<b>(14.5)</b>	<b>(44.7)</b>	<b>(58.4)</b>	<b>(29.8)</b>	<b>(28.6)</b>	<b>(227.2)</b>
EBITDA impact 2015	(6.2)	(6.9)	(3.9)	17.3	18.4	(1.1)	0.3
<b>EBIT impact 2015</b>	<b>(66.6)</b>	<b>(10.6)</b>	<b>(258.7)</b>	<b>(27.1)</b>	<b>17.4</b>	<b>(44.5)</b>	<b>(363.0)</b>

EBIT was strongly impacted by a number of exceptional items of in total EUR 227.2 million. Key items are:

- Restructuring costs were mostly incurred for companywide headcount reductions.
- Other relates primarily to the transaction loss of EUR 12.0 million on the sale of the CGG term loan.
- Non-cash impairments include EUR 75.2 million goodwill & intangibles and EUR 117.5 million property plant & equipment with as main items two geotechnical vessels, two subsea vessels and some offshore geotechnical and seismic equipment.

**Net result**

<b>Result</b> (x EUR million)	2016	2015
<b>EBIT</b>	(218.7)	(249.9)
Net finance costs	(70.9)	(47.0)
Share of profit/ (loss) in equity accounted investees	(2.2)	7.8
Income tax gain/ (expense)	(9.2)	(69.6)
(Gain)/ loss on non-controlling interests	(7.9)	(13.8)
<b>Net result</b>	<b>(308.9)</b>	<b>(372.5)</b>

**Finance income/ (costs)**

<b>Finance income/ (costs)</b> (x EUR million)	2016	2015
Interest income	8.9	6.5
Dividend income on financial assets	0.0	0.9
Exchange rate variances	-	10.2
<b>Finance income</b>	8.9	17.6
Interest expenses	(65.0)	(62.0)
Net change in fair value of financial assets	(0.3)	(2.6)
Exchange rate variances	(14.5)	-
<b>Finance expenses</b>	(79.8)	(64.6)
<b>Net finance income costs</b>	(70.9)	(47.0)

Interest expense amounts to EUR 65.0 million. This includes EUR 39.7 million interest on outstanding loans and EUR 25.3 million expenses for a large part related to accelerated amortisation of capitalised transaction fees due to early repayments on the US private placement loans. Excluding amortisation, interest expenses decreased by EUR 14.8 million mainly as a result of a lower average outstanding debt in 2016.

The negative exchange rate variances of EUR 14.5 million relate for the most part to the devaluation of monetary assets denominated in Angolan Kwanza and Egyptian Pound.

**Share of profit/ (loss) of equity accounted investees**

The loss in equity accounted investees of EUR 2.2 million (net of tax) was caused by a loss in the joint venture with China Oilfield Services Limited and other joint ventures, partially offset by the profit generated in a joint venture in Iraq.

**Income tax gain/ (expense)**

<b>Tax</b> (x EUR million)	2016	2015
Tax excluding exceptional items	(13.2)	(83.1)
Tax on exceptional items	4.0	13.5
<b>Total tax</b>	(9.2)	(69.6)

Income tax expense was driven by taxable profits in certain countries. In addition, in a number of jurisdictions no deferred tax assets were recognised for current year tax losses and previously recognised deferred tax assets were partially written down because of recoverability risk. The goodwill impairments were not tax deductible.

**(Gain)/loss on non-controlling interests**

The gain attributable to non-controlling interests was EUR 7.9 million and mostly the result of the profit of a subsidiary in the Middle East. The gain last year of EUR 13.8 million included a higher contribution from profits of Seabed Geosolutions, in which CGG has a 40% interest.

**Highlights balance sheet and cash flow****Goodwill**

Goodwill decreased by EUR 52.7 million to EUR 343.9 million. Of this decrease, EUR 51.1 million is related to impairments and EUR 1.6 million to foreign currency translation differences.

**Other intangible assets**

Other intangible assets decreased by EUR 20.5 million to EUR 49.6 million, fully caused by impairments for a total amount of EUR 24.1 million on the profit sharing agreement with Finder and on a geotechnical software application. The remaining value of the indirect interests in Australian exploration projects, via Finder Exploration, is EUR 20.5 million.

**Working capital**

<b>Working capital</b> (x EUR million)	2016	2015
Working capital	192.9	282.3
Working capital as % of last 12 months revenue	10.9%	11.9%
- Inventories	22.1	29.6
- Trade and other receivables	546.2	755.9
- Trade and other payables	(375.4)	(503.2)
Days revenue outstanding (DRO)	92	102

Working capital as a percentage of revenue decreased from 11.9% to 10.9%. Fugro managed to achieve 10 days improvement in days of revenue outstanding as a result of improved billing performance. The year-on-year revenue decline in the fourth quarter of 22.8% was the other main reason for the declining trade receivables.

## Return on capital employed

**Return on capital employed** (x EUR million)

2016

2015

	YE15	HY16	YE16	Average	YE14	HY15	YE15	Average
Capital employed	1,689.7	1,481.0	1,341.2	1,504.0	2,230.6	2,219.2	1,689.7	2,046.5
Exceptional items EBIT impact	–	151.7	227.2	126.3	–	26.0	363.0	129.7
Exceptional items tax impact	–	(2.6)	(4.0)	(2.2)	–	(10.9)	(13.5)	(8.1)
Adjusted capital employed	1,689.7	1,630.1	1,564.4	1,628.1	2,230.6	2,230.6	2,234.3	2,168.1
				2016				2015
EBIT excluding exceptional items				8.5				113.1
Equity accounted investees				(2.2)				7.8
Profit before tax <sup>1</sup> excluding exceptional items				6.3				120.9
Tax expense <sup>2</sup>				(17.3)				(37.4)
NOPAT excluding exceptional items				(11.0)				83.5
Return on capital employed (ROCE)				(0.7%)				3.9%

<sup>1</sup> Excluding net finance income/(expenses).<sup>2</sup> Tax on profit excluding net finance income/(expenses).

The decrease in capital employed is mainly the result of non-cash impairments, the working capital reduction, sale and lease back of a geotechnical vessel and the fact that capex was significantly below depreciation plus amortisation. The return on capital employed was below last year due to reduced EBIT.

## Capital expenditure

**Capital expenditure** (x EUR million)

2016

2015

Maintenance capex	33.2	69.5
Other capex (including assets under construction)	59.3	91.0
<b>Total capex</b>	<b>92.5</b>	<b>160.5</b>

Capital expenditure was reduced from EUR 160.5 million to EUR 92.5 million as a result of strict capex curtailment. The capex spend included a non-cash amount of EUR 23.9 million for the investment in the Hugin vessel for Seabed

Geosolutions. This vessel was previously chartered and the total cash out under this new lease and purchase agreement is similar to the previous operational lease agreement, whilst Seabed has now become the owner of the vessel.

Cash outflow was therefore EUR 68.6 million.

Other capital expenditure was almost entirely for asset maintenance and project equipment. Currently one survey vessel is under construction, with expected delivery in the second quarter of 2017.

## Cash flow

**Cash flow** (x EUR million)

2016

2015

Cash flow from operating activities	130.8	324.9
Cash flow from investing activities	55.3	(10.2)
<b>Cash flow from operating activities after investments</b>	<b>186.1</b>	<b>314.7</b>
Cash flow used in financing activities	(228.0)	(196.2)
<b>Net cash movement</b>	<b>(41.9)</b>	<b>118.5</b>

Improved working capital management, in particular cash collection, resulted in cash flow from operating activities of EUR 130.8 million.

Cash flow from investing activities was EUR 55.3 million positive and included the proceeds from the sale of the CGG term loan (EUR 62.5 million) and the sale and leaseback of a geotechnical vessel (EUR 48.6 million). Last year's cash flow also included proceeds from the sale and leaseback of a geotechnical vessel and proceeds from the divestment of the multi-client data library, but also a significantly higher level of capital expenditures and investments in intangible assets.

Cash flow used in financing activities was negative EUR 228.0 million mainly due to the repayments on the US private placement notes.

### Financial position

Cash flow from operating activities after investments was healthy at EUR 186.1 million driven by cost savings, improved cash collection, curtailed capital expenditure and proceeds from asset disposals. Compared to EUR 160.5 million last year, capital expenditure was contained to EUR 92.5 million. The sale and lease back of a geotechnical

vessel and the sale of the CGG term loan, both in the first half year, resulted in combined proceeds of EUR 111.1 million.

In the fourth quarter, subordinated convertible bonds were successfully placed with total proceeds of EUR 190 million. The proceeds were fully used for early repayment of part of the United States private placement notes (USPP), resulting in reduced interest expense. The related bond amount and related interest costs are excluded from the covenant ratios, creating additional headroom.

Net debt was reduced from EUR 534.7 million to EUR 351.1 million, primarily as a result of the positive cash flow.

The subordinated convertible bonds contain a debt component of EUR 153.9 million and an equity component of EUR 34.5 million before tax. This results in a net debt for covenant reporting purposes of EUR 198.4 million.

Net debt/EBITDA was 1.1, compared to 1.8 at the end of September 2016 and a covenant requirement of below 3.0. The fixed charge cover was 2.4 compared to 2.6 at the end of September 2016 and a covenant requirement of above 1.8.

### Backlog

<i>Backlog per division for next 12 months</i> (x EUR million)	2016	2015	Reported	Currency
			growth	comparable growth
Geotechnical	395.6	435.1	(9.1%)	(7.8%)
Survey	439.7	473.1	(7.1%)	(7.9%)
Subsea Services	240.9	260.0	(7.3%)	(6.8%)
Geoscience (Seabed Geosolutions)	93.4	155.2	(39.8%)	(41.7%)
<b>Total</b>	<b>1,169.6</b>	<b>1,323.4</b>	<b>(11.6%)</b>	<b>(11.6%)</b>

### Outlook

During the first half of 2017, the market for offshore related oil and gas services is expected to show a further significant decline. Towards the latter part of the year it is expected to bottom out as oil and gas companies move from a cost savings mode to cautious preparations for new investments. This expectation is supported by the stabilisation in Fugro's backlog during the second half of 2016.

In line with market developments, Fugro expects a further significant decline of its revenue for the first half of the year, however less severe than in 2016, and ongoing pressure on margins. Towards the latter part of the year Fugro anticipates a bottoming out of the revenue decline. For the full year, we expect a positive cash flow and capex of around EUR 100 million.

Until the oil and gas market recovers, the company will continue to adjust its resources and cost base in line with activity levels.

In the building & infrastructure, offshore wind and mining markets, Fugro expects modest growth.

### Dividend

Due to the negative net result, Fugro will not propose to pay a dividend over the year 2016.

### Operational review per division

#### Geotechnical division

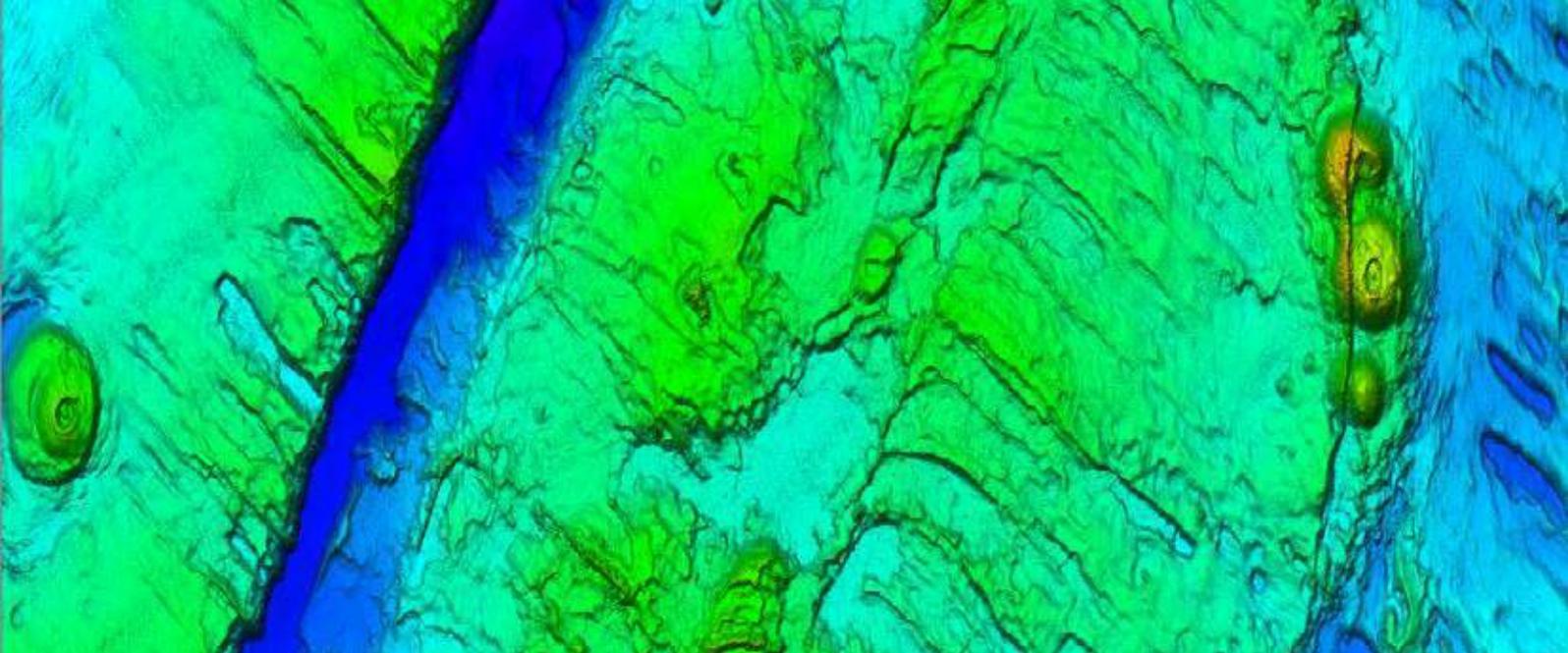
Key figures (x EUR million)	2016	2015
Revenue	640.6	740.4
- reported growth	(13.5%)	(4.5%)
- currency comparable growth	(11.1%)	(14.0%)
EBITDA (excluding exceptional items)	59.7	85.3
EBIT (excluding exceptional items)	19.5	32.7
EBIT margin (excluding exceptional items)	3.0%	4.4%
EBIT	(90.1)	(33.9)
EBIT margin	(14.1%)	(4.6%)
Capital employed	433.5	626.5
Backlog next 12 months	395.6	435.1
Number of employees (at year-end)	4,997	5,491

- Onshore revenue decreased by 6.2% at constant currencies to EUR 430.4 million, primarily due to investment cut-backs in the oil and gas sector. The resulting decline was partially offset by power plant projects in the UK, infrastructure projects in the Netherlands and the Hong Kong Airport runway expansion.
- Offshore revenue decreased by 19.8% at constant currencies to EUR 210.2 million, particularly in the Americas and Europe. The reduction in oil and gas revenues was partly offset by site investigation work on offshore wind farms in North West Europe and the first wind farm developments in the USA and Taiwan.
- Onshore EBIT margin (excluding exceptional items) improved slightly due to a solid operational performance in APAC, Middle East and India. Losses in Africa were reduced while the restructuring is still ongoing.
- Offshore EBIT margin (excluding exceptional items) declined to low-single digit figures caused by price pressure and lower vessel utilisation despite the ongoing high market share.

- EBIT was adversely impacted by EUR 109.6 million of exceptional items primarily relating to impairments on the Fugro Synergy and Fugro Adventurer vessels, the seafloor drills and goodwill related to onshore activities in Africa and to restructuring costs.
- Progress of performance improvement and cost reduction measures:
  - The Fugro Synergy has been repurposed for geotechnical drilling/coring activities and commenced work on a wind farm project off the Dutch coast in January 2017.
  - The headcount was reduced by 494 (- 9%).
  - Third party costs were reduced by EUR 40 million or 17%.
- Noteworthy projects during the year included Fugro's fourth site investigation into gas hydrate bearing sediments for the Guangzhou Marine Geological Survey in the South China Sea, a major offshore site characterisation project for India's national oil and gas company ONGC, a large number of international wind farm projects, and site investigations for "The Tower" in Dubai and Hong Kong International Airport.
- Several new technologies were launched in 2016, among others for improved geotechnical data collection and road monitoring.
- Backlog for the next 12 months shows a decline of 7.8% on a currency comparable basis, compared to the end of 2015. Onshore backlog increased by 1.0% to EUR 301.4 million, while the offshore backlog declined by 28.3% to EUR 94.2 million.

#### Survey division

Key figures (x EUR million)	2016	2015
Revenue	638.8	835.8
- reported growth	(23.6%)	(5.9%)
- currency comparable growth	(21.6%)	(13.5%)
EBITDA (excluding exceptional items)	67.5	160.8
EBIT (excluding exceptional items)	11.7	89.6
EBIT margin (excluding exceptional items)	1.8%	10.7%
EBIT	(2.8)	79.0
EBIT margin	(0.4%)	9.5%
Capital employed	518.3	590.1
Backlog next 12 months	439.7	473.1
Number of employees (at year-end)	3,798	4,392



Bathymetry map (showing water depth) of a detail of the MH370 search area in the Southern Indian Ocean.

- The revenue for the Survey division was well below last year mainly due to less construction support activity, a lower number of subscriptions for positioning services and pressure on rates for geophysical work, due to the excess capacity in the market. Survey has strengthened its market position.
- Activity levels outside of oil and gas increased, mostly in renewables.
- Cost reduction measures did offset the lower activity level but were not sufficient to also compensate for price pressure, resulting in a strong decrease in EBIT. Reported EBIT includes exceptional costs of EUR 14.5 million primarily related to restructuring measures.
- Cost reduction measures included:
  - A reduction in the survey fleet to 18 vessels by retiring 3 vessels, in order to take capacity out of the market.
  - Further headcount reductions of 594 FTE (-14%).
  - Third party cost reductions of EUR 47.0 million (-17%).
- The search for the Malaysia Airlines MH370 aircraft (recently suspended) was one of the main projects during 2016. The year also witnessed an increase in hydrocarbon seep surveys, particularly in the Americas and Asia Pacific and geophysical work for offshore wind farms. A significant offshore survey and positioning contract at Total's Kaombo oil development offshore Angola commenced during 2016.
- Several new technologies were launched in 2016, among others for unexploded ordnance detection, positioning services and vertical placement of large structures.
- On a currency comparable basis, the backlog for the year ahead is down by 7.9% compared to 2015. Compared to the previous quarter, it increased by 11.9%.

#### Subsea division

<b>Key figures</b> (x EUR million)	2016	2015
Revenue	323.5	423.6
- reported growth	(23.6%)	(30.4%)
- currency comparable growth	(19.8%)	(36.5%)
EBITDA (excluding exceptional items)	0.2	20.8
EBIT (excluding exceptional items)	(43.4)	(31.0)
EBIT margin (excluding exceptional items)	(13.4%)	(7.3%)
EBIT	(88.1)	(289.7)
EBIT margin	(27.2%)	(68.4%)
Capital employed	253.4	298.2
Backlog next 12 months	240.9	260.0
Number of employees (at year-end)	1,299	1,566

- Revenue decreased by 19.8% at constant currencies, particularly in the North Sea and Asia Pacific regions, while revenues grew marginally in Brazil, Middle East and India.
- The decline in revenue in combination with high operating leverage, led to an increased EBIT loss (excluding exceptional items). Europe and Asia Pacific were loss-making while Brazil generated a positive EBIT reflecting reasonable vessel utilisation and good operational performance.
- EBIT for the division was negatively impacted by EUR 44.7 million of exceptional items mainly caused by impairment charges on goodwill for the division and on two construction support vessels.
- In 2016, measures taken were:
  - The active subsea services fleet was reduced by 2 long term charters. A number of older ROVs were retired, bringing the total number to 125.
  - Following two recently awarded multi-year IRM contracts in Asia Pacific, Fugro has decided to acquire one of these vessels, REM Etive,

- at conditions significantly more beneficial than a renewed charter agreement.
- The divisions headcount was reduced by 267 FTE (-17%).
- Third party costs were reduced by EUR 30.0 million (-15%).
- In Brazil, 7 subsea vessels were active at the end of 2016, compared to 9 a year earlier. These consisted of 6 vessels on tripartite contracts plus the Fugro Aquarius. In the course of 2016, four tripartite contracts were renewed and three ended.
- Noteworthy projects during the year included Rampion wind farm project, IRM work for Petrobras (multiple vessels), deep water ROV drill support for Total and an installation and support project for BHP Billiton.
- At year-end, the backlog for the next 12 months was 6.8% lower on a currency comparable basis compared to the end of 2015.

#### Geoscience division

The Geoscience division almost fully consists of Fugro's 60% stake in Seabed Geosolutions (fully consolidated) and some indirect interests in Australian exploration projects, via Finder Exploration.

#### Seabed Geosolutions

<b>Key figures</b> (x EUR million)	2016	2015
Revenue	173.0	343.8
- reported growth	(49.7%)	52.7%
- currency comparable growth	(49.7%)	27.2%
EBITDA (excluding exceptional items)	58.5	69.3
EBIT (excluding exceptional items)	17.2	23.1
EBIT margin (excluding exceptional items)	9.9%	6.7%
EBIT	(12.6)	40.5
EBIT margin	(7.3%)	11.8%
Capital employed	132.8	174.6
Backlog next 12 months	93.4	155.2
Number of employees (at year-end)	200	261

- Revenue decreased by 49.7% at constant currencies, driven by idleness of the two ocean bottom cable crews.
- Seabed Geosolutions' other two crews were active throughout the year with the shallow water crew working continuously in the United Arab Emirates for ADNOC, while the ocean bottom node crew was active in Australia and the North Sea before mobilising at year-end for West Africa.

- In a slow market affected by project delays, Seabed Geosolutions maintained its leadership position, while protecting margins and cash generation.
- Seabed Geosolutions implemented strong cost measures resulting in a reduction of 61 FTE (23%) and non-project related costs by 20%.
- EBIT (excluding exceptional items) includes a one-off operational benefit of EUR 11.3 million. This one-off is the result of the conversion of the charter agreement for the Hugin Explorer vessel into a lease and purchase agreement in the first half of 2016. The terms of this transaction will improve Seabed Geosolutions long term competitiveness while providing access to a vessel well suited for future technology developments.
- EBIT was adversely impacted by exceptional items for an amount of EUR 29.8 million primarily related to impairments on goodwill and equipment in the first half of the year, partially compensated by the reversal of an onerous contract provision.
- The backlog for the next 12 months decreased by 41.7% at constant currencies compared to the end of 2015. Whereas 2017 will be another complex year for the ocean bottom seismic services market, there is a growing project pipeline in all key regions, especially on the 4D market. With the introduction of the Manta™ node technology and the deployment of additional efficiency enhancing solutions, Seabed Geosolutions is well positioned for those opportunities.

#### Foreign currency

<b>Exchange rates (versus euro)</b>	2016 Year-end	2016 Average	2015 Year-end	2015 Average
US dollar	0.95	0.91	0.92	0.91
British pound	1.16	1.22	1.36	1.38

As a result of the fluctuations in average exchange rates during the year, the net foreign exchange effect in the profit and loss was EUR 14.5 million negative (EUR 10.2 million positive in 2015). The currency translation difference related to foreign operations had a positive effect of EUR 26.9 million on equity per 31 December 2016 (31 December 2015: EUR 118.7 million positive). The majority of the translation difference relates to the US dollar and British pound.

## Employees

At the end of 2016 the number of employees was 10,530 (2015: 11,960). In most operating companies, reductions in staff were implemented during the year as part of the ongoing cost reduction measures. The net effect of these reductions and few new hires was a decrease of 1,430 employees. The average number of employees for the year was 11,245 (2015: 12,749), a decrease of 11.8%.

<b>Employees</b>	2016	2015
Europe	3,251	3,624
Americas	2,276	2,747
Asia Pacific	2,127	2,314
Middle East & India	2,086	2,226
Africa	790	1,049
<b>Total (at year-end)</b>	<b>10,530</b>	<b>11,960</b>
<b>Total (average)</b>	<b>11,245</b>	<b>12,749</b>

## Subsidiaries and joint ventures

### Subsidiaries with non-controlling interest

Fugro has several subsidiaries over which it has control and which are fully consolidated. The related consolidated subsidiaries with a non-controlling interest are included in the financial statements for 100% and the part which belongs to the partner and/or other shareholder(s) is shown as 'non-controlling interest'.

The net profit is mainly related to Seabed Geosolutions and a subsidiary in the Middle East.

<b>Subsidiaries with non-controlling interest - 2016</b> (x EUR million)	100% Basis	Included in financial statements
Revenue	217.7	217.7
Net profit	13.3	13.3
- Attributable to owners of the company	-	5.3
- Attributable to non-controlling interest	-	8.0

## Joint ventures

The interest in equity-accounted investees comprises joint ventures in which Fugro has joint control. These joint ventures and partnerships are included in the financial statements on the line 'Share of profit/ (loss) of equity accounted investees' and in the consolidated statement of financial positions on the line 'Investments in equity-accounted investees'.

<b>Joint ventures - 2016</b> (x EUR million)	100% Basis	Included in financial statements
Revenue	50.7	-
Share of profit/ (loss) of equity accounted investees	(4.5)	(2.2)

## OVERVIEW IMPORTANT CONTRACTS

### AMERICAS

**Brazil** – Fugro deployed its newly built vessel Fugro Aquarius on inspection, repair and maintenance (IRM) work for Petrobras. This contract, with a duration of one year with an option for an additional year, reinforces Fugro's market leadership in the IRM segment in Brazil and underlines the success of its long-term relationship with the client. In addition, per the end of the 2016, Fugro had 6 tri-partite vessel contracts with Petrobras.

**Brazil** – Fugro was awarded a 3-year contract by Petrobras to provide positioning services, including OARS (Offshore Assisted Remote Services) technology, for an estimated 22 anchor handling vessels, floating production, storage and offloading units (FPSO) and mobile offshore drilling units. Initial operations were carried out in the fourth quarter of 2016.

**Canada** – Fugro was awarded a contract by the Canadian Hydrographic Service (CHS) to provide hydrographic survey data from ports, harbours, nearshore and offshore regions. The resulting data will be used by CHS to update its nautical charts.

**Uruguay** – Fugro completed a contract for Total to support its offshore drilling campaign in the Raya-1 field at 3,400 metres water depth. The project comprised rig positioning and tooling services. Fugro supplied two remotely operated vehicles (ROV), which are installed on board the drilling ship and a field support vessel. Real-time video provided by Fugro and Total's telecom network allow Total to remotely observe critical operations from its onshore office during drilling operations.

**USA** – Fugro Roadware was awarded a large road survey contract by the state of Texas to collect over 45,000 lane-miles of pavement condition data annually using multiple Fugro ARAN systems. Data and information is input to the Texas Department of Transportation's pavement management information system and will be used by the client to develop reliable and timely maintenance and rehabilitation plans. Texas has the largest state road network in the country.

**USA** – Vineyard Wind contracted Fugro to perform a geotechnical site investigation for its wind development lease, offshore Massachusetts. Fugro's state-of-the-art, 105-metre drilling vessel Fugro Synergy performed the

study, which included numerous seabed cone penetration tests and exploration boreholes. Following the field work, a programme of laboratory testing was performed. The Fugro Synergy also conducted a similar site characterisation programme for DONG Energy offshore Massachusetts, on their Bay State Wind development project.

### EUROPE

**The Netherlands** – The city council of The Hague has contracted Fugro to monitor movements of structures and ground surface above the tunnel 'Rotterdamsebaan' during construction. Fugro will install about 40 robotic stations and use its in-house developed GeoRisk Portal to host and present the monitoring results to the client and the contractor in real-time.

**Norway** – The Norwegian Public Roads Administration awarded Fugro a significant contract for marine environmental and meteorological measurements in connection with the planned upgrade of the coastal highway (Route E39) running from Kristiansand along the west coast to Trondheim. Route E39 currently includes 7 fjord crossings by ferry. Fugro's tethered LiDAR buoys will provide the needed information about projected wind forces on the roadway between future bridge towers. This contract is planned to run over a period of 12 years.

**Norway** – Fugro was awarded a three-year IRM contract for Det norske (since merged with BP Norge to form Aker BP). The offshore scope covers subsea assets in the Norwegian sector of the North Sea at multiple field developments.

**United Kingdom** – Fugro undertook site characterisation works for Horizon Nuclear Power at the proposed Wylfa Newydd power station site on the Isle of Anglesey. Two jack-up barges conducted the geotechnical drilling and sampling operations at 36 borehole locations in varying water depths. The detailed works are assisting Horizon to gain a better understanding of the geological conditions of the proposed site.

**United Kingdom** – DONG Energy appointed Fugro to perform offshore surveys at the Walney Extension offshore wind farm off the Cumbria coast. The surveys will include additional geophysical data to ensure the seabed is clear of obstructions, including unexploded ordnance from the Second World War. The 660MW wind farm is expected to be fully commissioned around 2019, at which time it will be the biggest offshore wind farm in the world.



Wave scan buoy onboard survey vessel Fugro Brasilis.

## AFRICA

**Angola** – Under a contract awarded by Technip, Fugro commenced deep-water survey and positioning services on the Kaombo oil field development in the second half of 2016. The work involves a total of seven installation and construction support vessels. Located in water depths up to 2,000 metres, the project features specialised survey operations and subsea positioning using one of the largest arrays of subsea acoustic transponders ever deployed. The contract is scheduled to continue until early 2018.

**Angola** – The positioning and survey support contract for Total was extended for another three years. This marks Fugro's continued relationship with Total Angola after more than 15 years of supplying services for the development of their assets in Block 17 and Block 32.

**Kenya** – Fugro will execute a seep survey for Shell/BG Kenya in the search for natural leakages of hydrocarbons as an indication of oil or gas reservoirs. For this project, the Fugro Discovery vessel will be upgraded to host a dual multibeam system. The field work is expected to be completed in the second quarter of 2017. Detailed reports will follow after an extensive programme of laboratory analyses.

**Congo** – Fugro was awarded a contract for two ROVs and associated subsea tooling to support Total in their Moho Nord development.

## MIDDLE EAST & INDIA

**India** – In 2016, Fugro commenced a major offshore site characterisation project for India's national oil and gas company ONGC on the East coast. The purpose of the work is to gather geotechnical and geohazard data to aid the design and installation of subsea infrastructure within the

field. The fieldwork is followed by extensive laboratory testing, data analysis, interpretation and integration with previously acquired geophysical and metocean data to generate comprehensive site characterisation reports.

**India** – ONGC also awarded Fugro an 18-month contract for the provision of deep-water ROV drill support services.

**Pakistan** – Fugro has been awarded a two-year contract for the assessment and exploration of mineral resources. Fugro will plan and supervise exploration of areas of the Punjab for iron ore and other minerals. The exploration programme will include geophysics, geotechnics, hydrology, drilling and laboratory testing as well as quality and budget control. The programme will culminate in a detailed estimation report of metal deposits in Punjab.

**United Arab Emirates** – Seabed Geosolutions secured an extension to its shallow water seabed seismic survey offshore Abu Dhabi. The variation order from Abu Dhabi National Oil Company (ADNOC) covers Phase-II of the Ghasha field project. Work commenced in October and is expected to take approximately 9 months. With this award, Seabed Geosolutions entered its 4th year of continuous operations for ADNOC.

**United Arab Emirates** – Fugro conducted a geotechnical site characterisation campaign for the iconic new addition to Dubai's skyline, 'The Tower at Dubai Creek Harbour' by Emaar Properties, which is expected to surpass the 828-metre high Burj Khalifa. This work programme represented one of the most comprehensive geotechnical investigations ever undertaken in the region.

## ASIA PACIFIC

**Australia** – Fugro was awarded a contract by INPEX for subsea services to be executed across the Ichthys facilities in the Timor Sea. The contract encompasses field operations support, inspection, repair and maintenance services and will run for five years, with options for extensions.

**Australia** – Fugro has been actively involved with the search for the missing Malaysia Airlines aircraft (MH370) between June 2014 and January 2017. After analysing all available information to determine the most likely location of the aircraft, the Australian Transport Safety Bureau contracted Fugro to conduct a bathymetric survey over an area of seabed 120,000 kilometres square, off the coast of Western Australia. Aided by the data from this survey, Fugro (and other parties) then conducted a detailed sonar search of the seafloor. Unfortunately, the aircraft was not found to be within the designated search area and the search is now officially suspended.

**Australia** – Energex, a government-owned corporation supplying electricity to over 3.2 million customers in South East Queensland, has awarded Fugro a contract to provide the full suite of Roames services over the entire Energex network. These services include the creation of a model of the complete network, vegetation management and an assessment of the condition of the network.

**China/Hong Kong** – Fugro continued its site characterisation work for the new third runway at the Hong Kong International Airport. Field work was performed including laboratory testing at locations near the original site, including some within the environmentally sensitive Marine Park. In addition, Fugro was involved in site trials of new soil stabilisation techniques that are designed to minimise the amount of dredging required and support the sustainable development of the runway.

**Myanmar** – During 2016, Fugro undertook two integrated seep surveys offshore Myanmar region for BG Group (now part of Shell) and Woodside. Using specialised survey vessels equipped with state-of-the-art multi beam echo sounders, Fugro utilised offshore interpretation and geochemical coring methods to examine naturally occurring hydrocarbon seeps to help companies maximise their potential for exploration success in deep water.

**Taiwan** – Fugro was awarded an integrated site characterisation contract by Dong Energy in preparation for a major offshore wind farm. Fugro's vessels the Equinox and Mariner completed a series of geophysical and geotechnical surveys over an area of approximately 480 square kilometres. This represented the first major renewables project for Fugro in Asia in what promises to be a sector with significant growth potential.



## Site characterisation in practice

# Five year site investigation campaign in Mozambique

In the uncharted waters of Northern Mozambique, Fugro recently completed a five year site characterisation campaign for Eni S.p.A.. The aim of the campaign was to map the sea floor and the geology beneath it and generate a ground model to assist with the engineering phase of the development of the recently discovered gas fields.

The survey commenced with a metocean programme which involved the deployment of a number of buoys to measure current, wind, wave and seawater properties down to 1,800 m water depth over a period of 18 months. This was followed by a comprehensive bathymetry and geophysical survey where we used an autonomous underwater vehicle to map the sea floor in water depths down to 2,600 m. Samples from the air, sea and seafloor were analysed in our specialist laboratories for subsequent analysis and interpretation. The final result was a complete ground model, developed by Fugro's geoscientists and geotechnical engineers.



Geophysical survey

fieldwork: **434** days

geotechnical & environmental

survey fieldwork: **581** days.

## SUSTAINABILITY

### Sustainability approach and ambitions

Fugro is committed to conducting its business ethically and responsibly and contributing to sustainable development. This requires balancing short and long term interests of our stakeholders and integrating economic, social and environmental considerations into decision making. Fugro's vision is to contribute to a safe and liveable world by being the world leading, independent provider of geo-intelligence and asset integrity solutions. With its solutions, Fugro delivers an essential contribution to sustainability, as Fugro's services enable clients to make sustainable use of the Earth and its resources and build assets.

Fugro's code of conduct embeds key aspects of its approach to sustainability. Fugro uses the OECD Guidelines for Multinational Enterprises as reference, covering topics like anti-corruption and bribery, human rights, competition and anti-trust and intellectual property. Fugro operates internationally, and complies with relevant local laws and regulations.

Fugro's people make the difference in an increasingly competitive marketplace. Fugro is an equal opportunity employer that promotes diversity and has as core value that we treat everyone with integrity and respect, irrespective of race, religion or background. Fugro has a broad global presence. It promotes strong local presence and benefits from this diversity as this contributes to understanding challenges and complexities from a local point of view.

Safety is key to all Fugro's operations, and therefore an essential element of its sustainability approach. Fugro is committed to providing a safe working place for all its employees, subcontractors and clients. Fugro management takes a proactive approach towards creating a safe working environment for all employees and is accountable for promoting continued safety education and training. Fugro firmly believes that incidents can be prevented.

Fugro is committed to avoid any damage to the environment. Fugro has assets, processes and solutions in place that assist its clients and other partners in limiting the impact on the environment during operational activities. Reducing the environmental impact of Fugro's own operations is of course also an essential part of its sustainability approach. Fugro's solutions generally contribute to the environment, for example in support of developing renewable energy and through environmental assessment services. Its asset

integrity solutions enhance longevity of assets, saving on environmental cost of renewal, ensuring safe and efficient operations of assets and reducing risk of leakage in oil and gas infrastructure.

### Sustainability organisation

Fugro's sustainability agenda is set by the Board of Management. Sustainability topics relevant to Fugro are managed and monitored by the appropriate corporate directors responsible for legal, human resources, QHSSE and IT. Fugro's operating companies are responsible for local implementation of relevant practices within the policy framework set by the Board of Management. In 2017, Fugro will further develop its policies relating to sustainability and reporting on performance.

### Materiality matrix

In 2017, Fugro will further develop its group approach to sustainability and related reporting as part of moving towards integrated reporting as per the framework of the International Reporting Council (IIRC). Leading in the implementation are the topics that have been identified as material related to sustainability. Materiality refers to the threshold at which topics become sufficiently relevant to be reported and are therefore important to Fugro's business, stakeholders and society. In 2016, Fugro established a materiality matrix that identifies the key sustainability topics for Fugro and its stakeholders. To achieve this, Fugro executed a stakeholder engagement process in cooperation with an independent sustainability consultant to determine topics covering economic, environmental and social impacts and their materiality.

The process started with the compilation of a longlist of topics, based on internationally accepted standards and frameworks including GRI standards, UN Global Compact, OECD Guidelines for Multinational Enterprises, specific oil and gas industry standards and disclosure practices of peer companies. From this longlist, 20 relevant topics were subsequently identified as being the most important to Fugro's business. These were further assessed internally and externally.

The internal assessment was focused on identifying topics that are most relevant from Fugro's business perspective. It was based on a questionnaire and subsequent interviews with a set of senior managers, both at head office level and in the regions. In these interviews the relevant 20 topics were discussed in depth.

**Fugro's materiality matrix**

		Material topics		
Relevance for external stakeholders of Fugro	Very relevant	Human rights Sustainable supply chain	Carbon footprint	Employee health & safety Business ethics & anti-corruption
		Biodiversity Waste management and effluents Energy and resource management Support of local communities	Regulatory & legal compliance Diversity & equal opportunity	Stakeholder engagement Employee training & development Sustainable innovation & services Talent attraction & retention
	Less relevant	Water resource management Environmental accidents and remediation	Tax policy Environmental compliance Climate change mitigation & adaptation	
		Less relevant	Very relevant	
<b>Relevance for Fugro</b>				

The external assessment was executed as a desk top study. Requests and opinions from customers and investors were compiled and analysed. The underlying objective was to determine which themes stakeholders consider as the most important sustainability topics for Fugro.

The shortlist of 20 topics and their assessment was reviewed and discussed by the Board of Management. The resulting materiality matrix shows the material topics for Fugro in the four upper right quadrants.

The material topics which result from the materiality assessment can be categorised in economic, social and environmental themes. They will serve as the basis to further develop Fugro's existing approach to sustainability. In 2017 we will enhance reporting processes and indicators that reflect and support Fugro's business and role in society.

**Economic topics**

**Stakeholder engagement**

Fugro values engagement with its stakeholders, supports them with extensive information on performance and progress, and actively seeks the opinions and ideas of its stakeholders through regular consultations. This includes customer satisfaction surveys, management reviews with key customers, internal and external audits, meetings with shareholders, works councils, governments, local communities, and contacts with research and development partners including a broad range of international universities and participation in standard setting organisations.

Stakeholders	Objective	Relevance for Fugro	Relevance for stakeholder	Interaction
<b>Customers</b>	Customer satisfaction and loyalty	Purchase services to support their projects	Provision of high quality competitive services to support and de-risk their investment	Work visits, exhibitions, annual reviews with senior management, technology fairs
<b>Employees</b>	Employee motivation, engagement and retention	Essential for providing high quality, sustainable services and continuity	Good employer, satisfying work environment, development, adequate remuneration	Management and peers, intranet, collaboration tools, newsletters, quarterly bulletins, performance appraisals, social media
<b>Capital providers (shareholders, bond holders, banks)</b>	Communication on strategy, results, markets, opportunities and risks, engagement	Access to capital markets	Solid investment	Annual general meeting, bi-annual visits to main shareholders, investor conferences, website
<b>Suppliers</b>	Strong, reliable suppliers	Provide products and services required to perform company activities	Having reliable customer/partner	Negotiations and contracts, review meetings, code of conduct
<b>Governments</b>	Adherence to legislation, understanding new developments, good citizenship	Setting local regulations and minimum requirements	Support economic development and employment, promote R&D and sustainability	Internet, trade missions, working groups
<b>Technical universities</b>	Recruitment of staff, joint R&D activities, good citizenship	Source of potential employees with appropriate education, scientific know-how	Potential future employer and provider of traineeships and practical experience	Internet, social media, seminars, joint R&D projects
<b>Industry societies (IMCA, IRO, etc)</b>	Exchange of knowledge, improvement of industry standards	Setting national and international industry standards, science and technology exchange	Partnership to secure and roll out industry standards, science and technology exchange	Internet, company representatives
<b>Local communities</b>	Good citizenship	Societal support	Support of local community	Sponsorship events, engagement activities

Most of the community projects supported by Fugro are initiated by local operating companies, and range from voluntary work, sponsoring in kind to donations to local schools, sports clubs, care facilities and other charities. In addition, Fugro seeks to preserve and promote accessibility to valuable culture, local heritage and nature, and supports many different initiatives around the world. In the Netherlands, Fugro is a sponsor of the world renowned Concertgebouw in Amsterdam, and also provides financial support to the Hermitage foundation in Amsterdam, the Mineralogisch-Geologisch Museum in Delft and the Hoge Veluwe national park (all in the Netherlands).

#### Business ethics and anti-corruption

Fugro is committed to conduct business in an ethical and responsible way and does not engage in bribery or corruption. Business decisions are based solely upon legitimate business considerations. Fugro, as a globally operating company, devotes a lot of effort towards promoting the appropriate behaviour throughout the organisation and the prevention of bribery and corruption, and takes appropriate measures when required.

Fugro's code of conduct provides the translation of Fugro's values into its day to day business activities. The purpose of the code is to provide guidance and support in order to conduct business ethically, comply with the law and maintain Fugro's reputation. The code has the OECD Guidelines for Multinational Enterprises as reference. The code is applicable to all employees, subcontractors and other business partners. In 2017 a new interactive e-learning course will be rolled out internally about the code of conduct and underlying policies. In addition to anti-bribery and corruption, training topics will include conflict of interest, economic sanctions and export controls.

The code of conduct is linked to Fugro's whistleblower procedure which encourages employees to speak up without retaliation in case of an observed irregularity. Fugro's employees are protected when reporting suspected irregularities of a general, operational or financial nature in any operating company, worldwide. In 2017 the whistleblower regulation will be replaced by a so-called speak-up procedure to enhance the process. It offers various channels for reporting suspected violation of the code of conduct and describes the subsequent internal investigation process supervised by the Fugro integrity committee. It includes a new reporting channel for reporting suspected irregularities which will be operated by a third party, assuring complete anonymity.

The code of conduct as well as the whistleblower procedure are translated in the most relevant languages and are published on the intranet, so that they are easily accessible. In addition, key Fugro staff complete a compliance form annually to confirm adherence to the code of conduct.

As Fugro promotes responsible behaviour throughout the supply chain, it requires suppliers and subcontractors to comply with its code of conduct, and conduct their business in an honest and ethical manner. Fugro has prepared a specific supplier code of business principles which will be introduced in 2017.

As part of Fugro's anti-bribery and corruption programme, Fugro has a procedure that provides for the screening of existing and new agents by an independent third party and a web-based self-assessment (for more details see Risk management). Agents are screened every second year and the screening rate is 100%.

### Regulatory and legal compliance

Fugro is committed to adhere to applicable (inter)national and local laws and regulations. To ensure compliance with all relevant laws, regulations, and expectations in society at large, Fugro monitors with key employees of its operating companies (through signed compliance forms) if they are aware of the content of the code of conduct and handle accordingly and if any irregularities have been raised against the company.

Fugro has an independent internal audit department to monitor adherence to legal and regulatory requirements on a continual basis. The head of internal audit reports to the CEO, but is also independently accountable to the audit committee of the Supervisory Board (for more details see Risk management). Internal audit has a risk based focus in determining the audit plan. In 2016, 27 internal audits were performed, covering around 25% of Fugro's revenue.

Fugro is committed to competing fairly and ethically within the framework of applicable anti-trust and competition laws. Fugro believes in honesty, integrity, and fairness in all aspects of its business and expect the same in the relationships with all those with whom it does business. Operating companies are encouraged to compete vigorously for business, but always fair, in compliance with the law and on the merits of its products and services.

### Sustainable innovation and services

Fugro is committed to provide services that support the sustainable development and operation of build assets of clients and natural resources. In addition, Fugro strives to limit the impact of its own operations on the environment.

Innovation is a key strategic driver for Fugro to support long term value creation for all its stakeholders. Through innovation, Fugro's portfolio of technology and services is continually enhanced. This is important to secure Fugro's competitive position and to create economic benefits, to increase opportunities for clients to enhance the sustainability of their projects, to provide services that directly support projects targeting sustainable energy and use of sustainable resources and to improve the sustainability of its own services.

Fugro has fifteen research & development centres around the world which actively work on the development of innovations. These centres are located internationally to promote and take advantage of diversity and to support



*Fugro Techcentre Nootdorp; the first LEED platinum building in the Netherlands.*

local development. In 2016, Fugro spent around 2% of its revenue on research & development and technology innovation.

As part of its research and development programmes, Fugro generates significant intellectual property. An outcome of Fugro's strategic review in 2013 was that protecting its intellectual property needed improvement, and patenting of inventions has been stepped up since. Fugro applied for 17 (families) of patents for new inventions and 15 patents have been granted in 2016. Since 2013, Fugro has filed 132 patents applications worldwide.

New technologies launched in 2016 were the GeoWing system, 3Direct®, NorthStar™, Wison® MkV, Seacalf 20c, XRF CPT technology, FAZTFiber™, and Manta® (see Strategy).

In November 2016 Fugro was awarded the ISO 17025 certification by the Dutch Accreditation Council RvA. It was the first time that this accreditation was handed out for the calibration of geotechnical instrumentation applied to cones penometers. The award is a highly regarded, international indicator of technical competence.

Scientific partners are important stakeholders for Fugro. A significant part of Fugro's technology is developed in close cooperation with its clients. Moreover, joint research and development activities are carried out with universities and institutes across countries in which Fugro works to develop new technologies and as part of Fugro's commitment to local communities.

Fugro maintains relationships with a large number of universities and other institutes across the globe. Examples are: University of California, Berkeley (United States),

University of Oxford (United Kingdom), University of Cambridge (United Kingdom), Ifremer marine research institute (France), TNO (technology research institute (the Netherlands), Delft University of Technology (the Netherlands), National University of Singapore, University of Western Australia Universidade Lúrio (Mozambique) and Hong Kong University (China). Fugro also contributes to knowledge dissemination through publications, and publishes or is involved with publishing around 100 scientific papers per year.

Fugro is growing its portfolio of services directly targeted at sustainability projects of clients and its own operations. Examples in 2016 are:

- In 2016, Fugro undertook a range of site characterisation projects to support the development of offshore wind farms in Europe, the USA and Taiwan.
- In the development of the third runway of the Hong Kong airport, which is located in the Hong Kong Bay, Fugro is trialing a new deep cement mixing technique for foundations. This supports a sustainable solution that will minimise dredging, which is especially important as contaminated mud pits underlie a large part of the development area.
- As a further example of environmental work, Fugro was commissioned by Total E&P Cyprus to undertake a marine environmental survey of the seabed at their proposed exploratory drill site located 200 kilometres south of Cyprus. Sediment samples and underwater video were collected to describe the seabed habitats and surrounding marine life and to highlight any environmental sensitivities as well as potential areas of ecological interest, if present.

- Fugro provides hydrography services to allow government bodies to map and assess their territorial waters and exclusive economic zones for resource management, sustainable development and safety of navigation. In 2016, Fugro completed a multi-year hydrographic survey in the Red Sea for Saudi Aramco and executed a complex, multi-sensor survey for NOAA in the United States. Fugro also holds multi-year hydrographic survey contracts with amongst others the United States, Canada, the United Kingdom and Australia.
- Fugro continues to roll out its Office Assisted Remote Services (OARS), which reduce the need for onboard surveyors on vessels and hence improves safety and reduces travel needs for clients.
- The Oceanstar positioning system is being introduced to the marine market to improve safety and reduce fuel consumption on large vessels.
- Fugro strives to make its own services environmentally friendly and safe. In 2016 we introduced the Fugro EcoDrive fluid for use in downhole geotechnical testing. It consists of 90% fresh water mixed with 10% vegetable base oil, to reduce the environmental impact of operations.

## Social topics

### Employee health & safety

Fugro is committed to provide a safe working place to its employees, third party staff and clients. Fugro strives to achieve a zero accident and incident rate and promotes continued safety education for its employees.

Focusing on employee health and safety is an integral part of operational management. Fugro firmly believes that incidents can be prevented and has therefore implemented a HSSE management system at all levels of the organisation. Fugro's HSSE management system establishes and defines the corporate vision, policy and principles regarding health, safety, security and environment for Fugro. All operating companies have to comply with this management system. Fugro continuously reviews potential areas of improvement and ensures thorough evaluation of every incident.

All key operating companies (those with a relatively high safety risk profile) need to operate according to standards and Fugro strives to achieve high coverage of operating in accordance with OHSAS 18001, the world's most recognised occupational health and safety management systems standard, or equivalent certification. Two more operating companies achieved OHSAS 18001 accreditation

by the end of 2016. By the end of 2016, 96% of Fugro's key operating companies are certified or close to certification. Fugro promotes visible leadership and a sense of responsibility throughout its organisation, in particular with respect to safety. Senior managers set and implement the relevant policies and procedures, decide on organisational objectives and priorities and lead by example. At the same time safety of themselves and their co-workers is the personal responsibility of every individual employee.

Key activities in 2016 included:

- Significant progress in rolling out 'Managing safely in Fugro', a 3 day class room course for (middle-) management and supervisors accredited by Institute of Occupational Safety and Health in the United Kingdom (IOSH). In 2016, the course was completed by 565 employees, similar to the previous year. The programme will continue throughout 2017 and 2018.
- The rollout of the internally developed e-learning course for all employees 'Working Safely in Fugro' has maintained its momentum with 573 employees completing the course during 2016, bringing the total number up to 2,081.
- Continued roll out of Fugro's groupwide health and safety programme iPower™, which emphasises personal responsibility. This year focused on manual handling and ergonomics, task planning and awareness, and driving.
- Internal publication of several new and updated corporate HSSE standards.
- As an example of improving safety by working closely with clients, Fugro is involved in a joint safety leadership project with Shell with the objective to reduce complexity of safety management on projects and to get safety to the 'front line' by involving all personnel working on a project. A number of safety tools were identified and combined into a toolkit, with supporting processes and examples. Following successful trials and implementation in Fugro's marine survey operations in Aberdeen, these tools are being rolled out across the Marine division throughout 2017.
- In November the Fugro senior management team and representatives from Shell participated in a 'safety challenge'. The purpose of the event was to reinforce the importance of health and safety for Fugro and facilitate an open discussion about HSSE performance issues and opportunities for improvement. This positively received event included several 'hands on' team safety challenges.

**Safety performance**

	Lagging indicators			Leading indicators	
	Lost time injury frequency (x million hours)	Total recordable case frequency (x million hours)	Total lost work days	Senior management project and site visits	Number of participants that completed MSiF course <sup>1</sup>
2009	1.71	4.59	2,143	-	-
2010	1.50	4.13	1,970	-	-
2011	1.29	3.68	2,131	-	-
2012	0.81	2.58	1,518	-	-
2013	0.81	2.17	820	-	-
2014	0.74	2.67	503	155	72
2015	0.45	1.79	258	967	564
2016	0.67	1.89	403	373 <sup>2</sup>	565

<sup>1</sup> Managing Safely in Fugro.

<sup>2</sup> Changed definition of senior management visits. In 2016 visits of project managers were excluded; otherwise the number would have been comparable to 2015.

Fugro suffered 1 fatal incident in 2016. In December, whilst driving from a project site to the nearby town of Bertoua, Cameroon, a Fugro vehicle was involved in a traffic incident. Sadly one of the employees travelling in the vehicle passed away after surgery. This incident shows that the company must continue to work on its safety awareness and performance.

The HSSE efforts over the years have been effective in improving related performance. However, in 2016 the lost time injury frequency (LTIF), the total recordable case frequency (TRCF) and associated number of lost work days increased. Despite this setback, over the past five years the total improvement has been very significant.

Fugro's objective is to achieve safety indicators which are in line with the benchmark for the sectors in which it operates or higher. On the key LTIF indicator, the target is to achieve an LTIF of less than 0.3 per million man hours worked (the 2015 benchmark set by the international association of oil and gas producers). For Fugro this is a high bar, as a large number of our staff work in general civil construction where safety standards are lower than in the oil and gas industry.

The decline in safety performance in 2016 is being addressed by increased focus on improving employee awareness and compliance with procedures. At the same time ownership and accountability of HSSE at all levels of

the company is being reinforced. The importance of following Fugro's Golden Rules of HSSE will be stressed via a dedicated internal communication campaign.

To continuously improve safety performance, it is essential that not only lagging but also leading safety metrics are implemented and monitored. In 2016, Fugro has therefore continued to monitor the leading indicators senior management site visits and the number of participants of the 'Managing Safely in Fugro' HSSE training.

#### Awards

Fugro's health and safety performance is recognised by external organisations, as evidenced by the various awards Fugro and employees received in 2016:

- Fugro's survey and geotechnical operating companies in the United Kingdom were awarded the internationally recognised Royal Society for the Prevention of Accidents gold award for outstanding health and safety performance.
- To celebrate the successful completion of the Red Sea H11 hydrographic survey project in the Middle East. Fugro Suhaimi were awarded a 'certificate of appreciation' by Saudi Aramco. The two year survey campaign exceeded one million man hours without any time lost to injury.
- In the Middle East, Fugro's drill-crew on the integrated gas development project on Das Island was awarded the



Safety workshop for senior management, November 2016.

'certificate of appreciation' for performance and commitment to safety from geotechnical contractor Menard Vibro ME.

- In Perth, Australia, Fugro received a platinum safety achievement award for their excellent safety performance from the Industrial Foundation for Accident Prevention.
- In Brazil, Fugro received an award from Petrobras for the third consecutive year with no lost time injuries for drill support operations.

### Employee training and development

Its employees are one of Fugro's greatest strengths. The company works continually at developing its employees by supporting the development of their skills and talents and enhancing their knowledge. This contributes to creating a motivating and interesting work place. The internal Fugro Academy is instrumental in the further development of social, technical and management skills of employees at all levels.

The Fugro Academy Training Centre in Plymouth, open since November 2015, employs 4 trainers and 2 certified vessel skippers along with 3 small survey vessels and a pool of related equipment, which matches the set-up of a Fugro standardised survey vessel. Since opening, the training centre has hosted 15 training courses. It is regularly being used as a testing or trail site for real-world live StarfixNG testing and it has assisted in environmental trials. It is now also hosting a remotely operated vehicle (ROV) simulator. In May 2016, the Fugro Academy also opened a training centre in Abu Dhabi. This is focused primarily on ROV courses, but also offers survey courses.

In 2016, the Fugro Academy celebrated the first decade of operating since its inception. Fugro Academy combines class room, onsite and virtual training and live marine training at its Plymouth, United Kingdom, facilities. Over time, the range and depth of courses available to staff has continued to grow. Selected courses use external expert support.

Since its inception, user numbers and course completions have continually grown. Due to changes within the organisation, utilisation declined slightly during 2016.

### Fugro Academy statistics

Year	Enrollments	Completed courses	% completed	Average courses per user
2007	504	353	70%	0,0
2008	2,077	1,532	74%	0,1
2009	7,560	6,692	89%	0,5
2010	30,074	28,447	95%	2,1
2011	50,286	48,422	96%	4,3
2012	57,504	56,642	99%	4,7
2013	49,784	49,659	100%	4,0
2014	85,710	85,331	100%	6,3
2015	77,757	76,954	99%	6,0
2016	59,659	59,659	100%	5,3

At the beginning of 2015, in partnership with the global HSSE team, Fugro Academy started the group-wide roll-out of the 'Managing safely in Fugro' and 'Working safely in Fugro' courses. Fugro Academy also launched a new supervisors training programme which has already been followed by 166 participants during 14 training sessions.

In 2017 Fugro Academy will support the roll-out of new training around the code of conduct and new speak-up procedure (see 'Business ethics and anti-corruption').

#### Talent attraction and retention

Fugro is a service provider and working with motivated, engaged employees is critical to the business. Fugro is committed to attract talented staff and keep employee turnover limited.

Recruiting, developing, retaining and engaging a diverse pool of talent is key to the future of Fugro. At the same time, this is a challenge in a period that Fugro is restructuring vigorously to deal with a strong revenue decline due to the low oil price. In 2016, Fugro had to let go of 1,430 employees or 12% of the total work force, after a reduction of 1,577 employees during 2015. Further restructurings will continue in 2017.

Irrespective of restructuring, the company maintained its focus on developing its leadership pipeline continued in 2016, building on the work commenced since 2014. In 2016, Fugro Academy continued the deployment of Fugro's three tiered management and leadership development training programme. The training is offered at the junior level (Growing my Team), the mid-level (Growing my Managers), and the senior level (Growing my Business). The programmes earn high praise from both delegates and their managers.

A variety of face to face, virtual, online activities and work assignments were devised for the 2016 participants. Classroom training modules were given in Houston, Singapore, Abu Dhabi, Leidschendam and London. By the end of the year, a total of 13 groups had completed one of these programmes, with 32 senior managers, 89 mid-level managers and 109 junior managers participating. In 2016, more emphasis was put on the application of the participants' skills in their own working environment and the managers were actively involved in coaching their participants. Recently, an external assessment was done of the impact of the programmes on the participants, their colleagues and the business overall. These results were very encouraging, with significant increases in the managerial effectiveness, productivity and leadership capabilities of the participants.

In 2015, Fugro's tool for Performance and Personal Development PPD v2 was rolled out across the company. This is an employee driven system whereby managers and

employees discuss current performance, behaviours, professional competence, development priorities, and goals and objectives which link to Fugro's overall strategy and objectives. In 2016 this tool was also used to perform the mid-year and year-end reviews for all employees.

#### Diversity and equal opportunity

Fugro is committed to provide fair terms and conditions of employment and provide equal opportunity for all. Every employee has equal opportunity to develop his/her skills and talents and advance within the organisation. Recruitment of employees, evaluation, promotion, development, discipline, compensation, and termination decisions are based on qualifications, merit, and performance or business considerations.

Fugro believes that a diverse workforce is a key competitive advantage. The organisation's success is a reflection of the quality and skills of its richly varied global talent base. Diversity recognises and values the contributions of people with varying capabilities, experience and perspectives, including gender, age, ethnicity and religious and cultural background. Fugro's culture is founded upon empowerment of its people and the company is committed to retaining and nurturing this unique and powerful aspect of the company by creating a workplace where all employees feel encouraged and free to bring a variety of approaches and ideas, free from inappropriate conduct such as bullying, discrimination, harassment and violence.

At the end of 2016 Fugro had 10,530 full-time employees worldwide. The company has the ambition to drive sustainable improvements in gender diversity at all levels of the organisation. The overall female representation was 18% in 2016. Fugro is committed to improve this ratio over time and will benefit from a slow global trend of women entering technical professions. Also the trend to use more remote, automated services will help, as this will reduce the number of staff exposed to physically challenging working environments.

Fugro works across the globe and promotes that its office locations are predominantly staffed with local staff. Diversity has a positive effect on operational activities as Fugro benefits from knowledge of local business procedures, legislation and traditions. Internal systems are now allowing staff at almost any location to benefit from information spread through Fugro's intranet, on-line training and to collaborate with colleagues across the world.

Key information and training materials are provided on a multi-lingual basis.

### Environmental topics

Fugro is committed to comply with environmental regulations for its operations. The company strives to respect and avoid any damage to the environment. Fugro has strict groupwide guidelines for risk analyses, incident and accident reporting and mitigation to prevent future incidents.

Fugro operates according to environmental standards in all operating companies that carry out operations, and strives to achieve a high coverage based on external standards and accreditation. In 2016 two more operating companies achieved ISO 14001 accreditation, bringing the total percentage of the key operating companies with a certificate to 86%. Compliance audits are carried out, both internally and by external ISO certification bodies and clients.

### Carbon footprint

The increasing drive to reduce fossil fuel consumption and carbon emissions is leading to growing investments in renewable energy around the world. With its technology, its employees' expertise, knowledge and assets, Fugro has an important role to play in this market. The demand for sustainable energy and sustainable infrastructure and construction creates a range of new opportunities in new markets, as further discussed in the topic Sustainable innovation and services.

Fugro works as a service provider and does not own or operate any production facilities. Therefore its own operations have a relatively low impact on the environment. Irrespective, for its own operations, Fugro promotes and undertakes projects to achieve energy savings. As well as reducing the impact Fugro's operations have on the environment, this will generate cost savings. A drive to reduce carbon footprint often goes hand in hand with capturing additional environmental and sustainability benefits. In this way Fugro strives to reduce its general environmental footprint.

Fugro started a pilot to measure and report its carbon footprint for its owned vessel fleet, as this is the largest source of emissions for the company, Fugro aims to externally report this over 2017.

### Environmental best practices – Examples

In December 2016, the Fugro Technical Centre in Nootdorp, was awarded a Platinum Leadership in Energy and Environmental Design (LEED) certificate by the US Green Building Council, the highest achievable level of sustainability. This is the first time that a Platinum LEED certificate has been granted in the Netherlands to a building that combines an office, warehouse, laboratory and workshop on the same site. In this facility energy consumption has been reduced by 80% relative to a comparable new build building meeting current building energy savings requirements. In addition, the facility has been built using 35% recycled materials.

In 2016 Fugro has fully implemented a ship energy efficiency management plan, incorporating best practices for the fuel efficient operation of ships:

- The economic speed model pilot, initiated in 2014, was successfully rolled out across the fleet in 2016. This model advises the vessel crew on the most economically favourable speed, taking into account fuel consumption, emissions, and vessel capabilities and allows them to seek the best balance between costs and emissions.
- Vessel speed management was improved in order to arrive just-in-time at a required location by good anticipation and planning, thereby avoiding to spend unnecessary fuel.



# Site characterisation services in practice New nuclear power station

This year, Fugro was involved in the site characterisation programme for the proposed construction of a new nuclear power station at Moorside. It is one of the largest site characterisation contracts to be awarded in the United Kingdom as a single package. The award recognises Fugro's unique ability to deliver integrated data for major developments.

The programme will provide vital information to support the design and layout, licensing, planning applications and other consents required to build the new facility. The programme is key in a project where there clearly is no room for error, and where geohazard risks can be mitigated by careful upfront planning.

The onshore work involved geological site investigations and laboratory analyses, seismic surveys, topographical surveys and groundwater monitoring. Fugro also conducted marine geotechnical drilling, sampling and testing, as well as geophysical, bathymetric and unexploded ordnance surveys.



The new generation facility will be capable of generating up to **3.6** GW – approximately **seven** percent of the of the United Kingdom's electricity requirements.



Over **300** boreholes drilled onshore and **30** offshore.



# GOVERNANCE

## BOARD OF MANAGEMENT



**Name** **Paul van Riel** (1956)  
**Function** Chairman Board of Management and Chief Executive Officer  
**Nationality** Dutch  
**Employed by Fugro** Since 2001.  
Appointed to Board of Management in 2006, appointed Chairman of the Board of Management and Chief Executive Officer in November 2012.  
**Current term** Until AGM 2018

**Background** Paul van Riel has a MSc in Applied Physics from Delft University of Technology. After his studies he continued for three years at the university, as co-founder and team leader of a large international oil industry research consortium. He established the seismic reservoir characterisation company Jason Geosystems in 1986, which was acquired by Fugro in 2001. While at Jason Geosystems, he worked in the USA for 6 years.



**Name** **Paul A.H. Verhagen** (1966)  
**Function** Chief Financial Officer  
**Nationality** Dutch  
**Employed by Fugro** Since 2014. Appointed to Board of Management per January 2014, appointed Chief Financial Officer in May 2014.  
**Current term** Until AGM 2018

**Background** Paul Verhagen worked for Philips for 23 years in various financial management positions in the Netherlands, Hong Kong, USA, China and Taiwan. He has been active in various global CFO positions since 2005, lastly as Executive Vice President and Chief Financial Officer of Philips Lighting. Paul holds an MSc in Business Administration from the Catholic University Brabant in Tilburg.



**Name** **Brice M.R. Bouffard** (1970)  
**Function** 2016: Director onshore geotechnical activities  
As of 2017: Director Land division  
**Nationality** French  
**Employed by Fugro** Since 2016.  
Appointed to Board of Management in 2016.  
**Current term** Until AGM 2020

**Background** Before joining Fugro, Brice Bouffard worked at several oil field services companies, where he held a range of technical, IT and commercial positions in various countries. He most recently worked at Weatherford and Spectraseis. Brice spent the first 13 years of his career at Schlumberger. He holds a master degree in maritime engineering from École Nationale Supérieure de Techniques Avancées Paris and a masters degree in geophysics from IFP School (Paris).



**Name** **Mark R.F. Heine** (1973)  
**Function** 2016: Director Survey division/offshore geotechnical activities  
As of 2017: Director Marine division  
**Nationality** Dutch  
**Employed by Fugro** Since 2000.  
Appointed to the Board of Management in 2015.  
**Current term** Until AGM 2019

**Background** Mark Heine joined Fugro in 2000 and served, amongst others, as regional manager Europe-Africa for the Survey division. He holds a MSc in Geodetic Engineering from Delft University of Technology.



**Name** **Steve J. Thomson** (1958)  
**Function** 2016: Director Subsea Services division/Geoscience division  
As of 2017: member of the Board of Management  
**Nationality** Australian  
**Employed by Fugro** Since 2000.  
Appointed to Board of Management in 2013.  
**Current term** Until AGM 2017

**Background** Steve Thomson brings experience in both technical services and manufacturing having held management positions in North America, Europe and Australia, at amongst others, CGG. Within Fugro he has been in several operational and management positions before becoming COO in the Geoscience division. He studied Physics and Geology and has an MBA from Queen's University at Kingston in Canada.

Company Secretary **Wouter G.M. Mulders** (1955)

## RISK MANAGEMENT

Fugro's risk management is aimed at long-term sustainable value creation. It is designed to provide reasonable assurance that objectives are met by integrating management control into Fugro's daily operations, ensuring

compliance with legal requirements and safeguarding the integrity of the company's financial reporting and its related disclosures. Good governance and high standards are essential for achieving business objectives and managing risk.

### Risk appetite and key risks

Risk category	Key risks	Key risk appetite	Page	General risk appetite
Strategic	■ Portfolio	High	55	For strategic risks, acceptable risk levels vary depending on the subject at hand, where expected rewards have to justify the risk. Generally the appetite is between 'above average' to high.
	■ Client focus and market leadership	Above average	56	
	■ Organisation and employees	Above average	56	
	■ Technology leadership and innovation	Above average	56	
Operational	■ QHSSE management	Low	57	Operational risks are handled with a moderate risk appetite. However, all risks related to QHSSE and cyber security are subject to low risk appetite.
	■ Capacity management	Moderate	57	
	■ Project management	Moderate	58	
	■ Cyber security	Low	58	
Financial	■ Currency risk	Low	59	Financial risk appetite is low, with the intent to limit financial risks and maintain long-term solvency and stay well within bank covenants.
	■ Credit risk	Low	59	
Legal compliance	■ Compliance	Low	60	Compliance is subject to a low risk appetite as Fugro strives for the highest level of compliance with legal and regulatory requirements and strives to not infringe on third party IP unless properly licensed.
	■ Intellectual property	Low	60	

### Sensitivity analysis

	Change	Impact	On	Assumption (based on 2016 financials excluding exceptional items)
Revenue (volume)	+ 1%	EUR 11 million	EBITDA	Flat net revenue own services
Revenue (price)	+ 1%	EUR 18 million	EBITDA	No change to cost base
Operating expenses	+ 1%	EUR (16) million	EBITDA	No change to revenue
Vessel utilisation	+ 1%	EUR 6 million	EBITDA	Equal contract terms
Days of revenue outstanding	+ 1%	EUR 5 million	Working capital	All other conditions remaining equal
Euro versus US dollar	+ 10%	EUR 5 million	Net profit	Stable revenue and margin in USD
Euro versus British pound	+ 10%	EUR 3 million	Net profit	Stable revenue and margin in GBP
Interest rate	+ 100 bp	EUR 0 million	Net profit	Net debt year-end 2016
Net debt	+ 100 million	EUR (1) million	Net profit	Stable interest rates

### Risk appetite and sensitivity

Fugro's risk management aims to identify, assess and manage risks in accordance with the company's risk appetite in different risk categories.

The table 'Sensitivity analysis' illustrates the impact of changes in Fugro's financials, exchange rates or its interest rate on EBITDA, working capital and net finance income/ (costs). The impact is based on the 2016 financials excluding exceptional items.

Fugro is aware of risks it can be confronted with and has an internal control framework in place to identify and manage risks and maintain internal controls.

### Control environment

The first level of the control environment consists of Fugro's employees who perform the day to day activities in the business operations, and their management. They exercise these activities in accordance with the applicable authorisation matrix, which is updated regularly by the Board of Management. They have the obligation to obtain an appropriate level of understanding regarding their roles and responsibilities and carry them out correctly and completely. They are owner of all risks related to their business operations and are expected to manage these by maintaining internal controls and executing risk and control procedures. Every employee is expected to comply with applicable laws and regulations.

The second level consists of regional and divisional management and the company's support functions such as corporate control, IT, tax, human resources, insurance, treasury and legal. These functions carry out various risk management and compliance activities to support and/or monitor the first level controls.

The third and final level consists of the independent internal audit department which provides the line management, the Board of Management and the audit committee with information about the structure, existence and effect of the system of internal control.

### Responsibilities

The Board of Management has the overall responsibility for Fugro's risk management and internal control framework. In 2016, the Board of Management held a comprehensive risk assessment workshop (assessing strategic, operational, financial and compliance risks) as part of improving its practices to determine the top risks. This practice will

continue going forward. The identified risks are assigned to risk owners within the Board of Management, who have ultimate responsibility to manage the risks.

This structured risk management process allows Fugro to take risks in a controlled manner. Constant monitoring of markets and the operating and financial results is intrinsic to Fugro's way of working due to the generally short-term nature of its assignments. Clarity and transparency are essential for assessing and evaluating risks. These are fundamental characteristics of the Fugro culture. All management is bound by clear authorisation restrictions regarding representation and decision-making.

### Strategic risk

Fugro's strategy 'Building on Strength' is built on two pillars, one representing 'what' we do (the portfolio of activities including our service offerings), and the second pillar representing 'how' we do it (market leadership, organisational capabilities, innovation and multi-market exposure). These strategic drivers have associated risks, for which Fugro has risk management measures in place.

### Portfolio

Although Fugro's activities show a high degree of cohesion, they also target diverse markets, clients and regions.

Still, a high proportion of the activities, around 70%, is related to the oil and gas industry and as such Fugro is significantly exposed to declines of the oil price and the related reduction of oil companies' investment and operational budgets. To a degree this is mitigated by Fugro's balanced exposure across the oil and gas field life cycle and strong market positions. However, this does not fully offset the impact of significant declines, in particular when they extend over longer time periods in excess of 3-6 months. The long term trend for the oil and gas market is strong, although there is a clear, increasing commitment by countries, companies and citizens to reduce carbon emissions to mitigate climate change. Despite this, global energy demand is of such a magnitude that the growth of renewables is, according to most predictions, not even able to cover energy demand growth in the medium term. Hence, energy from fossil fuels will continue to dominate for years to come.

The other activities are primarily dependent on developments in the building & infrastructure, power (non-fossil fuel energy sources like wind) and mining

markets. The impact of positive and negative economic effects is reduced by:

- Strong market positions.
- Cohesion between a broad range of services provided to a large and diverse base of clients in different markets.
- Broad geographical spread.

#### Client focus and market leadership

Fugro strives to further strengthen its leadership positions in its marine survey and geotechnical services. Fugro's market leadership is founded on the company being an independent service provider. If this status is lost, market leadership will be at risk since access to a broad range of customers will be limited or cannot be maintained. Maintaining leadership positions requires continuous investments with uncertain returns. The level of investments that this requires is dependent on market conditions. In the current market Fugro has adjusted the level of investments downward in line with the market developments and its financial capacity.

#### Organisation and employees

With its global reach, Fugro is uniquely positioned to support its global clients locally. In addition, it mitigates exposure to local economic volatility. However, Fugro has exposure in countries with geopolitical risk where political and/or economic systems may be unstable, or Fugro is required to work in joint ventures with local partners. Fugro is very selective and aims to work in areas where its people and assets are properly safeguarded, for example through working with reliable and reputable partners. Fugro's security procedures include routinely updated assessments of no-go or high risk countries or areas. In no-go areas, travel is prohibited. In high-risk areas, special procedures are followed.

Fugro requires well trained and for a large part highly educated employees. As Fugro is evolving towards providing more high-end services as part of its strategy, the share of employees with higher degrees continues to grow. Not being able to recruit or retain qualified personnel is a risk that can impact both current and future operations and results. In addition, in the current market Fugro needs to adjust the organisation in line with the market decline and runs a risk that certain capabilities cannot be maintained at the desired level. Fugro acknowledges the value of developing its employees, through training, development, career opportunities and focuses on a healthy level of retention.

All staff must adhere to Fugro's values, which cover behaviour, safety and compliance with laws and regulations. Fugro has a code of conduct, which is an extension of Fugro's values, and a corporate handbook for senior management containing instructions regarding many business aspects, including risk management. This should limit the risk that people are unaware of applicable standards or do not apply them for other reasons. Most of Fugro's operating companies work in accordance with the relevant standards such as ISO 9001, ISO 14001, OHSAS 18001 (for more details, see 'Sustainability'). Compliance audits are carried out by the internal QHSSE organisation, by clients and by external agencies.

#### Asset base

To supply its services, Fugro utilises an asset base consisting of a large pool of diverse data acquisition equipment, vessels, vehicles, laboratories and IT infrastructure. Increasingly IT is a client services enabler by supporting project work from multiple locations, remote services and long term data and information hosting. There is a risk that the current asset base is not aligned with future market developments, technological developments, and client needs, subsequently rendering impacted assets obsolete before they have been sufficiently depreciated. There is a further risk that market segments decline more rapidly than anticipated, resulting in reduced utilisation at lower prices or even the need to scrap or sell assets, leading to impairment risk. Fugro constantly monitors the utilisation of its large assets and is in constant contact with clients to determine sufficient fit with (near) future market demands.

#### Technology leadership and innovation

Focus on innovation and developing new technology enables Fugro to provide more competitive and differentiated solutions to its clients and the company is therefore maintaining investments in innovation and technology, even in the current challenging market circumstances. There is a risk that investments relating to research and development will not deliver new technologies and market opportunities or that, irrespective of Fugro's efforts to protect its intellectual property, competitors develop similar or better solutions, thereby negatively impacting Fugro's competitive edge. By working closely with clients and understanding their needs, Fugro is able to effectively invest in research and development resources. Furthermore, working with universities, technology institutes and other high tech companies gives Fugro the opportunity to leverage third party technology and research and development, resulting in increased effectiveness.

### Multi-market exposure

Approximately 70% of the Fugro business is exposed to oil and gas markets. Although Fugro has a balanced exposure across the field life cycle, this makes the company vulnerable to the risk of declining oil prices and the resulting lowering of oil companies' investment budgets, as the company has been experiencing since 2014.

Fugro is committed to increase its exposure to non-oil and gas markets such as general infrastructure, power, rail, telecom cable routing, wind farms and hydrography, to be less vulnerable to market volatility. These markets run in different economic cycles than the oil and gas markets and offer good opportunities for Fugro.

### Operational risk

#### Organic growth plus M&A

Fugro complements organic growth with highly selective mergers and acquisitions. In most cases acquisitions serve to obtain special technologies, or to strengthen market positions. Acquisitions always involve an element of risk. Therefore thorough and extensive due diligence (with external expertise when necessary) is carried out before any company is acquired. The evaluation of an acquisition opportunity is based on strategic fit, financial criteria and growth and overall value creation potential.

Acquisitions in emerging and frontier markets are considered to have a higher risk profile, specifically regarding compliance with Fugro's code of conduct. In those cases Fugro, in addition to the regular due diligence, checks on compliance by the selling party, in addition to obtaining applicable representations and warranties.

### QHSSE management

Fugro recognises that the industries in which it works expose employees to safety and security risks and is therefore committed to preventing these risks from turning into accidents. Fugro has a group wide QHSSE strategy and related policies where all levels are expected to focus on safety, and actively motivate, influence and guide individual and collective behaviour. This is fuelled by the belief that all accidents are preventable.

In 2016, Fugro experienced a decline in safety performance, and 1 fatality. To improve safety performance and boost safety awareness, strong emphasis will be placed on individual and collective safety in 2017, with personal involvement from the Board of Management. Every employee and contractor is expected to abide by Fugro's

'Golden rules of HSSE', based on the premise that safety is the responsibility of every individual. Employees receive regular safety training and many of Fugro's processes have and continue to be analysed to identify possible risks and improve safety.

### Price changes

Fugro is sensitive to oil price changes and, to a degree, to sudden changes in exchange rates, although it can adapt relatively quickly due to the general short term duration of its projects. Since 2014, the strongly decline of the oil price and related lowering of oil companies' budgets has especially impacted pre-final investment decision spending on large capital projects. For oil field services companies such as Fugro this has resulted in lower work volumes, with new projects being deferred or cancelled, and significant price pressure due to overcapacity.

In order to mitigate this development, Fugro continuously adjusts its capacity, investments and the cost base to market developments. Fugro also renegotiates prices with its suppliers in order to pass (part of) the price pressure onto its suppliers.

Similarly, in the event that Fugro is not able to compensate for, or pass on, increasing fuel costs to customers, such price increases could have an adverse impact on operating results. Similarly, price changes in labour or services cannot always be passed on.

### Capacity management

The fact that Fugro deploys specialist equipment implies the risk of capacity under-utilisation. Fugro is constantly alert for signals that indicate changes in market conditions so it can react quickly and appropriately. The availability of and need for vessels is closely monitored in order to achieve the most effective use of owned and chartered vessels. In 2016 Fugro has continued to reduce its workforce and vessel fleet, starting with chartered vessels, in order to bring capacity in line with lower client demand. A longer duration of the market downturn may result in a further lowering and/or reduction in work scopes, impacting backlog, revenue generation and asset utilisation. It may also mean that in certain areas capacity cannot be reduced any further without incurring penalties (for example related to the early termination of long term charters) or (cold) stacking costs.

A significant part of Fugro's activities take place at the start of a project or investment cycle of a client. This means Fugro's activities can be the first to be affected by changes

in market conditions (both positive and negative). Cancellations and/ or postponement of the flow of orders and project delays can lead to shortfalls in revenue due to under-utilisation of capacity.

The weather and the availability of vessels are key factors for offshore activities in particular. Weather influences are calculated into the budgets and tend to average out over the year. However, extended periods of poor weather can impact revenue in that particular period.

The general increase in contract sizes, which Fugro has been experiencing during the last years, results in less predictable award and project scheduling, which can hamper optimal resource and asset utilisation. At the same time, the exchange of manpower and equipment between the various operating companies can improve utilisation. Part of the staff is appointed on a temporary basis or works on a freelance basis, providing Fugro with a certain flexibility to respond to variations in manpower needs.

#### Project management

Good project management is essential for satisfactory project execution, especially as contract size and complexity of projects are increasing. Lack of management or control, either because of time or knowledge constraints, can cause serious damage to a project and Fugro's reputation, and may result in (financial) penalties. Therefore projects and contracts with a value or risk exceeding a specified amount must be approved in accordance with the applicable authorisation matrix, which is updated regularly by the Board of Management. A complexity assessment for these projects also ensures that a sufficiently qualified project manager is selected to manage these projects, reducing the risk that unnecessary costs are incurred. Fugro is strongly focused on further improving its efficiency, amongst others by a relentless focus on delivery excellence, for example by global equipment, software and process standardisation.

#### Cyber security

Fugro relies on a range of IT systems (hardware, software and network connections) to manage its business, support operations and deliver many of the advanced technological solutions which help to differentiate the company in the market place. Fugro actively develops proprietary hardware and software to support its range of specialist services. Consequently, malfunctioning of Fugro's IT systems, due to either an outside attack or other internal system instabilities, may result in a delay of projects or a negative impact on Fugro's reputation.

Fugro has a solid security IT infrastructure in place which consists of advanced spam and advanced threat filters, firewalls, secure, policy-based access to the internet and tooling to monitor our network and cloud usage. Fugro's IT systems are constantly monitored and controlled for contamination by viruses, malware or malicious content. The global IT security team operates independently from the IT staff in the operating companies.

Phishing attacks are an industry wide problem and Fugro is not immune from this phenomenon nor for the risk it introduces to Fugro's employees and the company at large. To help mitigate this risk in 2016 Fugro launched a highly visible, interactive and successful global cyber security awareness campaign throughout the company. To-date, 3 specific topics have been addressed: phishing, malware and data loss. There has not been any major security incident in 2016. In 2017, Fugro's cyber security environment will be audited by an external party, in cooperation with Fugro's internal audit department.

#### Catastrophes

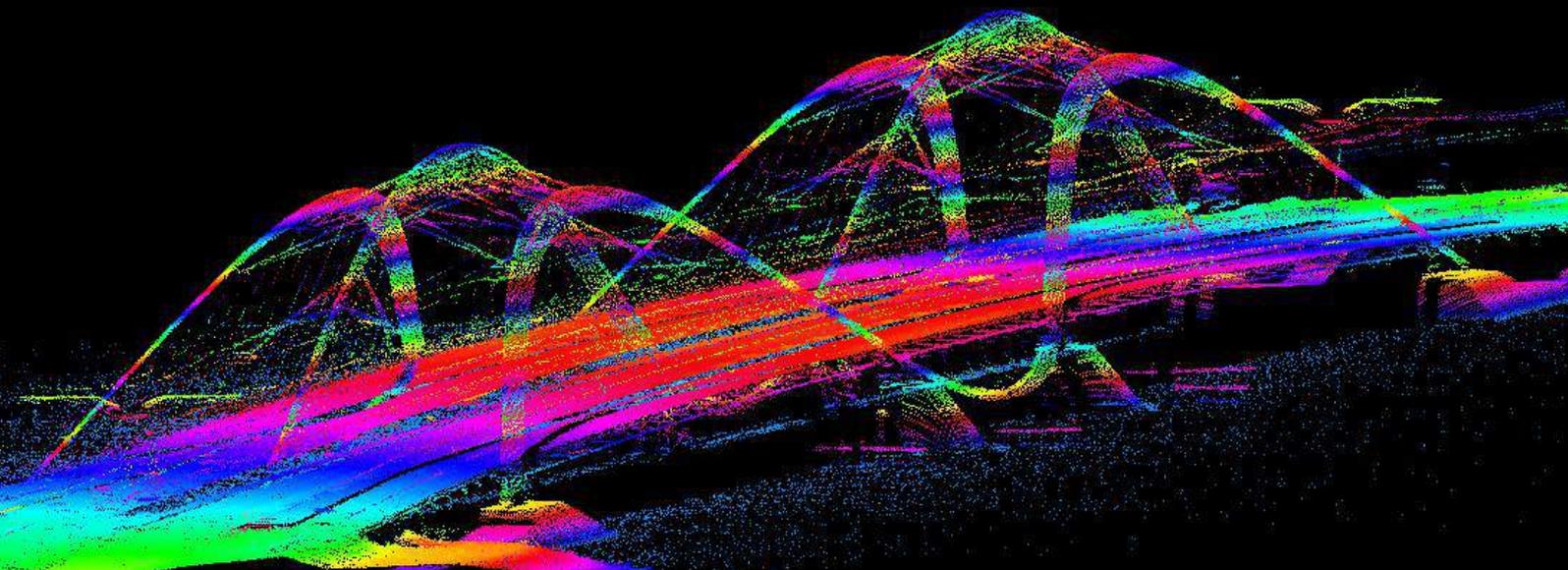
Fugro operates globally and thus runs the risk of a major (natural) disaster impacting the ability to sustain operations or recover operational costs. Catastrophes are mostly of an external nature and cannot be foreseen. Fugro will respond to catastrophes as and when they occur. Procedures for immediate notification of incidents and a policy regarding accidents and injuries are in place. For the main processes and IT systems, proper back-up and restore procedures are in place.

#### Financial risk

##### Financing risk

A prolonged duration of the market downturn could affect the ability of Fugro to raise equity or refinance debt in the capital markets or could lead to significant increases in the cost of such borrowing in the future. Fugro is also exposed to the risk of breaching the covenants with its lenders, which could lead to penalties, higher interest payments or demands for (partial) repayment of debt.

Per the end of 2016, with a net leverage (net debt/EBITDA) of 1.1 and fixed charge cover of 2.4, Fugro is well within its covenants. In addition, Fugro continues to focus on a further lowering of net debt. In October 2016, Fugro issued EUR 190 million subordinated convertible bonds. The proceeds were fully used for early repayment of USPP notes. The related bond amount and interest costs will be



*Terrestrial laser scan of bridge for lightrail traffic, IJburg, the Netherlands.*

excluded from the covenant ratios. This has resulted in additional headroom under the financial covenants, reduced interest expense and increased financial flexibility.

#### Interest rate

Future interest rate risks are limited to bank loans, particularly in relation to Fugro's revolving credit facility. Fugro's objective is to limit the effect of interest rate changes on the results by borrowing a material part of its funding requirements with term debt with fixed interest rates.

#### Currency risk

Fugro is exposed to fluctuations in exchange rates, which can impact equity, debt, revenue and profitability. As most of Fugro's revenue in local currencies is used for local payments, the effect of negative or positive currency movements on operational activities at a local level is reduced. However the currency movements at group level can be substantial, in particular related to equity and debt. The group treasurer focuses amongst others on improving transparency regarding the various currency exposures and provides advice on how to mitigate these. Fugro strives to match revenue with costs and assets with liabilities in each applicable currency or in USD and hence makes use of natural hedges. As a result, the usage of forward exchange contracts is limited. Through standardisation and centralisation and improved treasury management systems Fugro will be able to monitor and mitigate its transactional currency risks on a global level and the group treasurer is monitoring all foreign exchange contracts and, together with group control, their significance for the assessment of assets, liabilities, and the financial situation and results.

The group's investment in US dollar functional currency subsidiaries is partly hedged by means of the US dollar private placement loans, which reduces the currency risk arising from the subsidiary's net assets. The group's investment in its subsidiaries in the United Kingdom is partly hedged by means of the British pound private placement loans. The hedge on the investments is fully effective. All exchange differences relating to this hedge have consequently been accounted for in other comprehensive income. The group is sensitive to differences in the translation resulting from its operations in non-euro currencies to euro.

Fugro holds cash balances in local currencies in certain countries where it is difficult to transfer cash abroad or to convert it to USD or EUR at short notice. These local cash balances expose Fugro to risk of devaluations against the euro. In Angola an amount of EUR 52.5 million is in Angolan Kwanza's which is subject to currency risk at year end 2016. The company expects that these exchange rate controls will become less stringent when the oil and gas market conditions improve and when Angola will have increased inflow of USD in relation to their oil business. In addition, several actions are being explored to further lower this amount in the coming year and thereafter.

#### Credit risk

Fugro has credit exposure to accounts receivable with customers. A default by counterparties can have a material adverse effect on operating results. Also, aging debtors have a negative impact on the available working capital, exposing Fugro to the risk of increased cost of capital. Fugro continues to focus on timely collections of outstanding debt in order to minimise this risk and by training its staff on proper working capital management.

## Legal compliance risk

### Compliance

Fugro's global presence exposes the company to regional and local law and regulation, as well as changing and challenging political and economic environments. This can impact the realisation of business opportunities. Other risks may include non-compliance with Fugro's code of conduct such as its anti-bribery provisions. Fugro's code of conduct directs Fugro's employees, subcontractors and business partners to conduct business ethically, comply with the law, and maintain Fugro's reputation. Continuous efforts are made to inform employees, suppliers and business partners about the code of conduct. Initiatives in 2016 included developing specific policies addressing some of the key topics addressed in the code of conduct, as well as developing new e-learning on topics addressed in the code of conduct.

### Agents

Fugro operates in certain parts of the world where working with agents is part of doing business. Fugro has a procedure to screen its agents which includes the screening of existing and new agents by an independent third party and a web-based self-assessment. Agency agreements include extensive audit rights and compliance with law representations. Agents must also fill in a compliance declaration on a yearly basis.

### Tax

Fugro is a multinational company, trading globally with subsidiaries and branches in various countries. This exposes the group to various complex tax jurisdictions and tax systems. Tax systems are increasingly under development following global initiatives from individual countries and organisations such as OECD and EU. Fugro acknowledges these developments and adheres to their principles. In conjunction with these developments, Fugro also acknowledges the increasing risk of tax controversy or double taxation, as local implementation or interpretation of global initiatives could be ambiguous.

As a basis for managing ongoing developments, Fugro has formulated a tax statement in 2016. The statement, which can be found on the company's website, highlights global tax principles that illustrate good corporate practice in the area of tax management and transparency. The principles are the foundation of Fugro's tax strategy.

The tax strategy supports Fugro's business strategy by providing value to the Group through delivery of high quality tax services within boundaries of legal and tax frameworks. The global tax department is equipped to support Fugro's global activities in an effective and compliant manner. The tax department is supported by an extended tax function, represented by individuals across finance, business, procurement and human resources, and the overall development of standardised processes in all these areas. In addition, tax support is provided by a reputable network of external tax advisers.

### Insurance

Fugro is covered for several risks through either global or local insurances. As these insurances only apply when compliant with the limitations in the contract, Fugro is exposed to the risk of not being covered. To mitigate this risk, Fugro has detailed guidelines with respect to risks to be insured, disseminated throughout the organisation in a manual for managers of all operating companies and their employees who are responsible for insurances.

### Intellectual property

Fugro uses high-performance equipment, technologies, software and business processes, and develops a significant part of this in-house. This drives the implementation of innovations in the technological solutions that are offered to clients. There is a risk that Fugro unintentionally infringes the intellectual property (IP) of others in this process, which could result in material financial claims, high license fees or even prohibition of applying certain technologies or methods. In order to mitigate this risk there is a corporate department managing Fugro's IP by increasing awareness within Fugro, and by assisting the company's research and development centers with the prevention of unintentional IP infringements.

### Claims and disputes

Some operating companies are involved in claims, either as the claimant or the defendant, within the context of normal business operations. Where necessary, provisions have been accounted for in the financial statements. With regard to items included in the financial statements, adjustments to estimates are possible.

### Financial reporting

Fugro operates in many different parts of the world, sometimes differing in accounting policies and local reporting requirements. This exposes Fugro to the risk of reporting figures that are not in line with the group's IFRS

framework, which may lead to a (material) impact on the reported figures. To mitigate this risk a financial handbook and an accounting manual (last updated June 2015), containing detailed guidelines for the financial reporting, is available for the senior management and the controllers of all operating companies. Every 6 months all managers and controllers of operating companies and the responsible division director sign a detailed statement regarding the financial reporting and internal control.

The business plans of every operating company are translated into forecasts. Deviations from the forecast are reviewed on a monthly basis. Any unforeseen circumstances that arise, or any substantial deviation from the forecasts, must be reported immediately to the responsible management. The monthly reports submitted by the operational management include an analysis of the achievements versus the approved plans and a forecast for the coming periods including actions to address any shortfall.

At the end of 2014 Fugro started with an initiative to design a groupwide IT system to optimise the way Fugro works in business development, project management and operations, procurement, and finances across the company. These key business processes are in the process of being standardised based on best practices and will be supported by a global cloud-based tool. After developing a blueprint in 2015, a first 'proof of concept' was rolled out in one operating company in 2016. Based on the lessons learned, a second proof of concept will be rolled out in another operating company in 2017 in order to further prepare for a global roll-out.

#### Internal control self-assessment

Fugro implemented internal control self-assessments (ICS) at five operating companies, spread over the five different regions. These self-assessments are aimed at increasing awareness of Fugro's overall internal control framework. They are focused on financial reporting, consistency in the use of standards and the effectiveness of controls, ultimately leading to an enhanced control environment. This process will evolve in the coming years, depending on evaluation of the operating companies that use ICS, changes in the risk environment, and demands from internal or external stakeholders.

#### Internal audit

The internal audit department assists the company with accomplishing its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. During 2016 the department participated in an external quality assessment by the Institute of Internal Auditors (IIA), and was awarded the IIA Quality Assessment Certificate that demonstrates Fugro's compliance with the International Professional Practices Framework.

In 2016, 27 reviews took place including 3 project focused reviews. The internal audit department is independently accountable to the audit committee of the Supervisory Board and participates and reports in each audit committee meeting (5 times per year). Additionally, the head of internal audit has direct access to the chairman of the audit committee and they meet at least twice per year.

#### External audit

The financial statements of Fugro are audited annually by external auditors, who are not part of the internal controls of the company, but do contribute to the internal control framework. These audits take place on the basis of generally accepted auditing standards. The external auditor does not act in an advisory capacity. In the majority of cases that advisory services are required, Fugro selects firms that are not selected to carry out component audits.

The performance of the external auditor is evaluated annually by the audit committee, assisted by the Board of Management. The audit committee advises the Supervisory Board on their proposal to the annual general meeting regarding (re)appointment of the external auditor.

#### Audit committee

The audit committee comprises three members of the Supervisory Board and, given the risk appetite of the company, it ensures an independent monitoring of the risk management process from the perspective of its supervisory role. The audit committee focuses on the quality of the internal and external reporting, the effectiveness of the internal audits and the functioning of the external auditor. See 'Supervisory Board report– Supervisory Board committees' for further information on the audit committee. These terms of reference (included in the terms of reference of the Supervisory Board) are posted on Fugro's website.

## Asset integrity services in practice

# Construction support Hebron oil field

As part of its asset integrity service portfolio, Fugro provides survey systems and related expertise to support offshore construction projects. A prime example is an ongoing project for the Hebron oil field offshore Newfoundland and Labrador in Canada.

In December 2016, Fugro was involved in the mating of the topside facilities (living quarters and drilling and production facilities) to the concrete gravity base at the Bull Arm construction site. This was done by floating two barges in a catamaran formation over the base structure. This required very precise positioning of multiple moving structures, coping with satellite masking from the large structure. Fugro continuously positioned 20 systems during this critical phase which was executed flawlessly. Fugro will also be involved in the towout of the platform to the oil field itself later in 2017, where Fugro will simultaneously be positioning 24 vessels using its Starfix Suite software.

The field was discovered in 1980. It is managed by ExxonMobil. The development is now 80 per cent complete and on track for first oil in 2017.

The platform is

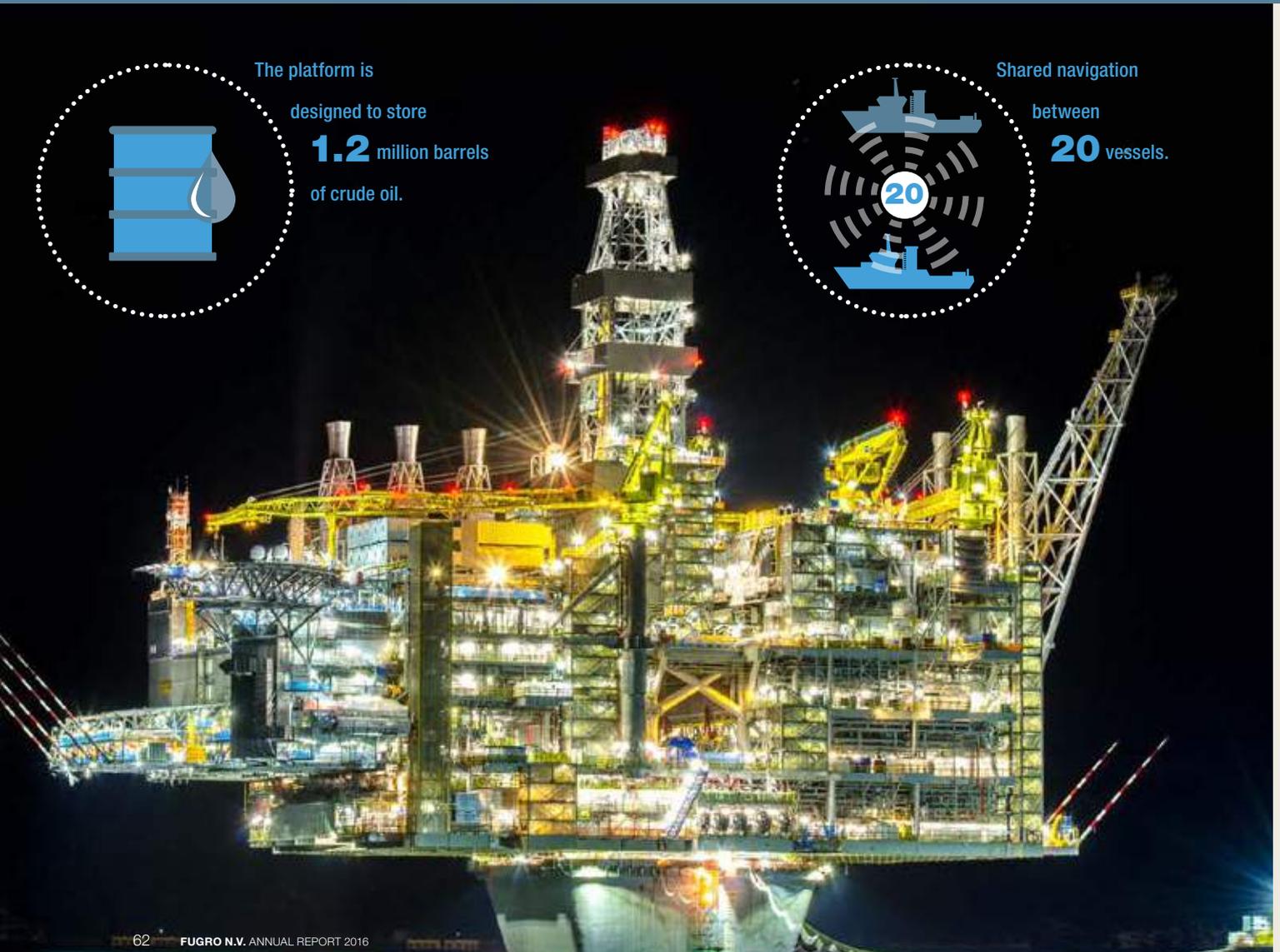
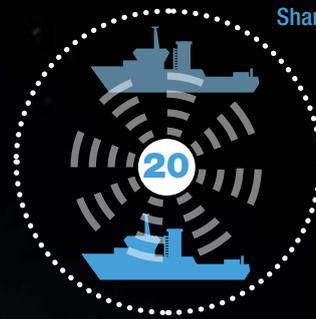
designed to store

**1.2** million barrels  
of crude oil.

Shared navigation

between

**20** vessels.



## CORPORATE GOVERNANCE

### Dutch corporate governance code

The Dutch corporate governance code ('the Code') provides guidance for effective cooperation and management. Governance is about management and control, about responsibility and influence, and about supervision and accountability. The purpose of the Code is to facilitate – with or in relation to other laws and regulations – a sound and transparent system of checks and balances within Dutch listed companies and, to that end, to regulate relations between the management board, the supervisory board and the shareholders (including the general meeting). Compliance with the Code contributes to confidence in the good and responsible management of companies and their integration into society. Every year, Dutch listed companies check their governance against the Code's principles and best practice provisions and render account of their compliance. Compliance figures are nearing 100% and the Code has become an important guide for shareholders as well as management board and supervisory board members of Dutch listed companies.

The Code was first adopted in 2003 and amended once in 2008. Fugro's corporate governance structure was discussed and approved in the Annual General Meeting (AGM) in 2004. In accordance with the recommendations of the corporate governance code monitoring committee ('the Committee'), the broad outline of Fugro's corporate governance structure and compliance with the principles and best practices of the Code was discussed in the AGM in 2010. Since that date no substantial changes have been made to Fugro's corporate governance structure. The Code (as amended in 2008) is available at <http://www.commissiecorporategovernance.nl/dutch-corporate-governance-code>.

### Revised Code

On 8 December 2016 the Committee published a revised version of the Code ("the revised Code"). The revised Code does not apply to the 2016 financial year. Dutch listed companies should report in 2018 on compliance with the revised Code for the 2017 financial year. The principal changes to the Code revolve around seven themes: a greater focus on long-term value creation; reinforcement of risk management, a shift of focus in effective management and supervision, introduction of culture as an explicit part of corporate governance, improvement and simplification of the remuneration provisions, shareholders and the general meeting and quality requirements for "comply or explain"

statements. In the course of 2017 Fugro will be acquainting itself with the revised Code and bring its corporate governance structure in line with the revised Code's principles and best practices. In 2018 Fugro will report on the revised Code with respect to the financial year 2017 and the key aspects of the corporate governance structure and compliance with the revised Code will be discussed at the 2018 AGM.

### Compliance with the Code

In this chapter and with respect to the 2016 financial year, Fugro reports on compliance with the Code as applicable in 2016. Fugro's corporate governance structure, its supervision and the way it is reported are in line with the Code. Companies may depart from the best practice provisions and departures may be justified in certain circumstances.

Since the previous reporting on compliance with the Code there are no (substantial) changes in the corporate governance structure of Fugro and its compliance with the Code that should be submitted to the AGM.

A full overview ('comply or explain'-report) of Fugro's compliance with the Code in 2016 is posted on Fugro's website. Fugro applies the principles and best practices of the Code, except for the following and for the reasons set out below.

#### Best practice provision III.5.11

The remuneration committee should not be chaired by the chairman of the Supervisory Board. However, in 2016 the chairman of the Supervisory Board, Harrie Noy, acted also as chairman ad interim of the remuneration committee following the resignation of the former chairman of the remuneration committee.

Meanwhile, this 'non-compliance' has been solved because as of 1 January 2017, Anja Montijn has been appointed chair of the remuneration committee.

#### Principle IV.2

Maintaining its operational independence is crucial for Fugro (see 'Protective measures' on page 66 for further explanation). One of the ways to safeguard this independence is share certification. Although the Code provides that the certification structure is not meant as a protective measure, Fugro has chosen, in the interest of its clients to also view the certification structure as part of its protective measures. When carrying out assignments Fugro



*Analysing soil samples in one of Fugro's specialist labs.*

often receives or can have access to extremely confidential information. Fugro can only perform its assignments if it can safeguard the confidential nature of such information towards its clients. Furthermore, it is strategically extremely important for Fugro that it is able to maintain its position as an independent service provider and to deter influences in conflict with these interests which might affect the independent position or the continuity and identity of Fugro and its group companies.

The second reason for the certification structure is the prevention of possible harmful effects as a result of absenteeism in the shareholders' meetings of Fugro. Fugro considers it not to be in the interest of its stakeholders in general that through absenteeism an accidental majority can, based only on its own interest, force through its opinion. Preventing this, ties in with this Principle IV.2.

#### **Best practice provision IV.2.1**

In accordance with this provision, the Board of Stichting Administratiekantoor Fugro ('Foundation Trust Office') enjoys the confidence of the holders of certificates and operates independently of Fugro. One deviation from this provision is that the administration terms and conditions of the Foundation Trust Office do not stipulate the instances in which and the conditions under which holders of certificates may ask the Foundation Trust Office to convene a meeting of holders of certificates. However, see the explanation on best practice provision IV.2.2.

#### **Best practice provision IV.2.2**

According to this provision the meeting of holders of certificates may make recommendations to the Board of the Foundation Trust Office for the appointment of a member to the Board. The Board has decided that holders of certificates representing at least 15% of the issued share

capital in the form of certificates of shares may request that a meeting of holders of certificates is convened in order to make recommendations concerning persons to be appointed as a member of the Board of the Foundation Trust Office.

#### **Best practice provision IV.2.5**

According to this provision the Foundation Trust Office, in exercising its voting rights, should be guided 'primarily by the interests of the holders of certificates, taking the interests of the company and its affiliated enterprise into account'. The articles of association and the administration terms and conditions of the Foundation Trust Office provide that if the Foundation Trust Office exercises its voting rights, it will do this in such a manner that the interests of Fugro and the enterprise affiliated therewith and all those concerned therewith are observed and complied with as far as shall be possible (article 2 of the articles of association and article 4 of the administration terms and conditions of the Foundation Trust Office). The interests of some stakeholders need not necessarily at all times run parallel with that of other stakeholders. For example, some will have a short term focus whilst others have a long term focus. It is up to the Board of the Foundation Trust Office to, after balancing the interests, come to a well-considered decision on the exercise of the voting rights.

In addition, when considering the exercise of the voting rights the Board in any case takes into consideration the (Dutch) law as well as the articles of association and the administration terms and conditions of the Foundation Trust Office. The Board can (also) opt, for reasons of its own, to not exercise the voting rights on the shares held by the Foundation Trust Office.

### Best practice provision IV.2.8

Based on the provisions of section 2:118a Dutch Civil Code and article 18.2 of the administration terms and conditions, the Foundation Trust Office will provide a proxy to any holder of certificates of shares who so requests, to exercise the voting rights on the (underlying) shares corresponding to the certificates held by the holder in a shareholders' meeting of Fugro. Holders of certificates of shares can (also) choose to have themselves represented in the shareholders' meeting by a written proxy. In specific situations the Foundation Trust Office may solely limit, exclude or revoke a proxy. See page 66 for more details. This is necessary – summarised – when Fugro's continuity, independence, identity or development is at stake. Therefore the deviation of this provision of the Code relates to the fact that proxies to vote are not issued without any limitation and in all circumstances. This deviation is of course the consequence of the fact that the structure of share certification is also meant as a protective measure.

## Corporate information

### Capital structure

The authorised capital of Fugro amounts to EUR 16,000,000 and is divided into:

- 96,000,000 ordinary shares, with a nominal value of EUR 0.05.
- 160,000,000 cumulative protective preference shares, with a nominal value of EUR 0.05.
- 32,000,000 cumulative financing preference shares, with a nominal value of EUR 0.05 each, which can be sub-divided into two series of 16,000,000 cumulative financing preference shares.
- 32,000,000 cumulative convertible financing preference shares, with a nominal value of EUR 0.05 each, which can be sub-divided into two series of 16,000,000 cumulative convertible financing preference shares.

On 31 December 2016 the issued capital amounted to EUR 4,228,626.25 divided into 84,572,525 ordinary shares. No preference shares have been issued. All the ordinary shares have equal voting rights (one share, one vote). There are no restrictions on the voting rights of the company's ordinary shares and preference shares (if issued).

### Restrictions to transfer of shares/exchange of certificates

The Board of Management's approval is required for each transfer of preference shares. The approval has to be requested in writing stating the name of the intended acquirer of the shares in question.

Ordinary shares may be transferred only to natural persons. Notwithstanding the provisions of the preceding sentence, the transfer of ordinary shares shall not be possible if and insofar as the acquirer, either alone or under a mutual collaboration scheme jointly with one or more others, natural persons and/or legal entities, either directly or – otherwise than as a holder of certificates of shares issued with the cooperation of Fugro – indirectly:

- Is the holder of ordinary shares to a nominal amount of one per cent or more of the total capital of Fugro issued in the form of ordinary shares (as of 31 December 2016 one percent equalled 845,726 shares).
- Through such transfer would acquire more than one per cent of the total capital of Fugro issued in the form of ordinary shares.

Exchange of certificates of shares for the (underlying) ordinary shares is only possible in accordance with the above-mentioned.

The restrictions to the transfer of ordinary shares stated above are not applicable to:

- The transfer of ordinary shares to Fugro itself or to a subsidiary of Fugro.
- The transfer or issue of ordinary shares to, or the exercise of a right to subscribe for ordinary shares by, a trust office or to another legal person, if in respect of such a trust office or other legal person the Board of Management with the approval of the Supervisory Board has by an irrevocable resolution wholly or partially lifted the restrictions limiting the transfer or issue of ordinary shares, to which lifting of restrictions conditions may be attached; in respect of another legal person as referred to above, such restrictions may be lifted only to the extent that such may be required to permit that legal person to avail itself of the facility of the participation exemption, as at present provided for in section 13 of the Corporation Tax Act 1969.
- The transfer of ordinary shares acquired by Fugro itself or the issue by Fugro of ordinary shares, if such a transfer or issue takes place within the framework of either a collaborative arrangement with or the acquisition of another enterprise, or a legal merger, or the acquisition of a participating interest or the expansion thereof, in respect of which the Board of Management with the approval of the Supervisory Board by an irrevocable resolution has wholly or partially lifted the restrictions limiting the transfer or issue of ordinary shares, to which lifting of restrictions conditions may be attached.

- The transfer or transmission of ordinary shares to shareholders who on 31 March 1992 were recorded as shareholders in the shareholders' register of Fugro, if in respect of such a transfer or transmission the Board of Management, with the approval of the Supervisory Board, by an irrevocable resolution wholly or partially lifted the restrictions limiting the transfer of ordinary shares, to which lifting of restrictions conditions may be attached.
- The transfer or transmission of ordinary shares to group companies of legal person-shareholders who on 31 March 1992 were recorded as shareholders in the shareholders' register of Fugro, if in respect of such a transfer or transmission the Board of Management, with the approval of the Supervisory Board, by an irrevocable resolution wholly or partially lifted the restrictions limiting the transfer of ordinary shares, to which lifting of restrictions conditions may be attached.

#### Protective measures

When carrying out assignments Fugro receives or can have access to clients' extremely confidential information. For this reason it is essential for Fugro that Fugro can safeguard its position as independent service provider.

The main point of Fugro's protection against a hostile takeover depends on the one hand on certification of the ordinary shares and, on the other hand, on the possibility of Fugro to issue cumulative protective preference shares. In addition to this, protective preference shares may also be issued by two of Fugro subsidiaries, Fugro Consultants International N.V. and Fugro Financial International N.V., to 'Stichting Continuïteit Fugro' (see 'Foundation Continuity Fugro').

The aim of the protective measures is to safeguard the interests of Fugro and of its group companies and of all parties concerned in the best possible way, including Fugro's position as an independent service provider and to deter influences in conflict with these interests which might affect the independent position or the continuity and identity of Fugro and its group companies.

#### Foundation Trust Office

Only (non-voting) certificates of shares are listed and traded on Euronext Amsterdam. These exchangeable certificates are issued by Foundation Trust Office and the Board of the Foundation exercises the voting rights on the underlying shares in such a manner that the interests of Fugro and the

enterprise affiliated therewith and all those concerned therewith are observed and complied with as far as shall be possible. The Board of the Foundation operates completely independent from Fugro. For the report to holders of certificates with respect to the year 2016 see page 186.

The Board of Foundation Trust Office is composed as follows:

Name	Function	Term
M. van Gelder, Chairman	Board member	2019
A.L. Asscher	Board member	2019
J.A.W.M. van Rooijen	Board member	2017

Holders of certificates (and their authorised proxies):

- May, after timely written notification, attend and speak at shareholders' meetings.
- Are entitled to request from Foundation Trust Office a proxy to exercise the right to vote for the shares that underlie their certificates. The Foundation may solely limit, exclude or revoke a proxy if:
  - A public offer has been announced or made on the (certificates of) shares of Fugro or if a justifiable expectation prevails that such an offer shall be made, without agreement thereon having been reached with Fugro.
  - A holder of certificates or a number of holders of certificates, in accordance with an agreement between and among them to co-operate, together or not, with subsidiaries, acquire at least 25% of the issued capital of Fugro, or have said amount of issued capital acquired.
  - In the opinion of Foundation Trust Office, the exercise of voting rights by a holder of certificates constitutes a real conflict of interest with those of Fugro and the enterprise affiliated therewith.
- May as long as they are natural persons, exchange their certificates of ordinary shares up to a maximum of 1% of the issued share capital in Fugro per shareholder.

Generally speaking a certificate holder's notification to attend a shareholders' meeting will be treated as a request to Foundation Trust Office to grant a proxy to vote for the (underlying) shares corresponding to their certificates.

#### Foundation Protective Preference Shares Fugro

The objects of Stichting Beschermingspreferente aandelen Fugro ('Foundation Protective Preference Shares') are to attend to Fugro's interests and of Fugro's businesses as well



## Asset Integrity services in practice

# Monitoring of meteorological conditions

The international energy company Statoil, headquartered in Norway, operates in more than 30 countries. In the northern North Sea their assets are exposed to some of the harshest weather conditions. The ability to monitor meteorological and oceanographic conditions in real-time assists Statoil in managing costs, asset integrity and safety of its operations. Helicopter operations, offshore marine operations and asset design reviews all benefit from ease of access to high accuracy data.

Late 2016, Statoil contracted Fugro's NorthStar integrated data acquisition software solution, supported by a pool of experienced technical personnel, for an eight year duration. Displays of real-time and historical data will be hosted by Fugro and accessible to all users on the Statoil network via Fugro's web-service via PC, smart-phones and tablet devices. With the NorthStar architecture in place, the system can be readily expanded to handle additional assets as requirements develop.



NorthStar integrates the metocean data acquired at over **30** offshore assets.



Fugro's web-service receives almost **3,000** data parameters every minute from offshore sites globally.

as the businesses of the entities that form part of the group, in such way that Fugro's interests and the interests of the relevant businesses as well as the interests of all parties involved, are safeguarded to the extent possible, and that Fugro and the relevant businesses are defended to the extent possible against factors that could negatively affect the independence and/or continuity and/or identity of Fugro and the relevant businesses, as well as all activities which are incidental to or which may be conducive to any of the foregoing.

The Foundation aims to achieve its objects independently from Fugro, by acquiring protective preference shares and by exercising the rights attached to such shares. Fugro has entered into a call option agreement with the Foundation pursuant to which the Foundation was granted the right to acquire cumulative protective preference shares in Fugro's share capital, each share with a nominal value of EUR 0.05, up to an amount to be determined by the Foundation and up to a maximum equal to 100% minus 1 share of the aggregate nominal value of ordinary shares and preference financing shares in Fugro that are held by third parties at the time the right to acquire protective preference shares is exercised by the Foundation. By entering into the option agreement, the Foundation is in a position to achieve its objects – i.e. safeguarding Fugro and its businesses – autonomously, independently and effectively should the occasion occur. The Board of Foundation Protective Preference Shares operates completely independently from Fugro.

The Board of Foundation Protective Preference Shares is composed as follows:

Name	Function	Term
M.W. den Boogert, Chairman	Board member	2017
J. J. Nooitgedagt	Board member	2021
S.C.J.J. Kortmann	Board member	2020
M.A.M. Boersma	Board member	2018
J.C. de Mos	Board member	2017

#### Foundation Continuity Fugro

The objects of Stichting Continuïteit Fugro ('Foundation Continuity') are similar to those of Foundation Protective Preference Shares. Foundation Continuity has entered into call option agreements with Fugro Consultants International N.V. ('FCI') and Fugro Financial International N.V. ('FFI') (both

registered in Curaçao) pursuant to which the Foundation was granted the right to acquire preference shares B in each of FCI and FFI up to a maximum equal to 105% of the nominal value of the then issued capital of the relevant company (in a form other than cumulative preference shares B), not including any shares that company holds in its own capital. The grant of these call options has been approved by the AGM in 1999. Foundation Continuity, at the level of FCI and FFI, basically has similar features as a Dutch Protective Preference Shares Foundation and under circumstances may acquire a veto right on important decisions relating to the Fugro businesses operating under FCI and FFI. The Board of the Foundation operates completely independent of Fugro but Board member A is appointed by the Board of Management of Fugro with the approval of the Supervisory Board of Fugro.

The Board of Foundation Continuity is composed as follows:

Name	Function	Term
G.E. Elias, Chairman	Board member B	2020
R. de Paus	Board member B	2019
M. van der Plank	Board member B	2018
A.C.M. Goede	Board member B	2017
G-J. Kramer	Board member A	2017

The protective measures described above shall be put up, especially in a takeover situation, when this is in the interest of Fugro to protect its independence and also in defining Fugro's position in relation to that of the raider and the raider's plans. It creates the possibility, when necessary, to look for alternatives. The protective measures will not be put up to protect the Board of Management's own position. Due to the uncertainty regarding the situations with which Fugro could be confronted, the use of protective measures in circumstances other than those described above cannot be discounted.

#### Stock option and share plan

Fugro has an unconditional option plan that was approved by the AGM in 2008 and a conditional performance option and conditional performance share plan that was approved by the AGM in 2014. See page 75 for further details of the two plans. Since 2014 only conditional performance options and conditional performance shares are granted to the members of the Board of Management. (Conditional) options and conditional shares are granted to members of the Board of Management and to other employees in such way that at



*Soil testing in one of Fugro's specialist labs.*

any moment the maximum number of outstanding rights to acquire and to obtain ordinary shares will not exceed 7.5% of Fugro's issued ordinary share capital (including treasury shares). In order to mitigate dilution, it is Fugro's policy to purchase own shares to cover/hedge the option and share plans with the result that no new shares are issued when options are exercised and shares vest. The total number of (conditional) options and conditional shares to be granted is subject to the approval of the Supervisory Board as is the grant of options and shares to members of the Board of Management itself.

#### General meeting of shareholders

General meetings are convened by the Board of Management or the Supervisory Board. Meetings can also be convened by shareholders who, individually or jointly, represent at least 10% of the issued share capital if authorised by the relevant Dutch court.

The powers of the general meeting are stipulated in legislation and in the articles of association of Fugro and can be stated concisely as follows: approval of decisions that would entail a significant change to the identity or character of Fugro or its business; appointment and dismissal of members of the Board of Management and of the Supervisory Board; adoption of the remuneration policy of the Board of Management; approval of the option and share plan for the Board of Management; approval of the remuneration of the Supervisory Board; adoption of the annual financial statements; discharge of members of the Board of Management and of the Supervisory Board; approval of the profit appropriation in accordance with article 36 paragraph 7 of the articles of association; authorisation to repurchase or cancellation of shares, to issue shares (or to grant rights to subscribe for shares) and to restrict or exclude pre-emptive rights in respect of

shares; and approval of decisions to amend the articles of association or to dissolve Fugro.

The AGM is held within six months of the end of the financial year (often at the end of April or the beginning of May) in order to discuss the management report and the financial statements, any appointments of members of the Board of Management and of the Supervisory Board and any of the other topics mentioned above. Extraordinary general meetings (EGM) are convened as often as the Supervisory Board or the Board of Management deems this necessary.

The shareholders' meeting is chaired by the chairman of the Supervisory Board. The Supervisory Board and the Board of Management provide the shareholders' meeting with all the information requested, unless there is a very good reason why providing the information would not be in the interests of Fugro.

Shareholders who, individually or jointly, represent at least 3% of the issued share capital may request to the Board of Management that items be placed on the agenda. Such requests need to be received in writing not later than 60 days prior to the meeting.

#### Board of Management and Supervisory Board

Fugro N.V. is a public limited liability company under Dutch law. It has a two-tier board structure, consisting of a Board of Management and an independent Supervisory Board. Each Board has its specific role and task regulated by laws, the articles of association, the Code and the rules and regulations of both Boards.

Management is responsible for the strategy, policies and results of Fugro. The Supervisory Board is responsible for supervising Fugro's management and Fugro's general affairs

and the business connected with it, and for advising the Board of Management. In performing its duties, the Supervisory Board shall be guided by the interests of Fugro and its business, and shall take into account the relevant interests of Fugro's stakeholders.

Members of the Board of Management and of the Supervisory Board are appointed (and, if necessary, dismissed or suspended) by the general meeting for a maximum period of four years. The Supervisory Board determines the number of members of the Board of Management after consultation with the Board of Management. The Supervisory Board consists of such number of members as shall be set by the Supervisory Board (currently six). Members of the Supervisory Board are eligible for reappointment of two additional four-year terms, up to a maximum of twelve years in office. It has been noted that in the revised Code it is stipulated that the maximum term of office for members of the Supervisory Board is twelve years, provided that re-appointment after eight years is only possible for a maximum of two two-year terms. Any re-appointment after eight years must be substantiated in the Supervisory Board report.

For every appointment to the Supervisory Board and the Board of Management, the Supervisory Board is entitled to make a (binding) nomination. The general meeting can overrule a binding nomination by a resolution adopted by an absolute majority of the votes cast, provided such majority represents more than one-third of the issued share capital. If this part of the share capital is not represented at the meeting, but an absolute majority of the votes cast is in favour of the resolution to cancel the binding nature of the nomination, a new meeting may be convened at which the resolution may be passed by an absolute majority of votes, irrespective of the part of the capital represented at such meeting. On a non-binding nomination, the general meeting decides on the appointment with an absolute majority of votes.

The Supervisory Board appoints one of the members of the Board of Management as chairman (CEO) and determines, in consultation with the Board of Management, the division of tasks. The Supervisory Board appoints one of its members as chairman and one as vice-chairman. The chairman of the Supervisory Board is assisted in his role by the company secretary. The Supervisory Board has established three key committees from amongst its members: an audit committee, a nomination committee and a remuneration committee. The function of the committees

is to assist the Supervisory Board and to prepare the decision-making.

The general meeting can dismiss or suspend members of the Board of Management and the Supervisory Board. Such a decision, other than proposed by the Supervisory Board, requires at least two-third of the votes, representing at least half of the issued share capital. With regard to the overruling of the binding nature of decisions to suspend or dismiss members of the Board of Management or Supervisory Board, convening a second meeting pursuant to section 2:120, subsection 3, Dutch Civil Code is not permitted. The Supervisory Board may at any time suspend a member of the Board of Management.

During 2016, the members of the Board of Management and the Supervisory Board have not been involved in transactions involving conflicts of interest for Board of Management or Supervisory Board members which were of material significance to Fugro.

#### Amendment of articles of association

A resolution to amend the articles of association of Fugro may be passed only on a proposal thereto of the Board of Management with the prior approval of the Supervisory Board and by a majority of at least two-thirds of the votes cast at a general meeting, representing at least half of the issued share capital. If this proportion of the share capital is not represented at the meeting, a second meeting may be convened at which the resolution may be passed by a majority of at least two-thirds of the votes cast, irrespective of the proportion of the capital represented at such meeting.

Insofar as a resolution to amend the articles of association brings about a change in the rights vested in the holders of protective preference shares or the holders of financing preference shares or the holders of convertible financing preference shares (currently no such preference shares are issued), such a resolution shall require the approval of the meeting of holders of protective preference shares or the meeting of holders of financing preference shares or the meeting of the holders of convertible financing preference shares, as the case may be.

#### Authorisation Board of Management regarding Fugro shares

Fugro regularly proposes to its shareholders to authorise the Board of Management to grant or issue (rights to acquire) shares and to repurchase own shares. On 29 April 2016 the AGM authorised the Board of Management for a period of



*Diver inspecting offshore structure.*

18 months as from 29 April 2016 until 29 October 2017, to, subject to the approval of the Supervisory Board:

- Cause Fugro to purchase (certificates of) its own shares, up to a maximum of 10% of the issued capital at the date of acquisition, provided that Fugro will hold no more (certificates of) shares in stock than at maximum 10% of the issued capital, either through purchase on a stock exchange or otherwise, at a price, excluding expenses, not lower than the nominal value of the shares and not higher than 10% above the average of the closing price of the certificates of the shares on Euronext Amsterdam for the five business days preceding the date on which the purchase is made.
- Resolve on the issue of – and/or on the granting of rights to acquire ordinary shares and all sorts of preference shares in which the authorised capital of Fugro is divided at the date the date of the relevant resolution.
- Limit or exclude pre-emption rights in relation to any issue or grant of (rights to acquire) ordinary shares and all sorts of financing preference shares.

The above-mentioned authorisation of the Board of Management with respect to the issue of ordinary shares and financing preference shares and/or the granting of rights to acquire ordinary shares and financing preference shares is limited to 10% of the issued capital of Fugro at the time of the issue plus an additional 10% of the issued capital of Fugro at the time of the issue in connection with or on the occasion of a merger, takeover or strategic partnership.

The Board of Management may resolve, with the approval of the Supervisory Board, to dispose of shares acquired by Fugro in its own capital.

#### Key agreements containing change of control provisions

Fugro differentiates the following categories of agreements as referred to in the Decree on Article 10 of the EU Takeover Directive:

- Fugro N.V., directly and indirectly, has entered into U.S. private placement loans (USPP) and into syndicate revolving credit facilities (RCF). See for further details note 5.50 of the financial statements. Both the USPP and the RCF agreements stipulate that in the event of a change of control of Fugro N.V., the loans/amounts outstanding under these arrangements are immediately due.
- Fugro N.V. has entered into a sale and lease back agreement regarding its geotechnical vessels Fugro Scout and Fugro Voyager. See note 5.29. The documentation contains change of control provisions which could result, depending on various circumstances, damages to be paid by Fugro.
- In October 2016 Fugro N.V. has issued EUR 190 million in subordinated convertible bonds. See note 5.50.3 of the financial statements. This agreement contains a change of control which gives the holder of each bond the right to require Fugro to redeem that bond.
- Agreement between Fugro Nederland B.V. and CGG SA regarding Seabed Geosolutions, a subsidiary of Fugro with significant non-controlling interest. This agreement contains a change of control clause with respect to the situation that a third party, other than an affiliate of Fugro N.V. or CGG acquires direct or indirect control over the affairs of Fugro N.V. or CGG; more than 30% of the voting rights in the capital of Fugro N.V. or CGG. In such a case the other party may terminate the agreement. Some other agreements Fugro N.V. and Fugro subsidiaries have entered into also contain change of control clauses, which agreements are in itself not considered key agreements within the meaning of the

Decree on Article 10 of the EU Takeover Directive, but jointly they are considered significant.

- Fugro N.V. and Fugro subsidiaries have entered into various important agreements that contain clauses that in the event of a change of control the other party has the right to terminate the agreement. These agreements are in itself not considered key agreements within the meaning of the Decree on Article 10 of the Takeover Directive, but jointly they are considered significant.
- Employee (conditional) option and conditional share agreements. The “old” unconditional option agreements stipulate that in the event of a restructuring of the share capital of Fugro N.V. or a merger of Fugro N.V. with any other legal entity, the option holder is entitled for every option to such securities, cash or other property as to which a shareholder of Fugro N.V. is entitled per share immediately prior to the restructuring or merger, unless the option period is shortened by Fugro N.V. In the event of a restructuring of its share capital or merger with another company, Fugro N.V. may shorten the option period so as to terminate immediately prior to the time at which the restructuring or merger is effectuated. In the event that a public offer is considered hostile and such offer is declared unconditional, all options become immediately exercisable. The “new” conditional performance option and conditional performance share agreements (first grants on 31 December 2014, 31 December 2015 and 31 December 2016) contain more or less similar change of control clauses.

#### Termination of services agreement of members Board of Management resulting from public bid

Fugro has not entered into any agreements with members of the Board of Management that provide for a specific severance payment on termination of the services agreement as a result of a public bid within the meaning of section 5:70 or 5:74 of the Dutch Act on Financial Supervision. The agreements with the members of the Board of Management do – in accordance with the Code – provide for a general severance payment amounting to a maximum of one year's base salary which in principle is applicable in the event of termination or annulment of the agreement unless this is for cause. This severance payment is also applicable when the termination is justified by such change of circumstances that the members of the Board of Management cannot reasonably be expected to continue the performance of their function/services as a statutory director of Fugro. This may be the case, for example, if Fugro is liquidated, is merged with or taken over by a third party, is subject to an important reorganisation or to a major

change of policy. This severance payment is in addition to a three months' notice period for both parties.

#### Corporate governance statement

This is a statement concerning corporate governance as referred to in section 2a of the decree on additional requirements for annual reports (Vaststellingsbesluit nadere voorschriften inhoud bestuursverslag) effective as of 1 November 2015 (the 'Decree'). The information required to be included in this corporate governance statement as described in sections 3, 3a and 3b of the Decree can be found in the following chapters, sections and pages of this annual report 2016 and are deemed to be included and repeated in this statement:

- The information concerning compliance with the Code, as required by section 3 of the Decree, can be found in the chapter 'Corporate governance'.
- The information concerning Fugro's main features of the internal risk management and control systems relating to the financial reporting process, as required by section 3a sub a of the Decree, can be found in the chapter 'Risk management'.
- The information regarding the functioning of Fugro's general meeting, and the authority and rights of Fugro's shareholders and holders of certificates of shares, as required by section 3a sub b of the Decree, can be found in the chapter 'Corporate governance'.
- The information regarding the composition and functioning of Fugro's Board of Management, the Supervisory Board and its committees, as required by section 3a sub c of the Decree, can be found in the relevant sections of the chapters 'Corporate governance' and 'Supervisory Board report'.
- The information concerning the disclosure of the information required by the Decree on Article 10 EU Takeover Directive, as required by section 3b of the Decree, can be found in the chapters 'Corporate governance' and 'Fugro on the capital markets'.

## FUGRO ON THE CAPITAL MARKETS

### Investor relations policy

Fugro's investor relations policy is aimed at providing timely, complete and consistent information to existing and potential shareholders, other capital providers and its intermediaries. Fugro wants to enable them to develop a clear understanding of the company's strategy, activities, historical performance and outlook for the future. Fugro offers comprehensive information on its website and through presentations to and meetings with analysts, investors and media and by means of press releases.

Investors are able to follow general meetings of shareholders and analyst presentations via webcast. Roadshows are held twice a year, amongst others in the United States, the United Kingdom, the Netherlands, Switzerland and Germany. In combination with further individual personal contacts with investors this resulted in around 175 'one-on-one'-meetings, presentations and telephone conferences in 2016.

These activities are carried out in strict accordance with the requirements of Euronext and the Dutch Authority for the Financial Markets. Fugro has a policy on bilateral contacts in place, detailing how information is provided to investors, analysts, financial institutions, the press and other stakeholders. For this policy and all other relevant publications such as press releases and presentations, see [www.fugro.com](http://www.fugro.com).

### Listing on the stock exchange

Fugro is listed on Euronext Amsterdam since 1992 (symbol: FUR/ISIN code: NL0000352565). Options on Fugro shares are traded on the European Option Exchange in Amsterdam (Euronext Life).

On 31 December 2016 Fugro had 84,572,525 shares outstanding. Only certificates of shares are listed on Euronext Amsterdam. These certificates are issued by the Foundation Trust Office, which carries out the administration of the underlying shares, for which it has issued the certificates. On 31 December 2016 the Foundation Trust Office administered 98.6% of the issued underlying shares.

For more information on share capital, certificates and the Foundation Trust Office see 'Foundation Trust Office' and 'Report of Stichting Administratiekantoor Fugro'.

### Share price and trading volumes

In 2016, the share price declined by 3%. This compares to a 20% increase of the most commonly used oil field services index. This OSX index is entirely composed of US oil services companies, whose share prices increased strongly in the last two months of the year in line with the oil price, due the expectation that US shale related activities will be the first to benefit from higher activity levels in the sector. The major Dutch index, the AEX, increased by 9% during the year.

### Development share price 2010 – 2016 (x EUR)

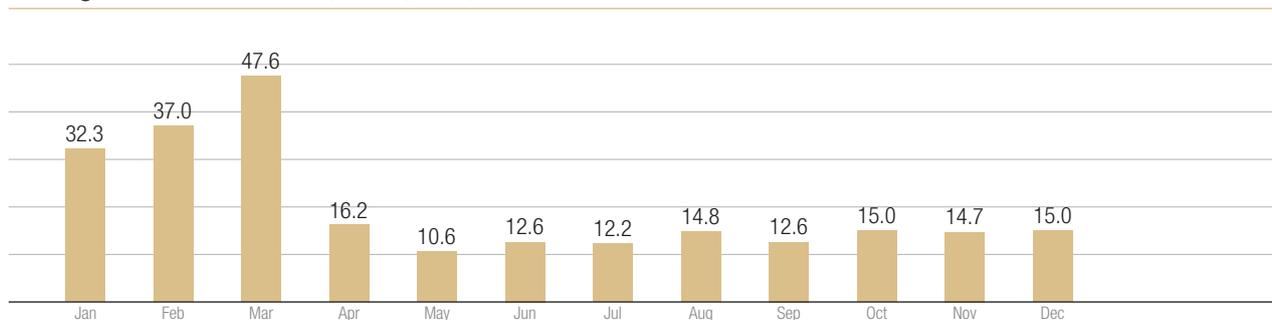


AEX (Dutch large cap index) and OSX (US oil services index composed of amongst others Halliburton, Oceaneering, Schlumberger, Transocean, Weatherford) calibrated to Fugro share price on 4 January 2016.

**Development share price 2016** (x EUR)

AEX (Dutch large cap index) and OSX (US oil services index composed of amongst others Halliburton, Oceaneering, Schlumberger, Transocean, Weatherford) calibrated to Fugro share price on 4 January 2016.

The average daily trading volume on Euronext Amsterdam was 750,484 shares. During the year, on a daily basis around 70% of the observable trading volume in Fugro shares took place on the Euronext platform, which was comparable to the previous year. The remaining volume was realised on alternative platforms such as Chi-X and Turquoise.

**Trading volume on Euronext** (x million Fugro shares)**Trading information**

	2016	2015	2014	2013	2012
Market capitalisation (x EUR 1 million)	1,231	1,274	1,460	3,663	3,688
Highest closing share price on Euronext	19.28	27.21	47.72	48.81	57.88
Lowest closing share price on Euronext	10.34	13.86	9.07	35.24	37.65
Year-end closing share price on Euronext	14.55	15.06	17.26	43.32	44.52
Average daily trading on Euronext (shares)	750,484	940,270	1,133,414	475,733	482,637
Average dividend yield (%)	0.0	0.0	0.0	3.6	4.2

<b>Information per share</b> (x EUR 1.–)	2016	2015	2014	2013	2012
Cash flow <sup>1</sup>	1.62	4.01	4.16	4.52	4.99
(Basic) earnings per share	(3.82)	(4.60)	(5.67)	5.29	3.61
Diluted earnings per share	(3.82)	(4.60)	(5.65)	5.27	3.58
Dividend paid out in the year under review	-	-	1.50	2.00	1.50
Proposed dividend over the year under review	-	-	-	1.50	1.50
Extra dividend for the year under review related to sale of majority Geoscience business					0.50
Pay-out ratio (%) over the year under review	-	-	-	54	56

<sup>1</sup> 2013 and 2014 based on cash flow from operating activities.

### Shareholders

Under the Dutch Financial Supervision Act, shareholdings of 3% or more must be disclosed to the Dutch Authority for the Financial Markets (AFM). On 31 December 2016, Fugro owned 4.29% of its own shares (treasury shares) to cover performance shares and (performance) options granted to employees. Approximately 1.3 million treasury shares are earmarked to be used, if necessary, in connection with the subordinated convertible bonds issued in 2016.

During 2016, Fugro has not been involved in any transaction with holders of at least 10% of shares in Fugro. This means that best practice provision III.6.4 of the Code has been observed.

### Shareholders owning 3% or more in Fugro's share capital per 31 December 2016 (public register AFM)

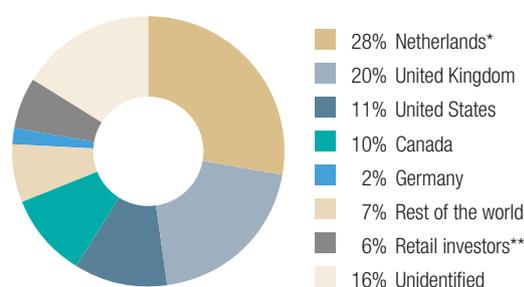
	Ownership	Date notification
NN Groep N.V.	10.01%	4 October 2016
Koninklijke Boskalis Westminster N.V.	9.38%	13 December 2016
Sprucegrove Investment Management Limited	5.18%	14 March 2013
Kiltearn Partners LLP	5.08%	19 December 2014
Fidelity Management and Research LLC	4.80%	5 May 2008
Fugro N.V. (treasury shares)	4.20%	30 September 2014

### Participations and employee options

On 31 December 2016 around 1% of Fugro's share capital was held by members of the Board of Management and other Fugro employees.

A total number of 571,850 new options, with an exercise price of EUR 14.55, were granted to a total of 695 employees on 31 December 2016. Furthermore, a total number of 257,200 performance options and 128,600 performance shares were granted to a total of 43 employees. Of these performance options and performance

### Geographical distribution shareholders



\* Including 4.20% treasury shares.

\*\* Primarily Dutch shareholders.

shares, 47% was granted to the five members of the Board of Management. In total, per 31 December 2016, 5,217,053 options (including the (performance) option and performance share grants) were outstanding.

### Treasury shares\*

	2016	2015
Balance on 1 January	3,628,347	3,623,316
Purchased	-	-
Sold in connection with option exercise	-	-
Adjustment	-	5,031
<b>Balance on 31 December</b>	<b>3,628,347</b>	<b>3,628,347</b>
Granted, not exercised options at year-end	4,281,670	4,834,902
Granted, not exercised performance options at year-end	623,589	372,700
Granted, not vested performance shares at year-end	311,794	186,350

\* Shares held to cover employee (performance) options and performance shares. In addition, approximately 1.3 million of the treasury shares have been earmarked for use, if necessary, in connection with the subordinated convertible bonds.

Unconditional options are granted in accordance with the option scheme that was approved by the AGM in 2008. Conditional performance options and conditional performance shares (these performance shares represent the right to receive actual shares in the future on the vesting date) are granted in accordance with the option and share scheme that was approved by the AGM in 2014.

Options (conditional as well as unconditional) are granted annually on 31 December. The exercise price is equal to the price of the certificates of shares at the closing of Euronext Amsterdam on the last trading day of the year. The vesting period is three years starting 1 January of the year following the grant date. The option period is six years.

The unconditional options granted are not subject to any further conditions of exercise, except that the holder is still employed by Fugro or one of its operating companies. The vesting conditions of the conditional options and the conditional shares are subject to continuous employment and performance testing after three years. Vested performance shares are subject to a two-year lock-up period. Standard exceptions apply to the latter rules in connection with retirement, long-term disability and death. In the event that a public offer is considered hostile and such offer is declared unconditional, all unconditional options become immediately exercisable. The same could apply with respect to the conditional options and the conditional shares but that is subject to a decision of the Supervisory Board.

Options (conditional as well as unconditional) and performance shares are granted in such a way that at any moment the maximum number of outstanding performance shares and outstanding options to acquire shares in Fugro will not exceed 7.5% of the issued ordinary share capital (including treasury shares), taking into account the number of shares repurchased for the unconditional option scheme and for the conditional option and share scheme.

On 31 December 2016 a total of 3,628,347 Fugro shares were held by the company ('treasury shares'). These shares are not entitled to dividend and there are no voting rights attached to these shares. The exercise/vesting of all outstanding options as of 31 December 2016, including the options and performance shares granted on this date, could – after having used the treasury shares excluding the approximately 1.3 million shares earmarked for the subordinated convertible bonds – lead to an increase of the issued share capital by a maximum of 3.5%. It is Fugro's policy to purchase own shares to cover the options and

shares granted with the result that no new shares are issued when options are exercised and performance shares vest. Between 1 January and 1 March 2017 no options were exercised.

<b>Number of outstanding shares</b>	2016	2015
Outstanding on 1 January	84,572,525	84,572,525
Issued in relation to stock dividend	–	–
Bought back and cancelled to neutralise dilution from stock dividend	–	–
<b>Outstanding on 31 December</b>	<b>84,572,525</b>	<b>84,572,525</b>
Balance held for option scheme and subordinated convertible bond (year-end)	3,628,347	3,628,347
<b>Entitled to dividend on 31 December</b>	<b>80,944,178</b>	<b>80,947,178</b>

#### Dividend

Fugro strives for a pay-out ratio of 35% to 55% of net result. Shareholders have the choice between cash or shares. In case no choice is made, the dividend will be paid in shares.

Fugro offsets dilution resulting from the optional dividend (cash or shares). Fugro will repurchase the number of shares issued as stock dividend and these shares will be cancelled after having obtained shareholder approval. This way, dilution is being offset while the tax advantage for a substantial part of the shareholders related to stock dividend is retained.

Due to the negative net result, Fugro will not propose to pay a dividend over the year 2016.

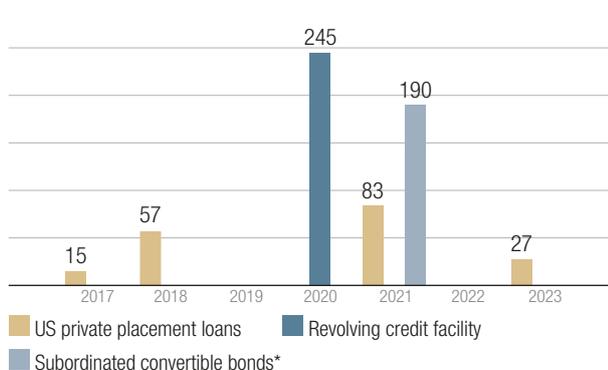
#### Bonds

Fugro has a revolving credit facility in place with seven banks. On this 5-year facility of EUR 500 million, as per 31 December 2016 EUR 245 million has been drawn. The interest is EURIBOR plus 110 to 190 basis points, dependent on the level of net debt/EBITDA.

In addition, Fugro has private placement loans with US and UK investors ('United States private placement notes' or USPPs). These loans, placed in 2002 and 2011, carry a weighted average interest rate of around 5.7%. In November and December 2016, a significant part of these loans was repaid early from generated cash flow and the proceeds

## Debt maturity profile per 31 December 2016

(in millions, euro equivalents)



\* Will be lower than EUR 190 million if bonds are (partly) converted into equity.

from the EUR 190 million subordinated convertible bonds (see below).

Both the bank loan (revolving credit facility) and the private placement loans contain certain covenant requirements, most notably net leverage (net debt/EBITDA) of below 3.0 and fixed charge cover of above 1.8. With net debt/EBITDA of 1.1 and a fixed charge cover of 2.4 per 31 December 2016, Fugro is well within its covenants. See note 5.50.6 in the financial statements for details.

In October 2016, Fugro issued EUR 190 million in subordinated convertible bonds. The proceeds were fully used for early repayments on the USPP notes. The related bond amount and interest costs will be excluded from the covenant ratios. This has resulted in additional headroom under the financial covenants, reduced interest expense and increased financial flexibility.

The subordinated convertible bonds, maturing in 2021, carry a coupon of 4.0% and an initial conversion price of EUR 19.4416. The shares underlying the bonds correspond to approximately 11.5% of Fugro's issued share capital. Fugro may decide to use part of its treasury shares to service any conversion rights above the authorised 10% of issued share capital, as approved by the annual general meeting on 29 April 2016. The bonds are trading on the Open Market (Freiverkehr) segment of the Frankfurt Stock Exchange (symbol: ISIN: XS1508771216).

## Annual general meeting

Fugro offers the possibility to grant proxies, whether or not with voting instructions, by electronic means. Fugro also offers the holders of certificates of shares the possibility to issue voting instructions by using an internet e-voting system: [www.abnamro.com/evoting](http://www.abnamro.com/evoting). As the technology matures and becomes more trustworthy, Fugro will evaluate whether to facilitate the use of electronic means to cast votes during the meeting without being present in person or by proxy.

## Percentage of issued capital represented in shareholders' meetings

	% of issued capital <sup>1</sup>	Of which certificates and shares	Of which shares held by Foundation Trust Office <sup>2</sup>
AGM 2016	99	71	28
AGM 2015	99	71	28
AGM 2014	99	74	25
EGM 2013	99	69	30
AGM 2013	99	62	37

<sup>1</sup> Excluding own shares held by Fugro.

<sup>2</sup> Foundation Trust Office votes on the shares for which certificates have been issued and on which shares the certificate holders do not vote themselves as representative of the Foundation Trust Office. For more information see 'Foundation Trust Office' and 'Report of Stichting Administratiekantoor Fugro' on.

## Financial calendar

24 February 2017	Publication 2016 annual results (7.00 CET)
3 March 2017	Publication 2016 annual report
2 May 2017	Publication trading update first quarter 2017 (7.00 CET)
2 May 2017	Annual general meeting (Crown Plaza Hotel, Den Haag, 14 CET)
3 August 2017	Publication half-year results 2017 (7.00 CET)
30 October 2017	Publication trading update third quarter 2017 (7.00 CET)
22 February 2018	Publication 2017 annual results (7.00 CET)
26 April 2018	Annual general meeting

## Contact

For further information contact  
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[c.vanbuttingha@fugro.com](mailto:c.vanbuttingha@fugro.com)  
[holding@fugro.com](mailto:holding@fugro.com)

## MANAGEMENT STATEMENTS

### Assessment of internal control

The Board of Management has reviewed the effectiveness of the internal risk management and control systems, based upon the following information:

- Letters of representation signed by the management of operating companies.
- Reports of internal audit on reviews performed throughout the year (27 reviews performed). Observations and measures to address issues were discussed with local management, the Board of Management and the audit committee. The main observations of internal audit relate to further improvement in project control and general IT controls, amongst which segregation of duties and back-up and recovery solutions.
- Management letter from the external auditor with observations and remarks regarding internal controls. This letter has been discussed with the audit committee and the Supervisory Board. The management letter notes that management expresses a positive attitude towards internal control and has several programmes to decrease risks and increase efficiency and effectiveness of internal controls through centralisation and improving controls and monitoring. Points of attention for further improvement included the relative informal culture towards documenting control activities.

The Board of Management concluded that progress has been made with improvements in risk management and internal control and that the issues identified did not materially impact the consolidated accounts of Fugro N.V. The company will continue to implement improvements that will further strengthen business processes and risk management.

### In control statement

The Board of Management is responsible for the design and functioning of the internal risk management and control systems. Despite the risk management and control systems that Fugro has and will put in place, there can be no absolute certainty that mistakes, losses, fraud or unlawful activities will be prevented.

Based on the approach as outlined above, the Board of Management believes that to the best of its knowledge, the internal risk management and control systems provide a reasonable assurance that the financial reporting does not

contain any errors of material importance and that the risk management and control systems worked properly in 2016.

### Responsibility statement

In accordance with article 5:25c of the Financial Markets Supervision Act (Wet op het financieel toezicht), the Board of Management confirms that to the best of its knowledge the financial statements (pages 99 to 179) give a true and fair view of the assets, liabilities, financial position and profit or loss of Fugro N.V. and the companies included jointly in the consolidation, and the management report (pages 17 to 78) gives a true and fair view of the situation on the balance sheet date and the business development during the financial year of Fugro N.V. and the group companies for which the financial information is recognised in its financial statements. The principal risks and uncertainties, with which Fugro N.V. is confronted, are described in this management report.

Leidschendam, 23 February 2017

P. van Riel, Chairman Board of Management/ Chief Executive Officer  
 P.A.H. Verhagen, Chief Financial Officer  
 M.R.F. Heine, Director Marine division  
 B.M.R Bouffard, Director Land division  
 S.J. Thomson, Member Board of Management



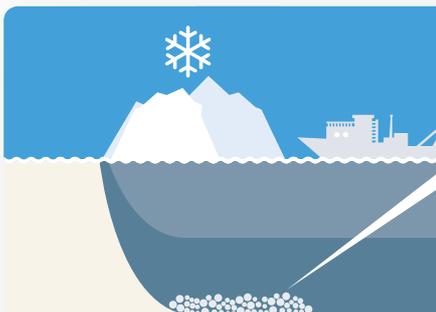
Site characterisation services in practice

# Gas hydrate research project in China

Fugro was commissioned by Guangzhou Marine Geological Survey (GMGS) for a major gas hydrate field investigation in the South China Sea in 2016. Gas hydrates, “frozen” gas-water solids resembling ice, may be an important source of future energy.

Fugro scientists and engineers aided GMGS’s gas hydrate research group to design and execute a successful exploration program. State of the art gas hydrate detection, sampling, and analysis tools were deployed for the 105-day field program on the drilling vessel Fugro Voyager. The site characterisation report and assessment of gas hydrate reservoir volumes provided by Fugro will be used by GMGS to plan for China’s first gas hydrate marine production test.

This was the fourth gas hydrate field research program for GMGS by Fugro. GMGS and Fugro have been cooperating in gas hydrate exploration drilling since 2007. Fugro has provided technical advice, specialised tools and vessels for many of the world’s major gas hydrate field programs to date.



Gas hydrates are found in the Arctic regions and deepwater continental margins around the world.

Total man-hours spent on the GMGS4 project: **152,496** without any work related injuries.



# REPORT OF THE SUPERVISORY BOARD

## SUPERVISORY BOARD



Name **Harrie L.J. Noy** (1951)  
Function Chairman  
Committee Chairman nomination committee  
Nationality Dutch  
First appointed 2012  
Current term Until AGM 2020

**Previous position** Chairman Executive Board and CEO ARCADIS N.V. until May 2012.  
**Other functions** Supervisory Board member Royal BAM Group N.V.; Extraordinary Board member Dutch Safety Board; Chairman Foundation Trust Office TKH Group.



Name **Maarten Schönfeld** (1949)  
Function Vice-chairman  
Committee Chairman audit committee  
Nationality Dutch  
First appointed 2013  
Current term Until AGM 2017

**Previous positions** 1977-2001 Several positions with Royal Dutch Shell Plc. From 2001 until 2008, CFO and vice-chairman of the Board of Management of Stork B.V.  
**Other functions** Member Supervisory Board and chairman audit committee ARCADIS N.V. and SIF Group N.V., member Foundation Continuity ICT.



Name **Antonio J. Campo** (1957)  
Committee Member remuneration committee;  
member nomination committee  
Nationality Colombian  
First appointed 2014  
Current term Until AGM 2018

**Previous positions** Multitude of senior management positions at Schlumberger and CEO of Integra Group.  
**Other functions** Vice-chairman Board Basin Holdings.



Name **Petri H.M. Hofsté** (1961)  
Committee Member audit committee  
nationality Dutch  
First appointed 2015  
Current term Until AGM 2019

**Previous positions** Senior financial management positions at various organisations; partner at KPMG, group controller and deputy chief financial officer of ABN AMRO Bank, division director of the Dutch Central Bank and chief financial and risk officer of APG Group.  
**Other functions** Member Supervisory Board Rabobank, Kas Bank (Chair audit committee), BNG Bank and Achmea (group) and Achmea investment management; Chair of Achmea Bank; member of the Board of Nyenrode Foundation.



Name **Anja H. Montijn** (1962)  
Committee Chair remuneration committee;  
Member nomination committee  
Nationality Dutch  
First appointed 2015  
Current term Until AGM 2019

**Previous positions** Various national and international leadership positions at Accenture, as managing director Resources practice in France and Benelux, Country Managing Director Accenture the Netherlands, Global Managing Director Management Consulting Resources.  
**Other functions** Non-executive director at OCI N.V.



Name **Douglas J. Wall** (1953)  
Committee Member audit committee  
Nationality American/Canadian  
First appointed 2014  
Current term Until AGM 2018

**Previous positions** President and CEO of Patterson-UTI Energy, Group President of completions and production at Baker Hughes, variety of executive positions with other oilfield services companies in Canada.  
**Other functions** Director of Select Energy Services, LLC; Director of Seventy Seven Energy Inc. and Chairman audit committee.

Company Secretary **Wouter G.M. Mulders** (1955)

## SUPERVISORY BOARD REPORT

The downturn in the oil and gas market that started in 2014, continued and even deepened in 2016. As Fugro derives around 70% of its revenues from this market, the company also in 2016 was seriously impacted by this unprecedented downturn. Clients continued reducing their spending and this resulted in lower work volumes and substantial price pressure. As a consequence, Fugro's revenues went down by almost 25% in one year.

Under these circumstances, the most important subject in our discussions with management was how to weather this storm. We believe that management has taken the right actions by continuously reducing costs, lowering working capital, curtailing investments and divesting non-core assets. This resulted in a slightly positive EBIT (before exceptional items) and more importantly a strong cash flow after investments. We strongly support management's efforts to use the present downturn to expand Fugro's market share and to adjust the organisation in order to further strengthen the company's competitiveness. The still weak market outlook in the short term caused additional non-cash impairments which was the main reason that for the third year in a row the company had to report a negative net result.

We were very pleased with the successful issue in October 2016 of a subordinated convertible bond for an amount of EUR 190 million. This enabled the company to refinance part of its debt at lower costs, created additional headroom under the financial covenants and increased financial flexibility. As a result of the strong cash flow and the successful placement of the subordinated convertible bond, net debt as defined under the covenants went down considerably and the net debt to EBITDA ratio under these covenants came out at 1.1 at year end 2016. This shows that – although the storm is not over yet and 'all hands on deck' is still very much required – Fugro's financial condition has improved, allowing the company to further strengthen its market leading positions.

### 2016 Financial statements and dividend

This annual report includes the 2016 financial statements, which are accompanied by an unqualified independent auditor's report by Ernst & Young Accountants LLP (see the independent auditor's report starting on page 180). These financial statements were prepared in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and section 9 of Book 2 of the Dutch Civil Code.

On 21 February 2017, the audit committee discussed the draft financial statements with the CFO, the CEO and the auditors. The audit committee also discussed the management letter and the auditor's report, the quality of internal risk management and control systems and had a discussion with the auditor without Fugro's management being present.

On 23 February 2017, we discussed this annual report, including the 2016 financial statements, with the Board of Management in the presence of the auditor. Furthermore, we took note of the reporting from the audit committee and reviewed the independent auditor's report and the quality of internal risk management and control systems. We are of the opinion that the financial statements and the report by the Board of Management provide a true and fair view of the state of affairs of Fugro including the management policies pursued.

We recommend that the Annual General Meeting (AGM), to be held on 2 May 2017, adopts the 2016 financial statements. In addition, we request that the AGM grants discharge to the members of the Board of Management in office in the 2016 financial year for their management of the company and its affairs during 2016, and to the members of the Supervisory Board in office for their supervision over said management. We concur with the decision of the Board of Management that due to the negative net result no proposal will be submitted to pay a dividend for 2016.

### Strategy

The strategy 'Building on Strength' which was introduced in 2014 to deal with the deteriorating market circumstances in the oil and gas market, still provides in our view the right direction for Fugro. It means that the company focuses on its core activities where it has global market leading positions as an independent service provider and a track record of solid operational and financial performance. By building on its strengths, including investments in innovation and technology, the company aims at preserving and expanding its market positions, with a strong focus on profitability, return on capital and cash flow.

Within the framework of this strategy, the company continued to look for divestment opportunities of those activities that it no longer considers part of its core business. However, under the present market circumstances, divesting of assets and/or parts of the business at reasonable prices is not easy. We were disappointed that an agreement reached to sell part of the Subsea activities, could not be



*Evaluating the stability of the Port of Los Angeles' San Pedro Breakwater.*

closed as the buyer came up with additional requirements that Fugro's management, with our support, did not want to meet. We agreed with management's plan to integrate the Subsea activities into the newly formed Marine division, in such a way that the heavier construction and installation support part of these activities can be separated. For these activities management will continue to seek partnerships or divestment opportunities as these activities do not fit into Fugro's strategy.

After a significant turnaround in 2015, Seabed Geosolutions performed reasonably well in 2016. Due to strong price pressure, some major tenders were lost, creating a gap in the backlog for 2017. After lengthy discussions with management, we agreed with investments in new technology that should improve the cost effectiveness of projects and should bring Seabed Geosolutions again at the forefront in its market. We support management's intention to eventually reduce Fugro's exposure in Seabed Geosolutions, but understand that in view of the present market conditions this will not be pursued in the short term.

During the year, we had regular discussions on the situation regarding Boskalis, a Dutch based dredging and maritime contracting company that as of November 2014 had built a substantial stake in Fugro. This happened without any preceding discussions with Fugro's management and was unexpected and unsolicited. In early 2016, it appeared that Boskalis had expanded its stake to 28.6% or 29.9% of the voting capital, just below the threshold that applies for making a mandatory offer. Fugro has explained repeatedly that its ability to provide its services independently is fundamental to the success of the company and a key pillar of its strategy. We have supported management's view in this respect, also based on the outcome of external investigations. At the shareholders meeting in May 2016,

Boskalis voted against several items on the agenda, which we considered as not being in the interest of Fugro and its stakeholders. Boskalis did not agree with Fugro's view on the need to operate as independent service provider which in our opinion means that it did not support Fugro's strategy. Therefore, we welcomed that by the end of 2016, after the successful placement of the subordinated convertible bond, Boskalis announced that it had reduced its holding in Fugro to 9.4%.

### **Organisation**

Throughout the year we had extensive discussions with management on the next phase of Fugro's organisational transformation. The first phase included the introduction of a regional structure and the strengthening of the corporate functions. The goal was to enhance internal collaboration, to improve quality through consistent delivery, to gain efficiencies through standardisation and to strengthen internal controls. The next phase is targeted at developing Fugro into a more customer centric organisation. As of 2017, the geotechnical, survey and subsea activities will be regrouped in a Land and a Marine division with two business lines per division: Site Characterisation and Asset Integrity. This creates better conditions for internal synergies and strongly improves Fugro's ability to deliver larger, integrated service packages to clients. The Supervisory Board fully supports this development, which we consider a major step for Fugro to improve its competitive strength. We also consider the simplification of the organisation by reducing the number of operating companies and the introduction of shared service centres for the support functions important to achieve this goal.

In 2016, the process to upgrade and harmonise systems and processes, continued. Further strengthening of the financial systems and processes was an important area of

attention especially of the audit committee. The new consolidation system is working well and allows reporting on a monthly basis, which is shared with our board. The next step is standardising management information systems across the company. We agreed with management that a phased approach is needed to avoid disruptions.

In September 2016, a new corporate human resources director was appointed. His main task will be the upgrading of systems across the group and the improvement of management and talent development to ensure that we are able to retain the best people and give them opportunities to grow into more senior roles within the company.

### **Supervisory Board activities and meetings**

The Supervisory Board met twelve times during 2016. All meetings were held jointly with the Board of Management. Six regular scheduled meetings were held, five of which were preceded by 'closed meetings' without the Board of Management being present. In addition, six extra meetings were held, partly by conference call. None of the members of the Supervisory Board was absent at the regular scheduled meetings. Two members of the Supervisory Board could not attend one of the additional meetings due to the fact that these meetings were convened at short notice. Members who were absent informed the Chairman in advance of their views on the items on the agenda. When necessary or useful, the Chairman was outside of the meetings in regular contact with his colleagues, the CEO and other members of the Board of Management and the Company Secretary.

The Chairman acts as the first point of contact within the Supervisory Board for the CEO. By way of preparation, many subjects are discussed in advance in one of the three Supervisory Board committees. The Board of Management is an important source of information for the Supervisory Board. It is supplemented with information from the external auditor, from internal audit and from presentations and discussions with corporate directors and with regional management and staff during site visits. The Supervisory Board receives monthly reports on the company's financial performance. Information is also provided outside meetings, in bilateral contacts or whenever a Supervisory Director feels the need to be informed on a specific topic.

Some members of the Supervisory Board attended part of Fugro's annual 'May managers meeting', at which, among others, Fugro's senior management discussed strategy, market conditions, improvement of operational and financial

performance, cost reductions and cash flow, and implementation of the new organisational structure. In September, our meeting was combined with site visits to operating companies and business locations in Wallingford and in Aberdeen in the United Kingdom. Management of the operating companies gave presentations on market developments, competitive position, performance, health and safety and main challenges and opportunities going forward. An 'innovation fair' offered us insight into various activities and the latest technology developments. These company visits and meetings with senior management and staff take place annually and we highly value them because it gives us a better view on local operations, management and key employees.

We consider health and safety of critical importance for Fugro and its people. Therefore we start each regular meeting with the Board of Management with a discussion on health and safety ('safety moment'). In 2016 we saw a decline in safety performance compared to the previous year. Although not an excuse, we noted that – after years of strong improvements – many in the industry are experiencing a levelling off in the rate of improvement of safety indicators. We extensively discussed with management various incidents, lessons learnt and the measures taken to improve safety performance. Unfortunately, Fugro had to regret one fatality as a result of a traffic accident. We strongly support management's ambition to reinforce health and safety culture throughout the company in order to bring the company back on a track of continuous performance improvement.

In the regular scheduled meetings the recurring items on the agenda were, among others, market developments and especially the continuous deterioration of the oil and gas market, financial performance and forecasts per division (including Seabed Geosolutions) and for Fugro as a whole, developments in the regions, organisational developments, internal control and risk management and compliance. On a regular basis we were informed on investor relations issues, feedback from investor road shows, share price developments and the composition of the shareholder base. The meeting reports of the audit committee, the nomination committee and the remuneration committee were also discussed.

Throughout the year we paid a lot of attention to Fugro's financial position. Topics such as cost reduction, capex, working capital, cash flow, financial scenario's and their impact on Fugro's financial headroom under its covenants,



Examples of 2016 PR campaign, showcasing Fugro's innovative solutions.

possible non-cash impairments and other one-offs, were discussed at length. Furthermore, we regularly discussed the different scenarios that could evolve in the relationship with Boskalis, their potential impact and the actions to be adopted.

Next to the regular agenda items, the following items were discussed:

In a separate meeting at the beginning of February, after a thorough selection process and on the recommendation of the nomination committee, we discussed and decided to nominate Mr. Brice Bouffard for appointment to the Board of Management. In our regular February meeting the annual results 2015 and related items were discussed. The annual report 2015 and the draft agenda for the 2016 AGM were approved. The former external auditor (KPMG) attended the financial topics. We received a presentation on the HSSE performance and achievements in 2015 and we discussed the HSSE plan and targets for 2016. In a closed meeting we discussed the functioning of the members of the Board of Management, the remuneration and the bonus 2015 for the members of the Board of Management and the bonus criteria for 2016.

In April we discussed the first quarter results. The Board of Management gave us an overview of the various actions that could be taken going forward if the oil price would stay low for the coming years. We received an update on the next steps in the development of the organisation. We also discussed vessel management against the background of cost and capex reduction measures and we prepared for the 2016 AGM.

Two conference calls were held in June and July to discuss investments of Seabed Geosolutions. We approved the

conversion of the charter agreement for the Hugin Explorer vessel into a lease and purchase agreement as the total cash out was hardly impacted. After lengthy discussions we also approved an investment in the new Manta<sup>®</sup> technology in order to improve the competitive position of Seabed Geosolutions. In another conference call in July we discussed progress on the sale of the Asia Pacific subsea services activities.

In August, the half-yearly report 2016 was discussed and approved. The external auditor attended the financial part of the meeting. We approved the sale of the Asia Pacific subsea services activities. Based on presentations from the respective corporate directors we discussed tax and IT. We also received an update on new initiatives to improve awareness with Fugro's code of conduct. We had extensive discussions on covenant scenarios and various contingencies were considered to improve financial headroom. At the beginning of July we had already been informed on the new European Market Abuse Regulation but in the August meeting we received a more extensive update. We approved a change of the annual budget process from a detailed plan to a rolling forecast and indicated what elements needed to be included.

In September, during our working visit to operating companies, we extensively discussed market developments in the short and longer term and an update on the planned changes in the organisation. In an open discussion we explored possibilities to make Fugro –in the longer run- less dependent on the oil and gas market by using growth opportunities in other markets. We also discussed various financial planning scenarios and the possibility of the issue of a subordinated convertible bond. Furthermore, we discussed additional cost reduction measures in 2017 on top of already initiated actions.

In October we had a conference call to discuss more extensively the issue of a subordinated bond. We also discussed the timing and concluded that at the moment of announcement of the bond issue, the market should be informed on the third quarter results and the outlook for the year. By mid-October we discussed the third quarter results and approved the issue of the subordinated convertible bond on Wednesday 19 October. It was decided to move the third quarter trading update forward to the same date. The approval of the final conditions of the placement, such as coupon rate and conversion premium, was delegated to a committee of our board.

In the regular meeting at the end of October, we spent considerable time on HSSE and we were updated on the planned changes in the organisation and on (potential) divestments. We also looked back at the successful placement of the convertible bond and we evaluated our working visit of September. We had an extensive discussion on market opportunities and compliance challenges in Africa and concluded that particularly in the longer-term Africa seems a promising market for Fugro, with in the short term a focus on larger investment projects for clients from the private sector.

In December we discussed the preliminary annual budget and the operational plan for 2017, which had been prepared by management according to the new approach of an extended 'rolling forecast'. It was concluded that some additional work needed to be done with the final decision to be taken in an extra scheduled meeting in January 2017. We took note of the fact that it had not been possible to close the sale of the Asian Pacific part of the subsea activities. We had an in-depth discussion on Seabed Geosolutions based on input from its CEO. With the new corporate human resources director we discussed his first impressions and his plans to further professionalise the HR function in Fugro. We also received an update on IT and related topics. We took briefly note of the revised Dutch corporate governance code ('the Code') that was published on 8 December 2016 and agreed to come back on it in the course of 2017. In a closed meeting we had a preliminary discussion on the short-term incentive targets for the bonus 2017 and on the recommendation of the remuneration committee to adjust the current remuneration policy. We also approved the proposed grants of (conditional) options and conditional shares as per 31 December 2016.

### Supervisory Board committees

The Supervisory Board has three permanent committees from amongst its members: an audit committee, a nomination committee and a remuneration committee, to which certain tasks are assigned. The function of the committees is to assist the Supervisory Board and to prepare the decision-making. The chairman of each committee reports the main considerations, findings and recommendations to the full Supervisory Board.

#### Audit committee

The members of the audit committee are Mr. Maarten Schönfeld (chairman), Mrs. Petri Hofsté and Mr. Douglas Wall. Collectively the members possess the required experience and financial expertise. Mr. Schönfeld acts as financial expert within the meaning of the Code.

The audit committee met six times in 2016. All meetings were attended by the CFO, the head of internal audit and the external auditor. In the meetings in which the annual results and half-year results were discussed, also the CEO was present. The former external auditor (KPMG) attended the relevant meetings with respect to the financial year 2015. The chairman of the audit committee had regular contact with the CFO to discuss financial performance, risks and any other matters.

Two times the chairman had a closed meeting with the head of internal audit and once a meeting was held with the audit committee and the full internal audit team. Among others, the performance and independence of internal audit and its members were discussed and evaluated. Conclusions were positive.

Recurring items on the audit committee agenda were, among others, the annual financial statements and the quarterly and half-yearly results, risk management and control, the internal audit plan, internal audit reviews, management letter and reports of the external auditor, pensions, taxation, insurance, IT (including cyber security and the phased roll out of a global IT system for commercial, finance, procurement and project management), treasury, developments in IFRS regulations, claims and disputes, compliance, bank covenants and financing, planning of the external auditor, follow-up group audit management letter, working capital, and the annual budget. Many of these topics were presented by the responsible managers.

In August we assessed the follow-up to the 2015 group audit management letter issued by the former external auditor as

part of the audit of the 2015 financial statements. It was concluded that the follow-up was adequate and that some actions were pending. In October an update was received from the current auditor with respect to materiality, scoping and planning, and an overview of the preliminary key audit matters. It was noted that materiality amounted to EUR 8 million (similar as in 2015) and that there were no significant changes in scoping. We noted with pleasure that the internal audit department was officially accredited by the IIA (Global Institute of Internal Auditors).

In December we discussed the results of a risk assessment workshop that was attended by the Board of Management and facilitated by internal audit and an external consultant.

Furthermore the functioning of the internal risk management and control system and specific risk areas, such as hedging and fluctuations in currency exchange rates were also discussed, as was the finance roadmap (improvement and strengthening of the financial processes and the financial organisation) and compliance/due diligence processes on agents. Regarding the finance roadmap, discussions were focused on the standardisation of management information systems and the results of pilot projects that were undertaken in 2016.

Considerable time was spent on bank covenant scenarios, (possible) impairments and other one-offs, the launch of a subordinated convertible bond and on capex.

Throughout the year the key audit matters as identified by the auditor were reviewed and discussed. The key audit matters for the year 2016 were: sensitivities and estimates with respect to the valuation of goodwill, vessels and other operational equipment, revenue recognition, project accounting and valuation with respect to unbilled receivables and trade receivables, availability of finance and compliance with debt covenant requirements, and estimates in respect to income tax positions.

The findings of the audit committee were always reported to all members of the Supervisory Board. In addition, the minutes of the meetings of the audit committee were on each occasion sent to all members of the Supervisory Board and of the Board of Management.

#### **Reappointment of external auditor**

At the AGM on 29 April 2016, Ernst & Young Accountants LLP (EY) was reappointed as external auditor to audit the financial statements for 2017. At the upcoming AGM on

2 May 2017, it will be proposed to reappoint EY to audit the financial statements for 2018.

#### **Nomination committee**

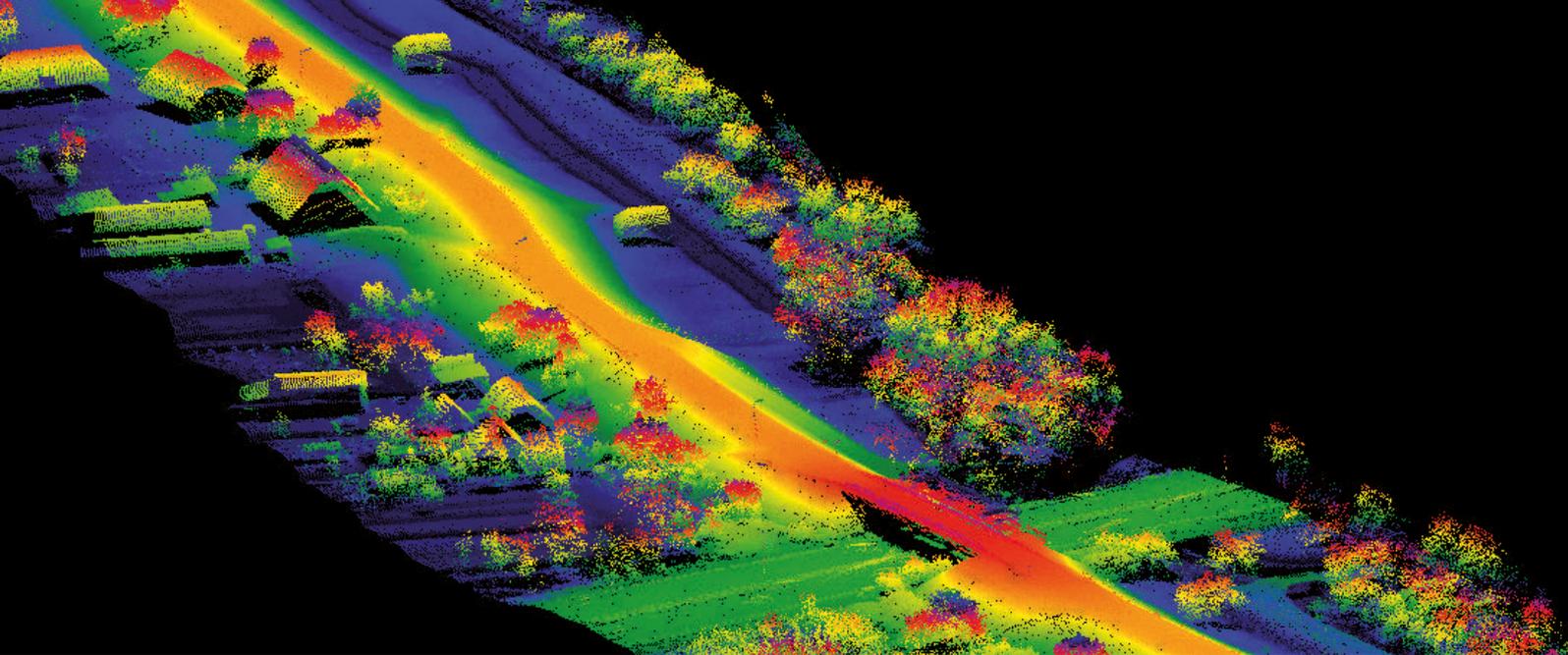
The members of the nomination committee are Mr. Harrie Noy (chairman), Mr. Antonio Campo and Mrs. Anja Montijn.

In 2016, the committee met two times, mostly with the CEO and the corporate human resources director being present. The committee also met informally on a number of occasions. The recurring topics that were discussed included, among others, global human resources management, succession planning, (re)appointments, annual assessment of the Board of Management and its individual members and the process for self-assessment of the Supervisory Board. The committee made recommendations to the Supervisory Board, which resulted in the appointment of Mr. Brice Bouffard to the Board of Management and the reappointment of Mr. Harrie Noy at the AGM on 29 April 2016. The committee also discussed the need of more exposure to the Supervisory Board of "high potentials" within Fugro.

#### **Remuneration committee**

The members of the remuneration committee are Mr. Harrie Noy, Mr. Antonio Campo and Mrs. Anja Montijn. During 2016, Mr. Noy acted as chairman ad-interim of the committee. He took over the chairmanship, following the resignation from the Supervisory Board of the former chairman of the committee. As of 1 January 2017 Mrs. Montijn became chair of the committee.

In 2016, the committee met two times, mostly with the CEO and the corporate human resources director being present. Discussed were, among others, the annual bonus with respect to 2015, the bonus targets for the Board of Management for 2016 and the grant and allocation of options and shares per 31 December 2016 under the long-term incentive plans. The committee also reviewed the remuneration policy with the assistance of an external consultant and concluded that remuneration levels are broadly in line with the market. Therefore, but also in view of the current market conditions, no proposal will be submitted to the AGM to increase remuneration levels. Nevertheless, taking into account the experience with the application of the remuneration policy in the last three years, the remuneration committee concluded that some adjustments should be made. For further details see 'Remuneration report' which is also available on Fugro's website.



*Laser point cloud of levee.*

### **Functioning of the Board of Management and of the Supervisory Board**

The Supervisory Board evaluated the performance of the Board of Management and its individual members with input from the CEO regarding the members of the Board of Management. Following this, the nomination committee had meetings with each member of the Board of Management in which feedback was given on personal performance. Also the personal targets that had been set for 2016 were evaluated and the functioning of the Board of Management as a team was discussed. The discussions were good and open minded. The conclusions were discussed in a closed meeting of the Supervisory Board.

The Supervisory Board undertakes a board self-assessment on an annual basis. Once every three years we engage an external and independent consultant to assist in our self-assessment. As this was done for the last time in 2014, in February 2017, we performed our self-assessment with the support of an external firm, specialised in board evaluation. Based on a list of attention points, each Supervisory Board member as well as the members of the Board of Management and the Company Secretary, were interviewed by the external consultant. The outcome was reported and discussed, first in a closed meeting of the Supervisory Board and thereafter in a combined meeting with the Board of Management. The main conclusion of this process was that the Supervisory Board is operating well and that discussions are very open and constructive. Several suggestions were made for further improvement. These suggestions relate, among other things, to paying more attention to permanent education which includes contacts with senior staff and young high potentials, to the strategic HR agenda in order to focus more on management development and succession planning, to having more informal contacts with the members of the Board of

Management and other senior staff, and to making sure that sufficient time is spent to Fugro's long term strategy.

### **Profile and composition of the Supervisory Board**

The Supervisory Board has formulated a profile defining its size and composition, taking into account the nature of the company and its activities. The composition of the Supervisory Board and the combined diverse mix of knowledge, skills, experience and expertise should be such that it fits the profile and the strategy of the company. Diversity, including but not limited to gender, is an important consideration in the selection process for (re)appointment of Supervisory Directors. However, the first priority when considering vacancies is quality, expertise, experience, independence and nationality.

The Supervisory Board has set the number of members of which the Supervisory Board shall consist at this moment at six. In the AGM held on 29 April 2016, Mr. Harrie Noy, was reappointed for his second term. He continues to be the Chairman of our board. The Supervisory Board currently comprises six members: one American/Canadian, one Colombian and four Dutch (see page 80 for biographies). The current composition of the Supervisory Board (four men, two women) is in compliance with the requirement of at least 30% of each gender.

The Supervisory Board attaches great importance to the independence of its members. All members of the Supervisory Board qualify as independent in the meaning of the Code. They do not carry out any other functions that could jeopardise their independence. The Supervisory Board also complies with the best practise provision that its members do not hold more than five supervisory board positions at certain "large" (listed) companies or entities. Fugro does not grant any loans, advances, guarantees,

shares or options to its Supervisory Board members and their remuneration is not dependent on the results of Fugro. None of the Supervisory Board members holds shares or options on shares in Fugro nor held any shares or options in 2016. During 2016 no transactions involving conflicts of interest occurred for Supervisory Board members. The Supervisory Board's functioning is governed by terms of reference, which are available on Fugro's website.

At the end of the upcoming AGM on 2 May 2017, the first four-year term of the Vice-chairman, Mr. Maarten Schönfeld, will expire. The Supervisory Board decided to nominate Mr. Schönfeld for reappointment as member of the Supervisory Board.

For the current composition of the Supervisory Board, its committees, and information about its members, please refer to page 80 of this annual report.

#### **Composition of the Board of Management**

In the AGM held on 29 April 2016, Mr. Brice Bouffard was appointed to the Board of Management. With his extensive international experience in Fugro's business environment, strong operational, commercial and entrepreneurial management skills and broad experience in information technology, Mr. Bouffard is highly qualified to support the strategic development of Fugro. In the Board of Management he took up responsibility for the onshore geotechnical activities, later in 2016 complemented with the geospatial activities. As of 2017 he became responsible for the Land division.

At the end of the AGM on 2 May 2017, the four-year term of Mr. Steve Thomson will expire. It has been decided to reduce the size of the Board of Management, as a logical consequence of the reduction in the number of divisions. Mr. Thomson will therefore not be nominated for reappointment. Mr. Thomson joined Fugro in 2000 and we would like to thank him for his contributions to building and shaping Fugro and especially for his efforts in the last period regarding the subsea activities under extremely challenging market conditions. Mr. Thomson will pursue his career and interests outside Fugro.

The size and composition of the Board of Management and the combined experience and expertise should be such that it best fits the profile and strategy of the company. Gender diversity is an important consideration in the profile and selection process for new members of the Board of Management. The Supervisory Board took this seriously into

account with respect to the nomination of Mr. Bouffard and will do this again for future nominations. However, the first priority when considering vacancies is quality, expertise, experience and fit with the team. Unfortunately, not many women fill senior positions in the highly technical environment in which Fugro operates. Nevertheless, the company encourages the development of female talent, which has led to appointments in key management positions.

For the current composition of the Board of Management and information about its members, please refer to page 53 of this annual report.

#### **In conclusion**

We are fully aware that the challenging market circumstances that Fugro is already experiencing for the last three years, put a lot of pressure on everybody in Fugro. However, the measures taken to adjust the company to the changed market reality are bearing fruit and the new organisation implemented as of 2017 improves client focus and Fugro's ability to deliver integrated services offerings to customers. As a result, Fugro is now in a better position than at the beginning of 2016 and that is a great achievement. We want to thank the Board of Management and all employees for their contribution to this achievement.

Leidschendam, 23 February 2017

Harrie Noy, Chairman  
 Maarten Schönfeld, Vice-chairman  
 Antonio Campo  
 Petri Hofsté  
 Anja Montijn  
 Douglas Wall

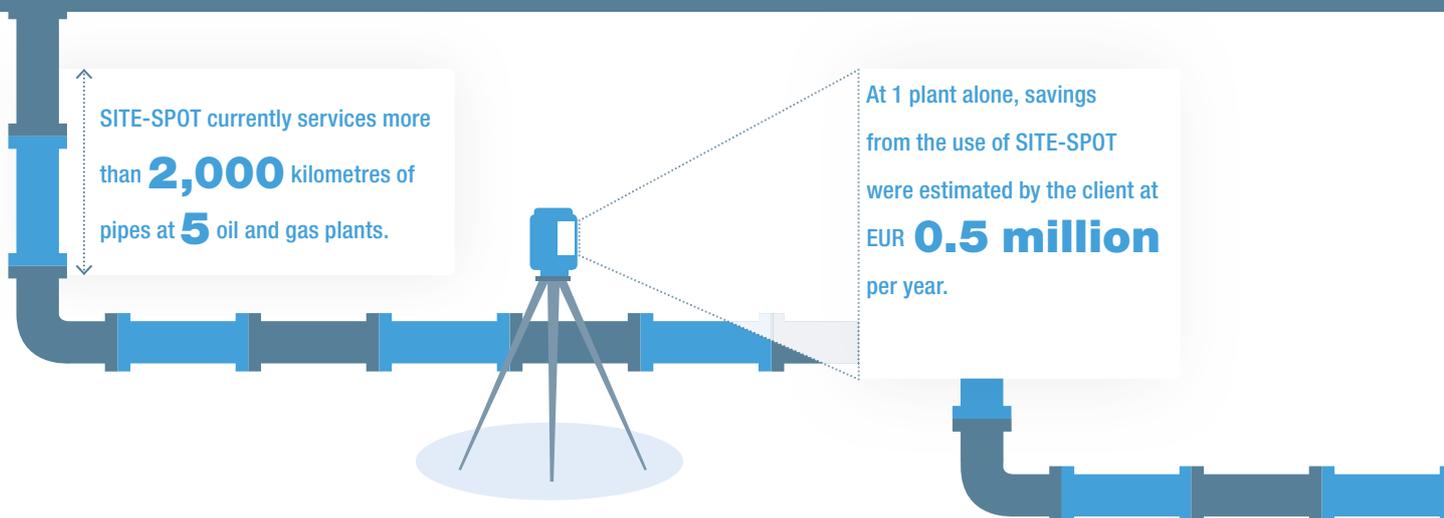
# Asset integrity in practice

## 3D model of client's infrastructure



Owners and operators of oil and gas processing facilities need up-to-date information on their assets in order to plan and execute maintenance programmes in a safe and efficient manner. This is particularly true of large, complex sites which have been built and expanded over time. In these cases diverse sources of information, such as engineering drawings, as-built surveys, maintenance history and so on, often co-exist in different departments, with varying degrees of accuracy.

Currently used by several oil companies in Europe and the Middle East, Fugro's SITE-SPOT solution delivers detailed three-dimensional information. Starting with state-of-the-art laser scanning and digital imaging techniques, Fugro builds a virtual model of the facilities' infrastructure works and assets. This 3D model is then populated with data from the clients' own asset management systems or from third-party sources. Through a web-based interface, operators and other stakeholders can access, visualise and analyse this information in a virtual environment from their desktop or mobile devices. This allows them to manage inspections, maintenance and turnarounds more efficiently, while reducing the need for in-field visits. This saves time, cost and reduces exposure to safety risks.



## REMUNERATION REPORT

This report has been prepared by the remuneration committee of the Supervisory Board. The main function of this committee is to prepare the decision-making of the Supervisory Board regarding the remuneration policy for the Board of Management and the application of this policy to the remuneration of the individual members of the Board of Management. The current members of the remuneration committee are Anja Montijn (chair), Antonio Campo and Harrie Noy. Mrs. Montijn was appointed chair as of 1 January 2017. During 2016, Mr. Noy acted as chairman ad interim.

This remuneration report contains:

- Overview of the current remuneration policy and remuneration design for the Board of Management.
- Remuneration of the Board of Management in 2016, based on application of the policy in 2016.
- Overview of term of appointment of the members of the Board of Management.
- Remuneration of the Supervisory Board.
- Adjustments in the remuneration policy for the Board of Management to be presented to the AGM on 2 May 2017.

More information on remuneration and on option and share ownership of members of the Board of Management is available in note 5.62.2 of the financial statements in this annual report, while note 5.62.4 contains more information on remuneration of the Supervisory Board members. The remuneration policy and this remuneration report are available on Fugro's website.

### Remuneration policy

The main objective of Fugro's remuneration policy is to attract, motivate and retain qualified management that is needed for a global company of the size and complexity of Fugro. The members of the Board of Management are rewarded accordingly. The remuneration policy aims at compensation in line with the median of the labour market reference group. Variable remuneration is an important part of the total package. The policy focuses on long-term value creation for Fugro and its stakeholders. The current remuneration policy was adopted by the AGM in 2014 and took effect retroactively as of 1 January 2014. The policy was slightly amended by the AGM in 2015. Within the framework of the policy, the remuneration for the Board of Management is determined by the Supervisory Board on the advice of the remuneration committee. The remuneration

policy will be reviewed once every three years to verify its market conformity, potentially leading to adjustments.

### Labour market reference group

In preparing the remuneration policy, the remuneration committee used external benchmark information to assess market comparability of the remuneration. The labour market reference group used in preparing the current remuneration policy consisted of 14 Dutch listed companies of comparable scope with highly international/global business activities. These are: Aalberts Industries, Aperam, Arcadis, ASMI, Boskalis, Brunel, Imtech, Nutreco, SBM Offshore, Ten Cate, TKH Group, TNT Express, Vopak and Wolters Kluwer. In addition, an international reference group has been used to assess market competitiveness within the sector. These reference groups have been reviewed and updated as basis for the proposed adjustment of the policy.

### Analyses

In the design of the remuneration policy and in determining the remuneration of the members of the Board of Management, the Supervisory Board has taken into account possible outcomes of the variable remuneration elements and how they may affect the remuneration of the members of the Board of Management. The level and structure of the remuneration are designed by taking into account these scenario analyses, internal pay differentials and the performance indicators relevant to the long-term objectives of the company, as included in the strategic agenda. The remuneration structure and elements do not encourage risk taking that is not in line with the risk profile of the company.

### Share ownership guidelines

The Supervisory Board encourages the Board of Management to hold shares in Fugro to emphasise their confidence in Fugro and its strategy. As of 2014 minimum share ownership guidelines are applicable. For the CEO this amounts to 250% of fixed base salary and for the other members of the Board of Management this amounts to 125% of fixed base salary. The build-up period equals 5 years.

### Adjustment of variable remuneration/claw-back/change-of-control

Within the principles of reasonableness and fairness, taking into account Dutch legal requirements and the Dutch corporate governance code ('the Code'), the Supervisory Board has the possibility and discretionary authority to: (a) adjust the value upwards or downwards of a variable

remuneration component if it would, in its view, result in an unreasonable and unfair outcome; and/or (b) take away (the benefits of) any variable remuneration in the event that such remuneration is directly or indirectly the result of incorrect financial information or incorrect assumptions. In addition, it is enacted that in case of a change-of-control event, a related increase in value of securities that have been granted to a member of the Board of Management as part of his/hers remuneration, will be deducted from the remuneration to be paid to the member of the Board of Management at the time of selling these securities or when his/hers board membership ends.

### Remuneration design

The remuneration of the Board of Management consists of the following four elements:

- Fixed base salary.
- Short-term incentive (STI), consisting of an annual cash bonus opportunity.
- Long-term incentive (LTI), consisting of conditional performance shares and conditional performance options.
- Pension and other benefits.

The principles of the remuneration policy are cascaded to the next senior management level.

#### Fixed base salary

Fixed base salaries of the members of the Board of Management are set in line with the median of the labour market reference group.

#### Short-term incentive

Each member of the Board of Management is eligible for an annual bonus. The bonus may vary from 0% to 100% of fixed base salary, with 67% being applicable when targets are achieved.

Targets are set yearly by the Supervisory Board, based on the budget and taking into account the strategy aspirations. Financial targets determine 75% of the bonus, non-financial or personal targets determine the remaining 25%. For each of the financial targets, a performance zone is set, with no bonus below the threshold level and the maximum bonus when performance exceeds the upper end of the performance zone. There will be no overshoot possibility for personal targets. The maximum multiplier for financial targets is therefore 1.67. The Supervisory Board ensures that the targets are challenging, realistic and consistent with Fugro's strategy.

The measures used and their relative weight are as follows:

Financial targets	Earnings per share (EPS)	35%
	EBIT margin	20%
	Working capital	20%
Non-financial (personal) targets		25%

The non-financial targets give the possibility to include health and safety, corporate social responsibility, personal development goals, etc. as targets into the bonus programme.

#### Long-term incentive

To strengthen the alignment with shareholder's interests, the long-term incentive plan includes the annual grant of conditional performance shares and conditional performance options. The conditional shares and options are performance related and vest after three years, depending on the achievement of predetermined criteria, which are focused on long-term value creation. Vesting is also subject to continuous employment.

The number of conditionally granted shares/options is set for a period of three years. This was done for the first time per 31 December 2014, based on the average share price of the Fugro shares in the last quarter of 2014. The principle being that the expected value equals 100% of the fixed base salary of the members of the Board of Management. The ratio of the number of shares versus options at grant is 1 to 2. The second grant took place per 31 December 2015, the third grant per 31 December 2016.

The number of shares/options that vest after three years is dependent on the achievement of certain targets. The maximum number of shares and options that can vest equals 175% of the conditionally granted number of shares and options (only in the case that maximum performance is achieved on all criteria). The criteria to be used for vesting and their relative weight are as follows:

Return on capital employed (ROCE)*	50%
Total shareholder return (TSR)*	50%

\* Refer to glossary for definitions.

The performance incentive zones for ROCE are shown in the table below.

	Below ROCE (weight: 50%) threshold	Threshold	Target	Maximum
Target	< 9%	9%	12%	14%
Vesting as % of conditional award	0%	25%	100%	175%

Return on capital employed (ROCE) is defined as net operating profit after tax (NOPAT) as a percentage of average total equity plus net interest bearing debt, in the last year of the three-year period. Total shareholder return (TSR) is defined as the share price increase, including reinvested dividends. TSR is measured over a three-year period based on a three-month average before grant and before vesting date. The relative position within the peer group determines the award level. The composition of the peer group is evaluated on a yearly basis, among others, in light of corporate events, but initially comprised of: Amec Foster Wheeler, Baker Hughes, Boskalis, Core Laboratories, Fluor, John Wood Group, Oceaneering, Schlumberger, Subsea 7, TechnipFMC and Transocean.

Total shareholder return ranking (weight: 50%)	Vesting (% of conditional award)
1	175%
2	150%
3	125%
4	100%
5	75%
6	50%
7	25%
8-12	0%

The conditional shares can become unconditional (i.e. may vest) three years after granting, based on the criteria mentioned above. Vested shares have a holding (lock-up) period of 2 years and may be partly sold only to cover taxes due as a result of the vesting. The holders of conditional shares are not entitled to shareholders' rights, including the right to dividends, during the period between granting and vesting. The option exercise price is equal to the closing price of the Fugro shares at Euronext Amsterdam on the last trading day of the year in which the grant is made. The vesting period is three years starting at the first day following the grant date. The option period is six years.

Performance shares and options are granted to the members of the Board of Management and other senior management in such a way that at any moment the maximum number of outstanding options and shares (including unconditional options granted to other employees) does not exceed the mandate of 7.5% of the issued ordinary share capital. In order to mitigate dilution, Fugro re-purchases shares to cover the options and shares granted, with the goal that effectively no new shares are issued when options are exercised and performance shares vest.

#### Pension and other benefits

The members of the Board of Management participate in the Fugro Dutch collective pension scheme. The contribution depends on age and is on Fugro's account. Due to new Dutch legislation that took effect as per 1 January 2015, tax deductible pension accruals are only possible for the part of salary up till EUR 100,000. The members of the Board of Management are compensated by a non-tax deductible, age dependent pension contribution, which allows building up pension out of net salary, such that the costs for Fugro are at a similar level as before. There are no specific early retirement arrangements in place.

Additional arrangements are commensurate with the position held and include expense and relocation allowances, a company car and health and accident insurance.

Fugro has not granted any loans, advances or guarantees to members of the Board of Management.

#### Remuneration Board of Management 2016

##### Fixed base salary

In 2016 (as well as in 2015), the fixed base salary of the members of the Board of Management was not increased.

##### Short-term incentive

###### 2015 (paid in 2016)

In February 2016, the Supervisory Board evaluated the performance of the company in 2015 in relation to the financial criteria. This led to the conclusion that no bonus was granted on the financial criteria. Based on input from the remuneration committee, the Supervisory Board also evaluated the performance of the members of the Board of Management in relation to the personal targets set for each of them. This resulted in achievements of 60 – 90% of the personal targets and bonus pay-outs of 10 – 15% of base salary. Taking responsibility for the overall 2015 net result of

the company, the CEO declined his bonus. The Director Subsea Services did the same due to the poor results of his division.

#### 2016 (to be paid in 2017)

Based on input from the remuneration committee, in February 2017, the Supervisory Board discussed the granting of bonuses to the members of the Board of Management. The Supervisory Board concluded – also based on advice of the Board of Management - that rewarding bonuses based on the performance of the company in relation to the financial criteria set for the year, would result in bonuses that would not be justifiable, given

the negative earnings per share and the still difficult market circumstances that the company is experiencing. In view of what has been achieved in 2016 despite these difficult circumstances, the Supervisory Board decided to grant a bonus based on achievement of 100% of the personal targets, leading to a bonus of 16.7% of base salary. In addition, 5% of base salary was added to reward the strong performance in working capital, resulting in a total bonus pay-out of 21.7% of base salary.

The following table provides an overview of the remuneration awarded to the members of the Board of Management who were in office in 2016 (excluding long-term incentive).

	P. van Riel		P.A.H. Verhagen		B.M.R. Bouffard <sup>1</sup>		M.R.F. Heine		S.J. Thomson	
(x EUR)	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Fixed base salary	600,000	600,000	450,000	450,000	339,312	n/a	450,000	412,500	450,000	450,000
Short-term incentive (STI) <sup>2</sup>	130,200	– <sup>3</sup>	97,650	67,500	73,630	n/a	97,650	60,000	97,650	– <sup>3</sup>
Pension compensation	95,135	95,550	75,708	69,930	40,674	n/a	58,545	215,238	89,908	87,885
Pension costs including disability insurance and related costs	41,315	36,129	42,362	39,367	34,057	n/a	27,335	1,274	34,268	11,249

<sup>1</sup> Mr. Bouffard joined Fugro as of 15 March 2016 and was appointed to the Board of Management as of 29 April 2016. The information shown above covers the period as of 15 March 2016.

<sup>2</sup> STI (bonus) 2015 was paid in 2016; STI (bonus) 2016 to be paid in 2017.

<sup>3</sup> Both Mr. Van Riel and Mr. Thomson declined their bonus. See above.

#### Long-term incentive

Until 2014, the long-term incentive plan consisted of the annual granting of unconditional options with a vesting period of three years and a lifetime of six years. As of 2014, the members of the Board of Management and most senior managers participate in Fugro's long-term incentive plan

(LTIP) consisting of the annual grant of conditional performance shares and conditional performance options.

The following table shows an overview of unconditional options granted to the members of the Board of Management that are still outstanding under the "old" unconditional option plan.

	P. van Riel	P.A.H. Verhagen <sup>1</sup>	B.M.R. Bouffard	M.R.F. Heine	S.J. Thomson
Options outstanding on 31 December 2015	220,900	30,000	n/a	48,500	142,700
Exercised in 2016	0	n/a	n/a	0	0
Expired with no value on 31 December 2016	(52,900)	n/a	n/a	(6,000)	(31,700)
Total number outstanding on 31 December 2016	168,000	30,000	n/a	42,500	111,000

<sup>1</sup> When Mr. Verhagen joined Fugro as of 1 January 2014 he received 30,000 unconditional options (exercise price EUR 43,32) as a one-off compensation for rights with his former employer that he lost as a result of him joining Fugro. This was approved by the EGM held on 27 November 2013.

As per 31 December 2016, a total of 60,000 conditional performance shares and 120,000 conditional performance options were granted to the members of the Board of Management, in line with the remuneration policy. The exercise price of the options is EUR 14.545 (the closing price of the shares at Euronext Amsterdam on the last trading day of 2016).

The following table shows an overview of the conditional performance shares and conditional performance options granted to the members of the Board of Management who were in office in 2016.

	P. van Riel	P.A.H. Verhagen	B.M.R. Bouffard	M.R.F. Heine	S.J. Thomson
<b>Shares</b>					
Conditional shares outstanding on 31 December 2015	30,000	22,500	n/a	19,750	22,500
Conditional shares granted as per 31 December 2016	15,000	11,250	11,250	11,250	11,250
Total number of conditional shares outstanding on 31 December 2016	45,000	33,750	11,250	31,000	33,750
<b>Options</b>					
Conditional options outstanding on 31 December 2015	60,000	45,000	n/a	39,500	45,000
Conditional options granted as per 31 December 2016	30,000	22,500	22,500	22,500	22,500
Total number of conditional options outstanding on 31 December 2016	90,000	67,500	22,500	62,000	67,500

As of 31 December 2016, the members of the Board of Management held the following number of shares in Fugro:

	P. van Riel	P.A.H. Verhagen	B.M.R. Bouffard	M.R.F. Heine	S.J. Thomson
Number of shares on 31 December 2016	189,376	6,000 15,000 <sup>1</sup>	2,000	3,600	13,733

<sup>1</sup> When Mr. Verhagen joined Fugro per 1 January 2014 he received 15,000 unconditional restricted shares as a one-off compensation for rights with his former employer. This was approved by the EGM held on 27 November 2013. These 15,000 shares vested on 31 December 2016 and have a holding (lock-up) period of two years but may be partly sold only to cover taxes due as a result of the vesting. Mr. Verhagen has sold 7,020 shares on 2 January 2017 to cover taxes he has to pay. For the remaining 7,880 shares the lock-up period of two years is applicable.

#### Other benefits

The additional benefits remained unchanged in 2016.

#### Term of appointment of members of Board of Management

The members of the Board of Management are each (re) appointed for a maximum period of four years. Their appointments expire as follows:

P. van Riel (CEO)	AGM 2018
P.A.H. Verhagen (CFO)	AGM 2018
S.J. Thomson	AGM 2017
M.R.F. Heine	AGM 2019
B.M.R. Bouffard	AGM 2020

Mr. Thomson will not be nominated for reappointment.



Installation of instruments for Osterberg Cell load test, Lantau, Hong Kong.

### Severance arrangement

The management service agreements with the members of the Board of Management do – in accordance with the Code – provide for a general severance compensation amounting to a maximum of one year's base salary which in principle is applicable in the event of termination or annulment of the agreement unless this is for cause. This severance compensation is also applicable when the termination is justified by such change of circumstances that the members of the Board of Management cannot reasonably be expected to continue the performance of their function/services as a statutory director of Fugro. This may be the case, for example, if Fugro is liquidated, is merged with or taken over by a third party, is subject to an important reorganisation or to a major change of policy.

### Remuneration Supervisory Board in 2016

The remuneration of the Supervisory Board was determined by the AGM in 2011 and comprises an annual fixed fee and an annual committee-membership fee. The remuneration is not dependent on the results of Fugro. Fugro has not granted any loans, advances, guarantees, shares or options

to its Supervisory Board members. None of the Supervisory Board members holds shares or options on shares in Fugro.

The fixed fee for the Chairman of the Supervisory Board is EUR 70,000 and EUR 55,000 for the vice-chairman. The other members of the Supervisory Board each receive a fixed fee of EUR 50,000. Audit committee, nomination committee and remuneration committee membership is awarded EUR 8,000 per member and EUR 10,000 for the chairman. In addition, Supervisory Board members that live or have business in the United States receive an attendance allowance of EUR 5,000 per physical meeting to compensate for the additional time commitment due to travelling when meetings are held outside the US.

No proposal to increase the annual remuneration for the members of the Supervisory Board will be submitted to the AGM in 2017.

The following table provides an overview of the remuneration awarded to the Supervisory Board in 2016.

(x EUR)	Fixed fee	Membership committee	Attendance allowance	Total
H.L.J. Noy (chairman)	70,000	10,000	–	80,000
J.C.M. Schönfeld (vice-chairman)	55,000	10,000	–	65,000
A.J. Campo	50,000	8,000	30,000	88,000
P.H.M. Hofsté	50,000	8,000	–	58,000
A.H. Montijn	50,000	8,000	–	58,000
D.J. Wall	50,000	8,000	30,000	88,000

### **Adjusted remuneration policy Board of Management as of 2017**

When the revised remuneration policy was introduced in 2014, it was mentioned that the remuneration policy would be reviewed once every three years to verify its market conformity.

The remuneration committee has done this at the end of 2016/beginning of 2017. With the assistance of an external consultant (Korn Ferry Hay Group), the remuneration committee updated the labour market reference group and benchmarked current remuneration of the Board of Management against this reference group. The committee also looked at the international reference group. The overall conclusion is that remuneration levels are broadly in line with the market. Therefore, but also in view of the current market conditions, no proposal will be submitted to the AGM to adjust remuneration levels. Nevertheless, taking into account the experience with the application of the remuneration policy in the last three years, the remuneration committee concluded that some adjustments should be made.

It concerns (in headlines):

- More flexibility in the financial performance criteria for the STI in order to be able to focus the criteria on the specific challenges in a given year. This can be done by the introduction of a broader list of performance measures, of which in a given year a selection will be made.
- The introduction of a third performance measure in the LTIP (besides the current measures TSR and ROCE) to reflect Fugro's longer term challenge to develop more business opportunities outside the oil and gas market.
- Shift in the LTIP from a mix of conditional performance shares and options to a programme only consisting of conditional performance shares.
- Grants under the LTIP will be shifted to an open period in the first half year, instead of as per 31 December.

In line with the recommendations of the remuneration committee, the Supervisory Board will present an adjusted remuneration policy for Fugro's Board of Management at the AGM on 2 May 2017. Full details will be available in the explanatory notes to the agenda for the AGM.

Leidschendam, 23 February 2017

On behalf of the remuneration committee  
Anja Montijn, Chair



Site characterisation  
in practice

# Hornsea offshore wind farm

Renewable energy is a growing market in a world that is moving towards an increased focus on lowering CO<sub>2</sub> emissions. Over the last ten years, Fugro has been very active in site characterisation for offshore wind farm developments in northwest Europe and more recently in United States and Taiwan waters.

Since 2014, Fugro has been involved in one of the largest seabed investigation campaigns in the history of the offshore wind. DONG Energy's Hornsea Project One, scheduled to go into operation by 2020, will be the world's first gigawatt scale, far from shore, wind farm. The park is located 120 kilometres off the Yorkshire coast.

Fugro provides integrated solutions; delivering site investigation data and related geoconsultancy advice on the foundation parameters. This information is vital to the costing and design of the construction and installation of the wind farm. During 2016 further advanced soil testing was performed and Fugro's geoconsultants provided design input to analyse the site's suitability to use suction bucket foundations.

With a capacity of **1.2** gigawatts, Hornsea Project One will be capable of providing environmentally friendly energy to over **1** million homes.

The wind farm will use **7** megawatt (MW) wind turbines. Each **190** metres tall – larger than the Gherkin building in London.

Hornsea wind turbine   'The Gherkin'



## **FINANCIAL STATEMENTS 2016**

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## 1 CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

For the year ended 31 December

(EUR x 1,000)	2016	2015
(5.26) Revenue	1,775,874	2,362,986
(5.30) Third party costs	(678,757)	(918,396)
Net revenue own services (revenue less third party costs)	1,097,117	1,444,590
(5.31) Other income	30,403	16,119
(5.32) Personnel expenses	(694,436)	(809,130)
(5.38) Depreciation	(172,366)	(212,486)
(5.39) Amortisation	(8,562)	(27,382)
(5.33) Impairments	(192,716)	(363,318)
(5.34) Other expenses	(278,118)	(298,321)
<b>Results from operating activities (EBIT)</b>	<b>(218,678)</b>	<b>(249,928)</b>
Finance income	8,880	17,636
Finance expenses	(79,810)	(64,570)
(5.35) Net finance income/(expenses)	(70,930)	(46,934)
(5.40) Share of profit/(loss) of equity-accounted investees (net of income tax)	(2,223)	7,810
<b>Profit/(loss) before income tax</b>	<b>(291,831)</b>	<b>(289,052)</b>
(5.36) Income tax gain/(expense)	(9,152)	(69,637)
<b>Profit/(loss) for the period</b>	<b>(300,983)</b>	<b>(358,689)</b>
<b>Attributable to:</b>		
Owners of the company (net result)	(308,934)	(372,522)
(5.49) Non-controlling interests	7,951	13,833
<b>Profit/(loss) for the period</b>	<b>(300,983)</b>	<b>(358,689)</b>
<b>Earnings per share from operations (attributable to owners of the company during the period)</b>		
(5.48) Basic and diluted earnings per share	(3.82)	(4.60)

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 1 CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (CONTINUED)

For the year ended 31 December

(EUR x 1,000)	2016	2015
Profit/(loss) for the period	(300,983)	(358,689)
<b>Other comprehensive income</b>		
<b>Items that will not be reclassified to profit or loss</b>		
(5.51) Defined benefit plan actuarial gains/(losses)	(14,145)	9,008
<b>Total items that will not be reclassified to profit or loss</b>	(14,145)	9,008
<b>Items that may be reclassified subsequently to profit or loss</b>		
(5.35) Foreign currency translation differences of foreign operations	26,935	118,736
(5.35) Foreign currency translation differences of equity-accounted investees	(1,425)	4,212
(5.35) Net change in fair value of hedge of net investment in foreign operations	5,079	(81,385)
(5.35) Net change in fair value of cash flow hedges transferred to profit or loss	288	477
(5.35) Net change in fair value of available-for-sale financial assets	34	37
(5.35) Net change in translation reserve transferred to profit or loss due to disposal	–	(8,286)
<b>Total items that may be reclassified subsequently to profit or loss</b>	30,911	33,791
<b>Total other comprehensive income for the period (net of tax)</b>	16,766	42,799
<b>Total comprehensive income/(loss) for the period</b>	(284,217)	(315,890)
<b>Attributable to:</b>		
Owners of the company	(295,447)	(329,397)
Non-controlling interests	11,230	13,507
<b>Total comprehensive income/(loss) for the period</b>	(284,217)	(315,890)

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 2 CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December

(EUR x 1,000)	2016	2015
<b>Assets</b>		
(5.38) Property, plant and equipment	805,992	986,585
(5.39) Intangible assets	393,497	466,627
(5.40) Investments in equity-accounted investees	20,068	29,577
(5.41) Other investments	33,750	98,424
(5.42) Deferred tax assets	80,602	88,386
<b>Total non-current assets</b>	<b>1,333,909</b>	<b>1,669,599</b>
(5.43) Inventories	22,102	29,557
(5.44) Trade and other receivables	546,226	755,902
(5.37) Current tax assets	22,743	20,101
(5.45) Cash and cash equivalents	248,488	304,993
(5.46) Assets classified as held for sale	981	61,032
<b>Total current assets</b>	<b>840,540</b>	<b>1,171,585</b>
<b>Total assets</b>	<b>2,174,449</b>	<b>2,841,184</b>

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 2 CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

As at 31 December

(EUR x 1,000)	2016	2015
<b>Equity</b>		
Share capital	4,228	4,228
Share premium	431,227	431,227
Other Reserves	(349,060)	(402,372)
Retained earnings	1,157,398	1,537,094
Unappropriated result	(308,934)	(372,522)
(5.47) <b>Total equity attributable to owners of the company</b>	934,859	1,197,655
(5.49) Non-controlling interests	55,250	36,702
(5.47) <b>Total equity</b>	990,109	1,234,357
<b>Liabilities</b>		
(5.50) Loans and borrowings	573,503	728,082
(5.51) Employee benefits	95,477	91,402
(5.52) Provisions for other liabilities and charges	26,845	61,827
(5.42) Deferred tax liabilities	1,650	5,751
<b>Total non-current liabilities</b>	697,475	887,062
(5.45) Bank overdraft	4,043	21,908
(5.50) Loans and borrowings	22,006	89,722
(5.53) Trade and other payables	375,377	503,213
(5.52) Provisions for other liabilities and charges	14,810	14,903
Other taxes and social security charges	36,710	42,843
(5.37) Current tax liabilities	33,919	47,176
<b>Total current liabilities</b>	486,865	719,765
<b>Total liabilities</b>	1,184,340	1,606,827
<b>Total equity and liabilities</b>	2,174,449	2,841,184

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 3 CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(EUR x 1,000)

2016

	Share capital	Share premium	Translation reserve	Hedging reserve	Reserve for own shares	Equity component of convertible bonds	Retained earnings	Unappropriated result	Total	Non-controlling interest	Total equity
<b>Balance at 1 January 2016</b>	4,228	431,227	(48,023)	(391)	(353,958)	–	1,537,094	(372,522)	1,197,655	36,702	1,234,357
<b>Total comprehensive income for the period:</b>											
Profit or (loss)								(308,934)	(308,934)	7,951	(300,983)
<b>Other comprehensive income</b>											
(5.35) Foreign currency translation differences of foreign operations			23,654						23,654	3,281	26,935
(5.35) Foreign currency translation differences of equity-accounted investees			(1,425)						(1,425)		(1,425)
(5.35) Net change in fair value of hedge of net investment in foreign operations			5,079						5,079		5,079
(5.51) Defined benefit plan actuarial gains/(losses)							(14,143)		(14,143)	(2)	(14,145)
(5.35) Net change in fair value of cash flow hedges transferred to profit or loss				288					288		288
(5.35) Net change in fair value of available-for-sale financial assets							34		34		34
<b>Total other comprehensive income/(loss), (net of tax)</b>			27,308	288			(14,109)		13,487	3,279	16,766
<b>Total comprehensive income/(loss) for the period</b>			27,308	288			(14,109)		(295,447)	11,230	(284,217)
<b>Transactions with owners recognised directly in equity</b>											
(5.32) Share-based payments							6,935		6,935		6,935
(5.47) Issuance of subordinated unsecured convertible bonds, net of tax						25,716			25,716		25,716
Share options exercised											
Addition to/(reduction of) reserves							(372,522)	372,522	–		–
(5.50) Contributions by shareholders										17,290	17,290
(5.49) Dividends to shareholders										(9,972)	(9,972)
<b>Total contributions by and distribution to owners</b>						25,716	(365,587)	372,522	32,651	7,318	39,969
<b>Balance at 31 December 2016</b>	4,228	431,227	(20,715)	(103)	(353,958)	25,716	1,157,398	(308,934)	934,859	55,250	990,109

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 3 CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

(EUR x 1,000)

2015

	Share capital	Share premium	Translation reserve	Hedging reserve	Reserve for own shares	Retained earnings	Unappropriated result	Total	Non-controlling interest	Total equity
<b>Balance at 1 January 2015</b>	4,228	431,227	(81,638)	(868)	(353,958)	1,977,645	(458,870)	1,517,766	(5,348)	1,512,418
<b>Total comprehensive income for the period:</b>										
Profit or (loss)							(372,522)	(372,522)	13,833	(358,689)
<b>Other comprehensive income</b>										
(5.35) Foreign currency translation differences of foreign operations			119,074					119,074	(338)	118,736
(5.35) Foreign currency translation differences of equity-accounted investees			4,212					4,212		4,212
(5.35) Net change in fair value of hedge of net investment in foreign operations			(81,385)					(81,385)		(81,385)
(5.51) Defined benefit plan actuarial gains/(losses)						8,996		8,996	12	9,008
(5.35) Net change in fair value of cash flow hedges transferred to profit or loss				477				477		477
(5.35) Net change in fair value of available-for-sale financial assets						37		37		37
(5.35) Net change in translation reserve transferred to profit or loss due to disposal			(8,286)					(8,286)		(8,286)
<b>Total other comprehensive income/(loss), (net of tax)</b>			33,615	477		9,033		43,125	(326)	42,799
<b>Total comprehensive income/(loss) for the period</b>			33,615	477		9,033	(372,522)	(329,397)	13,507	(315,890)
<b>Transactions with owners recognised directly in equity</b>										
(5.32) Share-based payments						9,286		9,286		9,286
Share options exercised										
Addition to/(reduction of) reserves						(458,870)	458,870	–		–
(5.50) Contributions by shareholders									37,481	37,481
(5.49) Dividends to shareholders									(8,938)	(8,938)
<b>Total contributions by and distribution to owners</b>						(449,584)	458,870	9,286	28,543	37,829
<b>Balance at 31 December 2015</b>	4,228	431,227	(48,023)	(391)	(353,958)	1,537,094	(372,522)	1,197,655	36,702	1,234,357

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 4 CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December

(EUR x 1,000)	2016	2015
<b>Cash flows from operating activities</b>		
Profit/(loss) for the period	(300,983)	(358,689)
<b>Adjustments for:</b>		
(5.38/5.39) Depreciation and amortisation	180,928	239,868
(5.33) Impairments	192,716	363,318
(5.41) Write-off long-term receivables	12,042	–
(5.40) Share of (profit)/loss of equity-accounted investees (net of income tax)	2,223	(7,810)
(5.31/5.34) Gain on sale of property, plant and equipment	(5,061)	(7,527)
(5.32) Equity-settled share-based payments	6,935	9,286
Net change in translation reserve transferred to profit or loss due to disposal	–	(8,286)
Change in provisions for other liabilities and charges and employee benefits	(35,497)	(68,317)
(5.36) Income tax expense/(gain)	9,152	69,637
Income tax paid	(30,646)	(29,978)
(5.35) Finance income and expense	70,930	46,934
Interest paid	(74,044)	(66,225)
<b>Operating cash flows before changes in working capital</b>	28,695	182,211
Change in inventories	7,606	5,635
Change in trade and other receivables	195,121	216,700
Change in trade and other payables	(100,662)	(79,616)
<b>Changes in working capital</b>	102,065	142,719
<b>Net cash generated from operating activities</b>	130,760	324,930
<b>Cash flows from investing activities</b>		
(5.41) Proceeds from sale of interests in business, net of cash disposed of	62,510	–
Proceeds from sale of multi-client data libraries, net of cash disposed of	–	103,569
(5.29) Net proceeds from sale & leaseback transaction of property, plant and equipment	48,631	48,631
(5.39) Acquisition of intangible assets	(6,052)	(10,408)
(5.39) Internally developed intangible assets	(5,060)	(23,567)
(5.38) Capital expenditures on property, plant and equipment	(68,643)	(160,472)
Proceeds from sale of property, plant and equipment	7,224	20,443
Acquisition of businesses, net of cash acquired	–	(9,889)
(5.35) Interest received	11,126	11,001
(5.40/5.41) Dividends received	5,582	10,481
<b>Net cash (used in) / from investing activities</b>	55,318	(10,211)
<b>Cash flows from operating activities after investing activities</b>	186,078	314,719

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 4 CONSOLIDATED STATEMENT OF CASH FLOWS (CONTINUED)

For the year ended 31 December

(EUR x 1,000)	2016	2015
<b>Cash flows from financing activities</b>		
Proceeds from issue of long-term loans	59,986	76,237
Proceeds from issue of subordinated unsecured convertible bonds	190,000	–
(5.50) Transaction costs relating to loans and borrowings	(21,490)	(12,713)
(5.50) Repayment of borrowings	(439,671)	(250,748)
(5.49) Dividends paid	(9,972)	(8,938)
Payments of finance lease liability	(6,802)	–
<b>Net cash from / (used in) financing activities</b>	<b>(227,949)</b>	<b>(196,162)</b>
<b>Change in cash flows from operations</b>	<b>(41,871)</b>	<b>118,557</b>
Net increase in cash and cash equivalents	(41,871)	118,557
Cash and cash equivalents at 1 January	283,085	153,078
Effect of exchange rate fluctuations on cash held	3,231	11,450
<b>Cash and cash equivalents at 31 December</b>	<b>244,445</b>	<b>283,085</b>
<b>Presentation in the statement of financial position</b>		
(5.45) Cash and cash equivalents	248,488	304,993
(5.45) Bank overdraft	(4,043)	(21,908)
	244,445	283,085

The notes on pages 108 to 179 are an integral part of these consolidated financial statements.

## 5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

### 5.1 General

Fugro N.V., hereinafter to be referred to as 'Fugro' or 'the company', has its corporate seat in The Netherlands. The address of the company's principal office is Veurse Achterweg 10, 2264 SG, Leidschendam, the Netherlands. The consolidated financial statements of Fugro as at and for the year ended 31 December 2016 include Fugro and its subsidiaries (together referred to as the 'Group') and the Group's interests in equity-accounted investees. An overview of the main subsidiaries is included in chapter 6.

### 5.2 Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Netherlands Civil Code.

On 23 February 2017 the Board of Management and Supervisory Board authorised the financial statements for issue. Publication will take place on 3 March 2017.

The financial statements will be submitted for adoption to the Annual General Meeting on 2 May 2017. The official language for the financial statements is the English language as approved by the Annual General Meeting on 10 May 2011.

### 5.3 Basis of preparation

#### 5.3.1 Functional and presentation currency

The financial statements are presented in EUR x 1,000, unless stated otherwise. The Euro is the functional and presentation currency of the company.

#### 5.3.2 Basis of measurement

The financial statements have been prepared on the basis of historical cost, except for that the following assets and liabilities are stated at their fair value: derivative financial instruments, available-for-sale financial assets and plan assets associated with defined benefit plans.

#### 5.3.3 Change in accounting policies resulting from changes in IFRS

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements. The company accounts for any change in accounting principle retrospectively. There are no new standards, amendments and/or interpretations that are required to be adopted as from 1 January 2016, which have a material impact on the Group.

### 5.3.4 Use of estimates and judgements

The preparation of the consolidated financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ materially from these estimates.

The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the result of which forms the basis of making the judgements about the carrying values of the assets and liabilities that are not readily apparent from other sources. The estimates and the underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised, if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Key sources of estimation uncertainty and references to the notes which include information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in note 5.64.

### 5.3.5 New standards and interpretations

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2016 reporting periods and have not been early adopted by the Group. The impact of these new standards have been assessed and set out in the table below. There are no other IFRSs or IFRIC interpretations that are not yet effective that would be expected to have a material impact on the Group.

Nature of change	Impact	Mandatory application date
<b>IFRS 9 Financial Instruments</b>		
<p>IFRS 9 addresses the classification, measurement and derecognition of financial assets and financial liabilities and introduces new rules for hedge accounting.</p> <p>In July 2014, the IASB made further changes to the classification and measurement rules and also introduced a new impairment model. These latest amendments now complete the new financial instruments standard.</p>	<p>IFRS 9 addresses the classification, measurement and derecognition of financial assets and financial liabilities and introduces new rules for hedge accounting. For impairment of financial and contract assets IFRS 9 replaces the 'incurred loss' model in IAS 39 with a forward-looking 'expected credit loss' model. The impact of this change is expected not to be significant. The Group applies hedge accounting only in limited number of circumstances. At this stage, based on initial assessment the Group does not expect the impact of the adoption of IFRS 9 on its consolidated financial statement to be significant.</p>	<p>Must be applied for financial years commencing on or after 1 January 2018 (endorsed by EU).</p>
<b>IFRS 15 Revenue from Contracts with Customers</b>		
<p>The IASB has issued a new standard for the recognition of revenue. This will replace IAS 18 which covers contracts for goods and services and IAS 11 which covers construction contracts. The new standard is based on the principle that revenue is recognised when control of a good or service transfers to a customer – so the notion of control replaces the existing notion of risks and rewards. The standard permits a modified retrospective approach for the adoption. Under this approach entities will recognise transitional adjustments in retained earnings on the date of initial application (eg 1 January 2018), ie without restating the comparative period. They will only need to apply the new rules to contracts that are not completed as of the date of initial application.</p>	<p>Management is currently assessing the effects of applying the new standard on the group's financial statements and has identified the following areas that are likely to be affected.</p> <p>At this stage, the Group expects limited impact from the new requirement.</p> <p>As revenue is currently recognised in profit or loss in proportion to the percentage of completion of the transaction at the reporting date. Based on the outcome of initial assessment performed, it is expected that this treatment can be continued. Fugro expects no significant impact on its consolidated financial statements from the adoption of IFRS 15.</p>	<p>Mandatory for financial years commencing on or after 1 January 2018 (endorsed by EU).</p>
<b>IFRS 16 Leasing</b>		
<p>The IASB has issued a new standard for the leasing. This will replace IAS 17 which covers leasing. The new standard require companies to bring leases onto the balance sheet.</p>	<p>This new standard will highly impact all leases of the Group that are currently accounted for as operational leases. These leases are currently incurred as expenses in the P&amp;L. The new standard will result in the Group having to account for (off-balance) operational leases on-balance by recognising liabilities and assets related to the leased properties. In addition, the nature of the expenses related to those leases will now change as IFRS 16 replaces the straight-line operating lease expense with a depreciation charge for right-of-use assets and interest expense on lease liabilities. Also refer to note 5.60.</p>	<p>Mandatory for financial years commencing on or after 1 January 2019 (subject to EU endorsement).</p>

**Summary of significant accounting policies**

The accounting policies set out below have been applied consistently by all subsidiaries and equity-accounted investees to all periods presented in these consolidated financial statements.

**5.4 Basis of consolidation****5.4.1 Accounting for business combinations**

Business combinations are accounted for using the acquisition method as at the acquisition date, which is the date on which control is transferred to the Group.

In assessing control, the Group takes into consideration potential voting rights that currently are exercisable. Non-controlling interest in the acquiree are measured at the proportionate share of the acquiree's identifiable net assets.

**5.4.2 Subsidiaries**

Subsidiaries are all entities (including structured entities) over which the group has control. The group controls an entity when the group is exposed to, 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. Subsidiaries are fully consolidated from the date on which control is transferred to the group. They are deconsolidated from the date that control ceases.

Any surplus or deficit arising on the loss of control is recognised in profit or loss. If the Group retains any interest in the previous subsidiary, it is accounted for as an equity-accounted investee or as an available-for-sale financial asset depending on the level of influence retained.

**5.4.3 Equity-accounted investees**

The Group's interests in equity-accounted investees comprise 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, rather than rights to its assets and obligations for its liabilities. Refer to note 5.10 or the accounting policy for equity-accounted investees.

**5.4.4 Other investments**

Other investments are those entities in whose activities the Group holds a non-controlling interest and has no control or significant influence. Refer to note 5.11 for the accounting policy for other investments.

**5.4.5 Transactions eliminated on consolidation**

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no objective evidence of impairment conditions.

**5.5 Foreign currency****5.5.1 Foreign currency transactions and translation**

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates prevailing at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the respective functional currency at the foreign exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortised cost in the functional currency at the beginning of the year, adjusted for effective interest and payments during the year, and the amortised cost in foreign currency translated at the exchange rate at the end of the year.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are translated to the functional currency at foreign exchange rates effective at the date the fair value was determined. Foreign currency differences arising on retranslation are recognised in profit or loss, except for differences arising on the retranslation of available-for-sale financial assets and equity-accounted investees, a financial liability designated as a hedge of the net investment in a foreign operation that is effective, or qualifying cash flow hedges, which are recognised in other comprehensive income. A summary of the main currency exchange rates applied in the year under review and the preceding years reads as follows:

	USD at year-end	USD average	GBP at year-end	GBP average	NOK at year-end	NOK average	AUD at year-end	AUD average
2016	0.950	0.910	1.160	1.220	0.110	0.108	0.690	0.670
2015	0.920	0.910	1.360	1.380	0.104	0.111	0.670	0.680

### 5.5.2 Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated to EUR at foreign exchange rates effective at the reporting date. The income and expenses of foreign operations are translated to EUR at exchange rates effective at the dates of the transactions.

Foreign currency differences are recognised in other comprehensive income, and presented in the foreign currency translation reserve for foreign operations (Translation reserve) in equity. However, if the operation is a non-wholly-owned subsidiary, then the relevant proportionate share of the translation difference is allocated to the non-controlling interests. When a foreign operation is disposed of, such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal. When the Group disposes of only part of its interest in a subsidiary that includes a foreign operation while retaining control, the relevant proportion of the cumulative amount in the translation reserve is reattributed to non-controlling interests. If the Group disposes of only part of its investment in an equity-accounted investee that includes a foreign operation while retaining significant influence or joint control, the relevant proportion of the cumulative amount in the translation reserve is reclassified to profit or loss.

If the settlement of a monetary item, receivable from or payable to a foreign operation, is neither planned nor likely in the foreseeable future, foreign exchange gains and losses arising from such monetary items are considered to form part of a net investment in a foreign operation and are recognised in other comprehensive income, and are presented in the Translation reserve in equity.

### 5.5.3 Hedge of a net investment in foreign operations

The Group applies hedge accounting to foreign currency differences arising between the functional currency of the foreign operation and the functional currency of Fugro (EUR), regardless of whether the net investment is held directly or through an intermediate parent.

Foreign currency differences arising on the (re-)translation of a financial liability designated as a hedge of a net investment in a foreign operation are recognised in other comprehensive income to the extent that the hedge is effective, and are presented within equity in the Translation reserve. To the extent that the hedge is ineffective, such differences are recognised in profit or loss. When the hedged net investment is disposed of, the relevant amount in the Translation reserve is transferred to profit or loss as part of the profit or loss upon disposal.

### 5.6 Determination of fair values

A number of the Group's accounting policies and disclosures requires the determination of fair value, for both financial and non-financial assets and liabilities. Fair values have been determined for measurement and/or disclosure purposes based on the following methods. When applicable, additional information on the determination of fair values is disclosed in the notes of the specific asset or liability.

#### 5.6.1 Equity and debt securities

The fair value of equity and debt securities is determined by reference to their quoted closing bid price at the reporting date, or if unquoted, determined using a valuation technique. Valuation techniques employed include market multiples and discounted cash flow analysis using expected future cash flows and a market-related discount rate.

#### 5.6.2 Trade and other receivables

The fair value of trade and other receivables is estimated at the present value of future cash flows, discounted at the market rate of interest at the reporting date. This fair value is determined for disclosure purposes.

#### 5.6.3 Forward exchange contracts and interest rate swaps

The fair value of forward exchange contracts is based on their quoted market price, if available.

#### 5.6.4 Other non-derivative financial liabilities

Fair value, which is determined for disclosure purposes, is calculated based on the present value of future principal and interest cash flows, discounted at the market rate of interest

at the reporting date, taking into consideration the Group's own non-performance risk. For financial leases the market rate of interest is either determined by reference to similar lease agreements or based on the implicit discount rate if determinable.

#### 5.6.5 Share-based payment transactions

Fugro operates equity-settled share-based payment plans. For members of the Board of Management and other selected senior employees, a long-term incentive plan is applicable since 2014. Under this plan, a combination of performance options and performance shares is granted and awarded on an annual basis subject to continued services. In addition, Fugro operates a share option scheme with only service conditions for other eligible and selected employees.

The fair value for shares awarded and options granted (conditional options) subject to a market condition is determined applying a Monte Carlo simulation model. The fair value of the options granted is determined using the Black and Scholes option pricing formula for the performance options not being subject to market conditions (conditional performance options with non-market service conditions) or based on the binomial model (options with only service conditions).

The grant date fair values of the employee share incentives are measured, taking into account the terms and conditions upon which the options and shares were granted and awarded. Relevant measurement inputs include the share price on the measurement date (year-end date of the year of grant), the exercise price of the instrument, expected volatility (based on the historical volatility of Fugro's (certificates of) shares, particularly over the historical period that commensurate with the expected term), expected term of the instruments (based on historical experience and general option holder exercise behaviour), expected dividends and the risk-free interest rate (based on government bonds). Service and non-market performance conditions attached to the share-based payment transactions are not taken into account in determining the grant date fair value.

### 5.7 Financial instruments

#### 5.7.1 Non-derivative financial assets

The Group initially recognises loans and receivables and deposits on the date that they are originated. All other financial assets (including assets designated at fair value through profit or loss) are recognised initially on the trade

date, which is the date that the Group becomes a party to the contractual provisions of the instrument.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognised as a separate asset or liability.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

The Group classifies non-derivative financial assets into the following categories: financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets. Reference is made to accounting policy (5.11) and note (5.41).

Loans and receivables comprise cash and cash equivalents and trade and other receivables. Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less.

#### 5.7.2 Non-derivative financial liabilities

The Group initially recognises debt securities issued and subordinated liabilities on the date that they are originated. All other financial liabilities are recognised initially on the trade date, which is the date that the Group becomes a party to the contractual provisions of the instrument. The Group derecognises a financial liability when its contractual obligations are discharged, cancelled or expire.

Financial liabilities and assets are offset and the net amount presented in the statement of financial position when, and only when, the Group has a legal right to offset the amounts and intends either to settle on a net basis or to realise the asset and settle the liability simultaneously.

Other financial liabilities are initially recognised at fair value net off any directly attributable transaction costs. Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest method.

The fair value of the liability portion of a convertible bond is initially determined using a market interest rate for an equivalent non-convertible bond at the issue date.

This amount is recorded as a liability on an amortised cost basis until extinguished on conversion or maturity of the bonds. The remainder of the proceeds is allocated to the conversion option. This is recognised and included in shareholders' equity, net of income tax effects and is not subsequently remeasured.

Other financial liabilities comprise loans and borrowings, bank overdrafts, and trade and other payables. Reference is made to note (5.45) Cash and cash equivalents and note (5.53) Trade and other payables.

### 5.7.3 Derivative financial instruments, including hedge accounting

#### 5.7.3.1 Other derivative financial instruments

The Group holds derivative financial instruments to hedge its exposure to foreign exchange risks arising from operational and financing activities. In accordance with its treasury policy, the Group does not hold or issue derivative financial instruments for trading purposes.

Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative are not closely related, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, and the combined instrument is not measured at fair value through profit or loss.

On initial designation as the hedging instrument, the Group formally documents the relationship between the hedging instrument and hedged item, including the risk management objectives and strategy in undertaking the hedge transaction and the hedged risk, together with the methods that will be used to assess the effectiveness of the hedging relationship. The Group makes an assessment, both at the inception of the hedge relationship as well as on an ongoing basis, of whether the hedging instruments are expected to be 'highly effective' in offsetting the changes in the fair value or cash flows of the respective hedged items attributable to the hedged risk, and whether the actual results of each hedge are within a range of 80-125%.

Derivatives are recognised initially at fair value and directly attributable transaction costs are recognised in profit or loss as incurred. Subsequent to initial recognition, derivatives are

measured at fair value, and changes therein are accounted for as described below.

#### 5.7.3.2 Net investment hedges

Gains and losses resulting from the settlement of transactions in a foreign currency, as well as from the translation of monetary assets and liabilities denominated in foreign currencies at year end are generally recognised in profit or loss. They are deferred in equity if they relate to qualifying net investment hedges to the extent the hedging relationship is effective. Gains and losses accumulated in equity are reclassified to profit or loss when the foreign operation is partially disposed of or sold.

The Group documents at the inception of the hedging transaction the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions have been and will continue to be highly effective in offsetting changes in fair values or cash flows of hedged items.

#### 5.7.3.3 Other non-trading derivatives

When a derivative financial instrument is not designated in a hedge relationship that qualifies for hedge accounting, all changes in its fair value are recognised immediately in profit or loss.

## 5.8 Property, plant and equipment

### 5.8.1 Owned assets

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses (refer to accounting policy (5.16)). The cost of property, plant and equipment includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the costs of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located and capitalised borrowing costs. Cost also may include transfers from equity of any gain or loss on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment. Purchased software that is integral to the functionality of the related equipment is capitalised as part of that equipment.

Property, plant and equipment that is being constructed or developed for future use is classified as property, plant and equipment under construction and stated at cost until construction or development is complete, at which time it is reclassified as land and buildings, plant and equipment, vessels or other property, plant and equipment. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment. The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of the property, plant and equipment, and is recognised net within 'other income' or 'other expenses' in profit or loss.

### 5.8.2 Leased assets

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. Upon initial recognition the leased asset is measured at an amount equal to the lower of its fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the asset is accounted for in accordance with the accounting policy applicable to that asset. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership and are not recognised in the Group's statement of financial position. Lease payments are accounted for as described in accounting policy 5.23.2. If a sale and leaseback transaction results in an operating lease, and it is clear that the transaction is established at fair value, any profit or loss is recognised immediately.

### 5.8.3 Subsequent cost

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

### 5.8.4 Depreciation

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately. Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives

of each component of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of the lease term. Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate. The estimated useful lives for the current and comparative period of significant items of property, plant and equipment are as follows:

Category	Years
<b>Land and buildings</b>	
Land	Infinite
Buildings	20 – 40
Fixtures and fittings	5 – 10
<b>Vessels</b>	
Vessels and jack-ups	2 – 25
<b>Plant and equipment</b>	
Plant and equipment	4 – 10
Survey equipment	3 – 5
Ocean bottom nodes	5 – 6
Aircraft	5 – 10
AUVs and ROVs	6 – 7
Computers and office equipment	3 – 4
Transport equipment	4
<b>Other</b>	
Dry-docking	3 – 5
Used plant and machinery	1 – 2

## 5.9 Intangible assets

### 5.9.1 Goodwill

Goodwill that arises upon the acquisition of subsidiaries is presented with intangible assets. For the measurement of goodwill at initial recognition, goodwill is measured at cost less accumulated impairment losses. Goodwill is allocated to cash generating units and is not amortised but is tested for impairment annually and when there is an indication for impairment (refer to accounting policy (5.4.1)). In respect of equity-accounted investees, the carrying amount of goodwill is included in the carrying amount of the investment, and any impairment loss is allocated to the carrying amount of the equity-accounted investee as a whole.

### 5.9.2 Multi-client data libraries

The multi-client data libraries relate to the to a profit sharing agreement with Finder Exploration Pty Ltd (Finder).

The Finder asset is accounted for at cost and is not amortised but assessed for impairment when facts and circumstances suggest that the carrying amount of the asset may exceed its recoverable amount. Refer to note 5.33 Impairments.

### 5.9.3 Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognised in profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditure is capitalised only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The capitalised expenditure includes the cost of materials, direct labour, overhead costs that are directly attributable to preparing the asset for its intended use, and capitalised borrowing costs. Other development expenditure is recognised in profit or loss as incurred. Capitalised development expenditure is measured at cost less accumulated amortisation and accumulated impairment losses (refer to accounting policy (5.16)).

### 5.9.4 Software and other intangible assets

Software and other intangible assets acquired or developed by the Group and that have finite useful lives are measured at cost less accumulated amortisation and accumulated impairment losses (refer to accounting policy (5.16)).

### 5.9.5 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, including expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

### 5.9.6 Amortisation

Amortisation is based on the cost of an asset less its residual value. Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets unless such lives are indefinite. Goodwill and intangible assets with an indefinite life are annually tested for impairment or when there is an indication for impairment (refer to accounting policy (5.16)). Other

intangible assets and software are amortised from the date they are available for their intended use. The estimated useful life of software and other capitalised development costs is, in general, five years. Amortisation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

### 5.10 Investments in equity-accounted investees

The Group's interests in equity-investees comprise interests in joint ventures. Investments in equity-accounted investees are accounted for using the equity method and are recognised initially at cost. The Group's investment includes goodwill identified on acquisition, net of any accumulated impairment losses (refer to accounting policy (5.16)). The consolidated financial statements include the Group's share of the income and expenses and equity movements of equity-accounted investees, after adjustments to align the accounting policies with those of the Group, from the date that significant influence commences until the date that significant influence ceases. When the Group's share of losses exceeds the carrying amount of the equity-accounted investee, the carrying amount is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or has made payments on behalf of the investee.

### 5.11 Other investments

#### 5.11.1 Other investments in equity instruments

Other investments in equity instruments do not have a quoted market price in an active market and are stated at cost. Dividends received are accounted for in profit or loss when these become due.

#### 5.11.2 Long-term loans and other long-term receivables

Long-term loans and other long-term receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are initially recognised at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method; less any impairment losses (refer to accounting policy (5.16)).

#### 5.11.3 Available-for-sale financial assets

Available for sale financial assets are non-derivative financial assets that are designated as available for sale or are not classified in any of the above categories of financial assets. Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses and foreign currency differences on available-for-sale debt

instruments (refer to accounting policy (5.16)), are recognised in other comprehensive income and presented in the other reserves in equity. When an investment is derecognised, the cumulative gain or loss accumulated in equity is reclassified to profit or loss. Available-for-sale financial assets comprise equity securities and debt securities.

#### 5.12 Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is determined using on the first-in first-out principle, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. Net realisable value of inventories is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

#### 5.13 Trade and other receivables

Trade and other receivables are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition they are measured at amortised cost using the effective interest method less, any impairment losses (refer to accounting policy 5.16). Unbilled revenue on (completed) projects represents the gross amount expected to be collected from customers for contract work performed to date. It is measured at costs incurred plus profits recognised to date less progress billings and recognised losses. Advances received from customers are presented as advance instalments to work in progress.

#### 5.14 Cash and cash equivalents

Cash and cash equivalents, comprising cash balances and call deposits, are initially recognised at fair value plus any directly attributable transaction costs. Subsequent to initial recognition they are measured at amortised cost using the effective interest method less, any impairment losses (refer to accounting policy (5.16)). Bank overdrafts that are repayable on demand and which form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the consolidated statement of cash flows.

#### 5.15 Assets of disposal groups classified as held for sale

Non-current assets that are expected to be recovered primarily through sale rather than through continuing use are classified as held for sale. Immediately before classification as held for sale, these assets are remeasured in accordance

with the Group's accounting policies. Thereafter generally the assets are measured at the lower of their carrying amount and fair values less costs to sell. Once classified as held for sale, intangible assets and property, plant and equipment are no longer amortised or depreciated and any equity-accounted investees are no longer equity-accounted.

#### 5.16 Impairment

##### 5.16.1 Non-derivative financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired.

A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

The Group considers evidence of impairment for receivables at both a specific asset and collective level. All individually significant receivables are assessed for specific impairment. All individually significant receivables found not to be specifically impaired are then collectively assessed for any impairment that has been incurred but not yet identified. Receivables that are not individually significant are collectively assessed for impairment by grouping together receivables with similar risk characteristics. In assessing collective impairment the Group uses historical trends of the probability of default, the timing of recoveries and the amount of loss incurred, adjusted for management's judgement as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognised in profit or loss and reflected in an allowance account against receivables. Interest on the impaired asset continues to be recognised through the unwinding of the discount. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit or loss.

Impairment losses on available-for-sale financial assets are recognised by reclassifying the losses accumulated in other comprehensive income, and presented in equity, to profit or loss. The cumulative loss that is reclassified from other

comprehensive income to profit or loss is the difference between the acquisition cost, net of any principal repayment and amortisation, and the current fair value, less any impairment loss recognised previously in profit or loss.

Changes in impairment provisions attributable to application of the effective interest method are reflected as a component of interest income. If, in a subsequent period, the fair value of an impaired available-for-sale debt security increases and the increase can be related objectively to an event occurring after the impairment loss was recognised in profit or loss, then the impairment loss is reversed, with the amount of the reversal recognised in profit or loss. Any subsequent recovery in the fair value of an impaired available-for-sale equity security is recognised in other comprehensive income.

#### 5.16.2 Non-financial assets

The carrying amounts of the Group's non-financial assets other than inventories, assets arising from employee benefits and deferred tax assets (refer to accounting policy (5.24)), are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. For goodwill, and intangible assets that have indefinite useful lives or that are not yet available for use, the recoverable amount is estimated each year at the same time.

An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit exceeds its estimated recoverable amount. Impairment losses are recognised in profit or loss. Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of cash-generating units) and then to reduce the carrying amount of the other assets in the cash-generating unit (or group of cash-generating units) on a pro rata basis.

The recoverable amount of an asset or cash-generating unit (CGU) is the higher of its value in use and its fair value less costs of disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or cash-generating unit. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or cash-generating unit. Subject to an operating segment ceiling test, for the purposes of goodwill impairment testing,

CGUs to which goodwill has been allocated, are aggregated so that the level at which impairment testing is performed reflects the lowest level at which goodwill is monitored for internal reporting purposes. Goodwill acquired in a business combination is allocated to groups of cash generating units that are expected to benefit from the synergies of the combination.

The Group's corporate assets do not generate separate cash inflows and are utilised by more than one cash-generating unit. Corporate assets are allocated to cash-generating units on a reasonable and consistent basis and tested for impairment as part of the testing of the cash generating units to which the corporate asset is allocated.

An impairment loss in respect of goodwill is not reversed. In respect of other assets, impairment losses recognised in prior periods are reviewed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change 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.

### 5.17 Equity

#### 5.17.1 Share capital

Share capital is classified as equity. The term 'shares' as used in the financial statements should, with respect to ordinary shares issued by Fugro, be construed to include certificates of shares ('share certificates' or 'depository receipts' for shares) issued by 'Stichting Administratiekantoor Fugro' (also referred to as 'Fugro Foundation Trust Office' or 'Foundation Trust Office'), unless the context otherwise requires or unless it is clear from the context that this is not the case. The surplus paid by shareholders above the nominal value of shares is recognized as share premium. Incremental costs directly attributable to the issue of ordinary shares and share options are recognised as a deduction from equity, net of any tax effects.

#### 5.17.2 Repurchase and sale of shares

When shares are repurchased or sold, the amount of the consideration paid or received, including direct attributable costs, net of any tax effects, is recognised as a change in equity. Repurchased shares and related results are reported as reserve for own shares and presented separately as a component of total equity.

### 5.17.3 Dividends

Dividends are recognised as a liability in the period in which they are declared.

### 5.18 Loans and borrowings

Loans and borrowings are recognised initially at fair value, less directly attributable transaction costs. Subsequent to initial recognition, borrowings are measured at amortised cost using the effective interest rate method.

### 5.19 Employee benefits

#### 5.19.1 Defined contribution plans

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognised as an employee benefit expense in profit or loss in the periods during which services are rendered by employees. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in future payments is available. Contributions to a defined contribution plan that are due more than twelve months after the end of the period in which the employees render the service are discounted to their present value.

#### 5.19.2 Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit pension plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets. The discount rate is the yield at the reporting date on AA credit-rated (high quality) corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The calculation is performed by qualified independent actuaries using the projected unit credit method. When the calculation results in a potential asset for the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. In order to calculate the present value of economic benefits, consideration is given to any minimum funding requirements that apply to any plan in the Group. An economic benefit is available to the Group if it is realisable during the life of the plan, or on settlement of the plan liabilities.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. Past-service costs are recognised immediately in profit or loss. Employee contributions for which the amount is independent of the number of years of service are recognised as a reduction of the service costs in the period in which the related services are rendered.

When the benefits of a plan are changed or when a plan is curtailed, then resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The Group recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

#### 5.19.3 Other long-term employee benefits

The Group's net obligation in respect of long-term employee benefits, other than pension plans, is the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value, and the fair value of any assets is deducted. At the reporting date, the discount rate is determined by reference to the yield on AA credit-rated corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The actuarial calculations are performed using the projected unit credit method. Any actuarial gains or losses are recognised in profit or loss in the period in which they arise.

#### 5.19.4 Share-based payments

The share incentive schemes allow Members of the Board of Management and some assigned Group employees to acquire shares in Fugro. The fair value of granted options and shares (awards) is recognised as an employee expense, with a corresponding increase in equity. The fair value is determined on the date of grant and is spread over the period during which the employees (share options) and the members of the Board of Management and other selected senior employees (performance shares and options) provide services and become unconditionally entitled to the share options or shares. The amount recognised as an expense is adjusted to reflect the number of awards for which the related non-market performance and service vesting conditions are expected to be met, such that the amount ultimately recognised as an expense is based on the number of awards that meet these conditions at the vesting date.

The expenses recognized for the conditionally awarded share options and shares are adjusted annually to reflect the actual number shares that are likely to vest based on the related service and non-market performance conditions.

#### 5.20 Provisions for other liabilities and charges

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions for other liabilities and charges are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. The unwinding of the discount is recognised as finance expenses.

##### 5.20.1 Onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of performing under the contract. The expected net cost of performing under the contract is based on cash flow calculations discounted using a rate that reflects current market assessments of the time value of money. Before a provision is established, the Group recognises any impairment loss on the assets associated with and/or dedicated to that contract.

##### 5.20.2 Restructuring cost

A provision for restructuring cost is recognised when the Group (i) has a detailed formal plan for the restructuring identifying at least the business or part of a business concerned, the principal locations affected, the location, function, and approximate number of employees who will be compensated for terminating their services, the expenditures that will be undertaken, and when the plan will be implemented; and (ii) has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

#### 5.21 Trade and other payables

Trade and other payables are recognised initially at fair value net of any directly attributable transaction costs. Subsequent to initial recognition they are measured at amortised cost using the effective interest method.

#### 5.22 Revenue

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and services rendered in the ordinary course of the Group's activities. Revenue is shown net of value-added tax, rebates and discounts and after eliminating sales within the Group.

The Group recognises revenue when persuasive evidence exists, usually in the form of an executed sales agreement, the amount of revenue can be measured reliably, it is probable that future economic benefits will flow to the entity and when specific criteria have been met for each of the Group's activities as described below. The Group bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

Revenue from sales of goods of seismic data, software licences and subscription income do not qualify as a significant category of revenue as referred to in IAS 18.35 (b); however for completeness sake the relating revenue recognition policies are set out in accounting policies 5.22.2 and 5.22.3.

##### 5.22.1 Services rendered

Revenue from services rendered to third parties relate to fixed price contracts and 'cost plus' contracts (mainly daily rates or rates per (square) kilometre). This revenue is recognised in profit or loss in proportion to the percentage of completion of the transaction at the reporting date. The percentage of completion is based on the input measure and is determined as a percentage of the contract costs incurred in relation to the total estimated contract costs (as this method is most appropriate for the majority of the services provided by the Group) and are only recognised to the extent of costs incurred that are likely to be recoverable. An expected loss on a contract is recognised immediately in profit or loss.

##### 5.22.2 Sales of goods

Revenue from the sale of goods is recognised when the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs of goods can be estimated reliably, and there is no continuing management involvement with the goods.

No revenue is recognised if there are significant uncertainties regarding recovery of the consideration due or associated costs. An expected loss on a contract is recognised immediately in profit or loss.

**5.22.3 Software licences and subscription income**

Software licences and subscription income are recognised in the period during which the underlying services have been provided, using a straight line basis over the term of the contract.

**5.22.4 Net revenue own service (revenue less third party costs)**

Net revenue own service comprises all revenue minus costs incurred with third parties related to the employment of resources (in addition to the resources deployed by the Group) and other third party cost such as charter-lease costs and other cost required for the execution of various projects.

**5.22.5 Other income**

Other income consists of income not related to the key business activities of the Group, such as income from the sale of non-monetary assets and/or liabilities, exceptional and/or non-recurring income.

**5.22.6 Government grants**

Government grants are recognised initially as deferred income at fair value when there is reasonable assurance that they will be received and the Group will comply with the conditions associated with the grant. Grants that compensate the Group (partly) for expenses incurred are recognised in profit or loss on a systematic basis in the same periods in which the expenses are recognised. Grants that (partly) compensate the Group for the cost of an asset are recognised in profit or loss on a systematic basis over the useful life of the asset.

**5.23 Expenses****5.23.1 Third party costs**

Third party costs are matched with related revenues on contracts and accounted for on a historical cost basis.

**5.23.2 Lease payments**

A lease is an agreement whereby the lessor conveys to the lessee in return for a payment, or series of payments, the right to use an asset for an agreed period of time.

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a lease receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income.

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 are recognised as an integral part of the total lease expense, over the term of the lease.

Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

At inception of an arrangement, the Group determines whether such an arrangement is or contains a lease.

A specific asset is the subject of a lease if fulfilment of the arrangement is dependent on the use of that specified asset. An arrangement conveys the right to use the asset if the arrangement conveys to the Group the right to control the use of the underlying asset. At inception or upon reassessment of the arrangement, the Group separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Group concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognised at an amount equal to the fair value of the underlying asset. Subsequently the liability is reduced as payments are made and an imputed finance charge on the liability is recognised using the Group's incremental borrowing rate.

**5.23.3 Net finance income and expenses**

Net finance income and expenses consist of finance expenses, finance income and foreign currency gains and losses. Finance expenses comprise interest expense on borrowings, unwinding of the discount on provisions, losses on disposal of available-for-sale financial assets, fair value losses on financial assets at fair value through profit or loss, impairment losses recognised on financial assets (other than trade receivables), and losses on hedging instruments that are recognised in profit or loss.

Finance income comprises interest income on funds invested (including available-for-sale financial assets), dividend income, gains on the disposal of available-for-sale financial assets, fair value gains on financial assets at fair value through profit or loss, gains on the re-measurement to fair value of any pre-existing interest in an acquiree, and gains on hedging instruments that are recognised in profit or

loss. Interest income is recognised in profit or loss as it accrues, using the effective interest method. Dividend income is recognised in profit or loss on the date the Group's right to receive payment is established, which in the case of quoted shares is normally the ex-dividend date.

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.

Foreign currency gains and losses are reported on a net basis as either finance income or finance cost depending on whether foreign currency movements are in a net gain or net loss position.

#### 5.24 Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax is recognised in profit or loss except to the extent that it relates to a business combination, or items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Current tax payable also includes any tax liability arising from the declaration of dividends.

Deferred tax is recognised in respect of temporary differences 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: taxable temporary differences arising on the initial recognition of goodwill; temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss; and temporary differences related to investments in subsidiaries and jointly controlled entities to the extent that it is probable that they will not reverse in the foreseeable future. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, 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 they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend 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 for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable 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.

In determining the amount of current and deferred tax the Group takes into account the impact of uncertain tax positions and whether additional taxes and interest may be due. The Group believes that its accruals for tax liabilities are adequate for all open tax years based on its assessment of many factors, including interpretations of tax law and prior experience. This assessment relies on estimates and assumptions and may involve a series of judgements about future events. New information may become available that causes the Group to change its judgement regarding the adequacy of existing tax liabilities; such changes to tax liabilities will impact tax expense in the period that such a determination is made.

#### 5.25 Statement of cash flows

The consolidated statement of cash flows is prepared using the indirect method. The cash flow statement distinguishes between operating, investing and financing activities. Cash flows in foreign currencies are converted at the exchange rate at the dates of the transactions. Currency exchange differences on cash held are separately shown. Payments and receipts of corporate taxes are included as cash flow from operating activities and interest paid is shown as cash flow from operating activities. Cash flows as a result from acquisition/divestment of financial interest in subsidiaries and equity accounted investees are included as cash flow from investing activities, taking into account the available cash in these interests. Dividends paid are part of the cash flow from financing activities.

## NOTES TO FINANCIAL STATEMENTS

### 5.26 Segment reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components. All operating segments' operating results are reviewed regularly by the board of management to make decisions about resources to be allocated to the segment and to assess its performance, and for which discrete financial information is available.

Inter-segment pricing is determined on an arm's length basis. Segment results, assets and liabilities include items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the year to acquire property, plant and equipment, and intangible assets other than goodwill.

#### 5.26.1 Operating segments

As an engineering firm with operations throughout the world, the Group delivers its services to clients located all over the globe and collects and interprets data related to the earth's surface and the soil and rock beneath. On the basis of this data the Group provides geo-intelligence and asset integrity solutions, generally for the oil and gas, the building and infrastructure, and the power and mining markets.

The Group has four reportable segments, being the Group's divisions. The divisions offer different products and services, and are managed separately because they require different technology and marketing strategies. For each of the divisions, the Board of Management reviews internal management reports on a monthly basis.

The segments are managed on a worldwide basis, and operate in five principal geographical areas: Europe, Africa, Middle East & India, Asia Pacific and the Americas. In presenting information on the basis of geographical areas, segment revenue is based on the geographical location of operating companies. The allocation of segment assets is based on the geographical location of the operating company using the assets. Information regarding the results of each reportable segment is included below. Performance is measured based on segment profit or loss before income tax, as included in the internal management reports that are reviewed by the board of management. Segment profit or loss is used to measure performance as management believes that such information is the most relevant in

evaluating the results of certain segments relative to other entities that operate within these industries.

Fugro allocates all other corporate expenses and finance income to the reportable segment profit (or loss) before income tax of the respective operating segments pro-rate based on net revenue. Assets that are used by more than one operating segment and liabilities that relate to more operating segments are pro-rate allocated based on net revenues to the respective reporting segments as well.

The following summary describes the operations in each of the Group's reportable segments:

#### *Geotechnical*

The Geotechnical division investigates the engineering properties and geological characteristics of near-surface soils and rocks using (in-house developed) proprietary technologies, advises on foundation design, provides construction materials testing, pavement assessment and installation support services. Geoconsulting services provide integrated geophysical, engineering geology and engineering analysis to solve engineering problems or to provide solutions for our clients and their projects. These services support clients' projects worldwide in the onshore, near shore and offshore environments, including deep water. Typical projects include support of infrastructure development and maintenance, large construction projects, flood protection and support of the design and installation of oil and gas facilities and wind farms.

#### *Survey*

The Survey division provides a range of services in support of the oil and gas industry, power, commercial and civil industries, as well as governments and other organisations. It encompasses numerous offshore activities as well as on shore geospatial activities. It also manages global positioning systems that support these and other Group activities. Offshore services include geophysical investigations for geohazards, pipeline and cable routes, inspection and construction support services, hydrographic charting and meteorological and oceanographic studies. Geospatial services concentrate on land survey and aerial and satellite mapping services for a wide range of clients. Fugro's global positioning system is used for the foregoing services, but is also provided on a subscription basis to clients in the oil and gas and shipping industries.

### ***Subsea Services***

The Subsea Services division provides underwater support services to the oil and gas, marine construction and renewable energy industries. It operates a modern fleet of remotely operated vehicles (ROVs) ranging from light inspection to heavy work class units, as well as ROV support vessels and dive support vessels providing services in water depths to over 3,000 metres. These activities are provided throughout the life of oil and gas fields and range from ROV support during exploration drilling, to field development, installation and construction support, long-term inspection repair and maintenance (IRM) of subsea services assets during production and through to assistance in the final decommissioning of those assets. The division also provides tooling and engineering services to enable the design and build of purpose-built tools and interfaces for ROV-based activities. ROV inspection services are augmented by air- and saturation-diving capabilities.

### ***Geoscience***

The Geoscience division provides services and products to acquire geophysical data that are used for the appraisal, development and production of offshore natural resources. The data sets are collected on or close to the seabed from shallow to ultra deep water. Multi-component seismic and time-lapse seismic methods are supported. These activities are carried out by Seabed Geosolutions B.V. (Seabed). Fugro has a 60% (controlling) stake in Seabed and therefore its financial information is fully consolidated. The remaining shares of Seabed are held by CGG. Clients of Seabed are predominantly oil and gas companies. In addition, the Geoscience division participates in a profit sharing agreement with Finder. Up to 30 June 2015, the Geoscience division owned and sold data from a large, geographically diverse 2D and 3D marine streamer seismic multi-client data library.

**Operating segments**

(EUR x 1,000)	Geotechnical		Survey		Subsea Services		Geoscience		Total	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Segment revenue	713,412	803,963	726,393	975,191	380,229	465,098	172,983	363,233	1,993,017	2,607,485
Of which inter-segment revenue	72,833	63,623	87,603	139,404	56,707	41,472	–	–	217,143	244,499
Revenue	640,579	740,340	638,790	835,787	323,522	423,626	172,983	363,233	1,775,874	2,362,986
<b>Segment result</b>	47,522	79,076	56,456	153,890	(4,949)	16,867	55,937	103,425	154,966	353,258
Depreciation	(38,029)	(50,216)	(52,804)	(67,940)	(43,117)	(51,333)	(38,416)	(42,997)	(172,366)	(212,486)
Amortisation	(2,133)	(2,455)	(2,956)	(3,200)	(460)	(435)	(3,013)	(21,292)	(8,562)	(27,382)
Impairments	(97,465)	(60,373)	(3,516)	(3,749)	(39,574)	(254,755)	(52,161)	(44,441)	(192,716)	(363,318)
<b>Result from operating activities (EBIT)</b>	(90,105)	(33,968)	(2,820)	79,001	(88,100)	(289,656)	(37,653)	(5,305)	(218,678)	(249,928)
EBIT in % of revenue	(14.1)	(4.6)	(0.4)	9.5	(27.2)	(68.4)	(21.8)	(1.5)	(12.3)	(10.6)
Finance income	5,655	10,730	7,444	15,218	3,474	5,410	3,826	1,986	20,399	33,344
Finance expense	(24,725)	(22,739)	(37,022)	(20,770)	(18,343)	(16,546)	(11,239)	(20,223)	(91,329)	(80,278)
Share of profit/(loss) of equity-accounted investees	(22)	8	2,431	5,730	(4,632)	2,072	–	–	(2,223)	7,810
<b>Reportable segment profit/(loss) before income tax</b>	(109,197)	(45,969)	(29,967)	79,179	(107,601)	(298,720)	(45,066)	(23,542)	(291,831)	(289,052)
Income tax	(13,633)	(12,709)	(6,825)	(41,555)	(441)	(5,900)	11,747	(9,473)	(9,152)	(69,637)
<b>Profit/(loss) for the period</b>	(122,830)	(58,678)	(36,792)	37,624	(108,042)	(304,620)	(33,319)	(33,015)	(300,983)	(358,689)
Capital employed	433,496	626,551	518,293	590,113	253,367	298,169	136,018	174,856	1,341,174	1,689,689
Reportable segment assets*	648,005	904,832	919,161	1,025,825	335,394	423,110	271,889	487,417	2,174,449	2,841,184
Reportable segment liabilities	306,307	491,238	434,262	506,755	312,200	303,569	131,571	305,265	1,184,340	1,606,827
Capital expenditure, property, plant and equipment	18,390	46,725	19,866	51,278	21,841	31,248	32,396	31,221	92,493	160,472
Capital expenditure software and other intangible assets	1,755	2,744	86	846	4	130	4,207	6,688	6,052	10,408
Additions multi-client data libraries (Finder)	–	–	–	–	–	–	5,060	22,835	5,060	22,835
Movement in other investments*	9,774	6,159	7,088	2,906	3,715	2,278	(78,253)	(4,344)	(57,676)	6,999

\* In 2016, the CGG senior secured term loan was fully allocated to the Geoscience division. Previously, this loan was qualified as a corporate asset. The comparative numbers have been adjusted for comparison purposes. As per 31 December 2015, the reportable segment assets amounted to EUR 932,221 thousand, EUR 1,056,767 thousand, EUR 438,784 thousand and EUR 413,412 thousand for the Geotechnical, Survey, Subsea Services and Geoscience operating segment respectively. The movement in other investments amounted to EUR 5,551 thousand, EUR 2,219 thousand, EUR 1,930 thousand and EUR (2,701) thousand for the Geotechnical, Survey, Subsea Services and Geoscience operating segment respectively as at 31 December 2015.

**Geographical areas**

(EUR x 1,000)	Europe		Africa		Middle East & India		Asia Pacific		Americas		Total	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Revenue from external customers	629,045	779,608	89,743	117,523	299,176	299,128	384,822	520,372	373,088	646,355	1,775,874	2,362,986
Non-current assets	656,464	935,829	34,802	38,843	74,105	90,739	258,909	234,594	309,629	369,594	1,333,909	1,669,599

**Other material items 2016 in respect of elements of profit or loss**

(EUR x 1,000)	Reportable segment totals	Adjustments and other unallocated amounts	Consolidated totals
Finance income	20,399	(11,519)	8,880
Finance expense	(91,329)	11,519	(79,810)

**Other material items 2015 in respect of elements of profit or loss**

(EUR x 1,000)	Reportable segment totals	Adjustments and other unallocated amounts	Consolidated totals
Finance income	33,344	(15,708)	17,636
Finance expense	(80,278)	15,708	(64,570)

**5.28 Government grants**

The company has not been awarded any significant government grants in 2016.

**5.29 Sale and lease back arrangement**

On 8 January 2016, Fugro completed the sale and operating leaseback of the Fugro Voyager vessel upon delivery of the vessel. This vessel was classified as an asset as held for sale as at 31 December 2015. The net proceeds amounted to EUR 48.6 million. Last year, Fugro entered into a sale and leaseback arrangement for the Fugro Scout and Fugro Voyager vessels.

The lease term is twelve years from the date of delivery unless cancelled earlier. The lessor has the right to cancel the lease on the fifth anniversary of the lease and on each anniversary thereafter provided that no termination event has occurred and Fugro has not exercised its purchase option. Fugro has the right to purchase the vessels beginning on the third anniversary of the lease term commencement and as of each anniversary date thereafter until the eleventh anniversary. The contract contains certain termination events, which events are considered to be mainly within the control of Fugro. If applicable, the lessor will have the right to sell the vessels to Fugro, to terminate the lease and/or sell the vessels to another third party. In case of a change of control of Fugro, the contract contains certain purchase and repurchases options in

respect of the vessels. In case these are not exercised, Fugro has to remit a penalty equal to the net present value of the remaining charter hire payments outstanding and redeliver the vessels to the lessor.

**5.30 Third party costs**

(EUR x 1,000)	2016	2015
Cost of suppliers	477,403	624,708
Operational lease expense*	91,760	99,470
Other rentals	49,832	149,818
Onerous contracts	(6,087)	(19,270)
Other costs	65,849	63,670
	678,757	918,396

\* The operational lease expense includes an amount of EUR 31.7 million (2015: EUR 35.1 million) relating to maintenance and repair. Refer to note 5.50.6.

Cost of suppliers comprises costs of third party equipment hire, fuel, demobilisation and mobilisation, consumables and third party personnel. Costs of other rentals relate to any lease or agreement with a term of less than one year or any project-based lease or agreement with a term that begins at the start of a specific project and ends upon completion of such project. Other costs mainly relate to withholding taxes on projects and subcontracted cost at request of the client which can be recharged to the client directly.

For the provisions relating to the onerous contracts, reference is made to (5.52).

**5.31 Other income**

(EUR x 1,000)	2016	2015
Settlements claims	726	3,143
Government grants	2,971	1,865
Net gain on sale of property, plant and equipment	5,364	7,527
Gain/ (loss) on sale of the multi-client data libraries	–	(1,119)
Reversal of the asset retirement obligation*	14,056	–
Sundry income	7,286	4,703
	30,403	16,119

\* The reversal of the asset retirement obligation relates to the purchase of the underlying chartered vessel (Hugin Explorer) in 2016. Refer to note 5.50.4.

**5.32 Personnel expenses**

(EUR x 1,000)	2016	2015
Wages and salaries	597,490	710,309
Compulsory social security contributions	52,091	66,269
Equity-settled share-based payments	6,938	9,286
Contributions to defined contribution plans	23,794	21,169
Expense related to defined benefit plans	13,809	1,572
Increase in liability for long-service leave	314	525
	694,436	809,130

**5.32.1 Share-based payments**

The share-based payment plans of Fugro N.V. can be divided in a long-term incentive plan (LTIP) and a share option scheme.

**Long-term incentive plan**

To further strengthen the alignment with shareholder's interests, the long-term incentive plan for members of the Board of Management, and other selected senior employees, effective as from 1 January 2014, consists of performance shares and performance options. Vesting is subject to continuous employment and performance measurement after three years.

The performance targets and their relative weights for the performance awards are as follows:

- ROCE (weight 50%) is defined as net operating profit after tax (NOPAT) as percentage of average total equity plus net interest bearing debt, in the last year of the three-year period, excluding multi-client business.
- TSR (weight 50%) is defined as share price increase, including reinvested dividends. TSR is measured over a three-year period based on a three-month average period measured immediately prior to the start and end date of the performance period. The relative position within the peer group determines the vesting level of the underlying instruments.

The performance incentive zones for the ROCE performance target is shown in the table below.

**ROCE (weight 50%)**

	Below			
	Threshold	Threshold	Target	Maximum
Pay-out as % of target	0%	25%	100%	175%

TSR measurement is related to share price performance versus a specific peer group of companies, which has been set by the Supervisory Board under guidance from an external consultant. The composition of the peer group, which is evaluated on a yearly basis, consists of: Amec Foster Wheeler, Baker Hughes, Boskalis, Core Laboratories, Fluor Corp., John Wood Group, Oceaneering Int., Schlumberger, Subsea 7, TechnipFMC and Transocean. Vesting is subject to the following performance incentive zone:

**Total Shareholder Return ranking**

<b>(weight: 50%)</b>	Vesting (% of conditional award)
1	175%
2	150%
3	125%
4	100%
5	75%
6	50%
7	25%
8-12	0%

In general, the participants have to be employed by the Group twelve months prior to the grant date to become entitled to performance options and performance shares (together 'performance awards'). The performance period is three years starting at the first of January of the year following the grant date. The costs of the performance awards are recognised in profit or loss over the total service period of four years.

The Board of Management and the Supervisory Board decide annually on the granting of performance awards. As at 31 December 2016, Fugro N.V. granted 257,200 (2015: 219,200) performance options and awarded 128,600 (2015: 109,600) performance shares (100% at target). The average remaining term of the performance options outstanding is 5.2 years as at 31 December 2016 (31 December 2015: 5.6 years).

As at 31 December the following performance options were outstanding:

Year of issue	Duration	Number of participants	Granted	Outstanding at 01-01-2016	Forfeited in 2016	Exercised in 2016	Outstanding at 31-12-2016	Exercisable at 31-12-2016	Exercise price (EUR)
2014	6 years	22	158,500	153,500	611	–	152,889	–	17.26
2015	6 years	39	219,200	219,200	5,700	–	213,500	–	15.06
2016	6 years	43	257,200	–	–	–	257,200	–	14.55
			634,900	372,700	6,311	–	623,589	–	

As at 31 December the following performance shares were outstanding:

Year of issue	Duration	Number of participants	Granted	Outstanding at 01-01-2016	Forfeited in 2016	Vested in 2016	Outstanding at 31-12-2016
2014	3 years	22	79,250	76,750	306	–	76,444
2015	3 years	39	109,600	109,600	2,850	–	106,750
2016	3 years	43	128,600	–	–	–	128,600
			317,450	186,350	3,156	–	311,794

The grant date fair value of the 50% portion with a TSR performance condition has been derived using a Monte Carlo Simulation model. The fair value of the portion with a ROCE performance condition (50%) has been determined using the Black & Scholes option pricing formula.

The weighted average grant date fair value amounts to € 14.33 (2015: € 14.91) for the performance shares and € 8.94 (2015: € 8.51) for the performance options.

The significant inputs into the valuation models were:

	2016	2015
	Performance Shares/Options	Performance Shares/Options
Share price (in €)	14.55	15.06
Exercise price options	14.55	15.06
Volatility (%)	62.8%	54.1%
TSR correlation	41.5%	36.1%
Dividend yield (%)	0.0%	0.0%
Vesting period (in years)	3	3
Risk-free interest rate (%)	(0.74%)	(0.26%)
Expected term shares/options (in years)	3/6	3/6

	2016	2015
	Performance Shares/Options	Performance Shares/Options
Costs of granted performance shares and performance options at the end of 2014 in EUR	236,047	255,123
Costs of granted performance shares and performance options at the end of 2015 in EUR	443,342	451,343
Costs of granted performance shares and performance options at the end of 2016 in EUR	518,923	–

The expected volatility is based on the annualised historical volatility prior to the date of grant, and the dividend yield is estimated based on the historic dividend yield on Fugro shares at the date of grant.

The total costs allocated to 2016 for the performance awards granted in 2014, 2015 and 2016 amount to EUR 1,198,312 (2015: EUR 706,466).

**Share option scheme**

Fugro's share option scheme allows some assigned Group employees, who do not participate in the new long-term incentive plan, to acquire shares in Fugro. A share option entitles the employee to purchase ordinary shares in Fugro. The granting of options is dependent on the achievement of the targets of the Group as a whole and of the individual operating companies as well as on the contribution of the relevant employee to the long-term development of the company. In order to become entitled to options, the employee has to be employed by the Group twelve months prior to the granting of the options. In addition to the services provided in the twelve months prior to the granting of the options, services also must be provided in the future. The vesting period for the granted options is three years starting at the first of January of the year following the grant date. The option period is six years. The options granted are not subject to any further conditions of exercise, except that the option holder is still employed by Fugro or one of its

operating companies. Standard exceptions apply to the latter rule about retirement, long-term disability and death.

The Board of Management and the Supervisory Board decide annually on the granting of options. Options are granted annually on 31 December and the option exercise price is equal to the closing price of the share certificates traded on Euronext Amsterdam on the last trading day of the calendar year. The costs of the options are recognised in profit or loss over the related period of employment (four years).

In 2016, Fugro N.V. granted 571,850 options to 695 employees. These options have an exercise price of EUR 14.55 (2015: 534,470 options were granted to 659 employees with an exercise price of EUR 15.06). In 2016, no options have been exercised.

As at 31 December the following options were outstanding:

Year of issue	Duration	Number of participants	Granted	Outstanding at 01-01-2016	Forfeited in 2016	Exercised in 2016	Outstanding at 31-12-2016	Exercisable at 31-12-2016	Exercise price (EUR)
2010	6 years	663	1,107,350	869,850	869,850	–	–	–	61.500
2011	6 years	684	1,161,100	908,700	63,550	–	845,150	845,150	44.895
2012	6 years	674	1,093,300	885,000	60,850	–	824,150	824,150	44.520
2013	6 years	621	956,925	891,285	51,855	–	839,430	839,430	43.315
2014	6 years	654	770,638	745,597	55,477	–	690,120	–	17.260
2015	6 years	654	534,470	534,470	23,500	–	510,970	–	15.060
2016	6 years	695	571,850	–	–	–	571,850	–	14.550
			6,195,633	4,834,902	1,125,082	–	4,281,670	2,508,730	

The outstanding options as at 31 December 2016 have an exercise price ranging from EUR 14.55 to EUR 44.90.

The average remaining term of the options is 3.2 years (2015: 3.3 years). The movement during the year of options and the average exercise price is as follows:

	2016		2015	
	Weighted average exercise price (EUR)	Number of options	Weighted average exercise price (EUR)	Number of options
Options outstanding at 1 January	39.95	4,834,902	42.69	5,501,963
Forfeited during the period	55.65	1,125,082	41.35	(1,201,531)
Options granted during the period	14.55	571,850	15.06	534,470
Options exercised during the period	–	–	–	–
Options outstanding at 31 December	32.45	4,281,670	39.95	4,834,902
Exercisable at 31 December		2,508,730		2,663,550

The fair value of the share options with only service conditions is determined by using a binomial model. Concerning the estimate for early departure (forfeitures), different percentages for different categories of staff are used: Board of Management 0% (only performance shares and performance options as from 2014) and other

management/employees 3% per annum. The expected behaviour for exercising the options is estimated until the end of the exercise period. Expected volatility is estimated by considering historical share price volatility.

The inputs used in the measurement of the fair values at grant date of the share options are the following:

	2016	2015
Average fair value of the granted options during the year in EUR	6.60	6.32
Exercise price (and fair value of shares at grant date) in EUR	14.55	15.06
Expected volatility	50%	45%
Option term	6 years	6 years
Expected dividends	0.00%	0.00%
Risk-free interest rate (based on government bonds)	(0.31%)	0.18%
Costs of granted options at the end of 2012 in EUR	–	2,932,352
Costs of granted options at the end of 2013 in EUR	2,873,577	3,828,884
Costs of granted options at the end of 2014 in EUR	967,486	903,490
Costs of granted options at the end of 2015 in EUR	820,648	697,137
Costs of granted options at the end of 2016 in EUR	858,633	–
Total	5,520,344	8,361,863

## 5.32.2 Number of employees as at 31 December

	2016			2015		
	Netherlands	Foreign	Total	Netherlands	Foreign	Total
Technical staff	641	7,068	7,709	649	8,086	8,735
Management and administrative staff	202	2,018	2,220	200	2,273	2,473
Temporary and contract staff	93	508	601	96	656	752
	936	9,594	10,530	945	11,015	11,960
Average number of employees during the year	940	10,305	11,245	978	11,771	12,749

## 5.33 Impairments

Intangible assets that have an indefinite useful life or intangible assets not ready for use are not subject to amortisation and are tested annually for impairment. Other non-financial assets that are subject to depreciation and amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. For 2016, the following impairments have been reported:

(EUR x 1,000)	2016
Goodwill Seabed Geosolutions	20,505
Goodwill Subsea Services	17,650
Goodwill Onshore Geotechnical Europe/Africa	12,933
Subtotal	51,088
Property, plant and equipment (PP&E)	117,480
Finder	16,633
Other intangible assets (and other non-financial fixed assets)	7,515
Total	192,716

**Goodwill**

An impairment loss on goodwill of EUR 20.5 million has been recognised for Seabed Geosolutions as a certain award of a sizeable contract did not materialise and due to low tendering activity in the seabed market. This has resulted in a downward impact on the projected future cash flows. The impairment loss relates to the Seabed Geosolutions cash generating unit and forms part of the Geoscience operating segment. Refer to note 5.39. In 2016, Fugro fully impaired the remaining goodwill of Subsea Services for the amount of EUR 17.7 million as a result of further market deterioration, which will last in 2017. The impairment loss relates to the cash generating unit of

Subsea Services and is included in the operating segment Subsea Services. Furthermore, Fugro fully impaired the remaining goodwill of EUR 12.9 million of the onshore Geotechnical Europe/Africa CGU due to significantly deteriorated market conditions. This CGU forms part of the Geotechnical operating segment.

**Property, plant and equipment**

An impairment loss on certain vessels was recorded of EUR 74.9 million due to poor market conditions, of which EUR 53.4 million and EUR 21.5 million relate to the Geotechnical and Subsea Services operating segments respectively. The recoverable amounts are determined based on the higher of fair value less costs of disposal (determined by using external broker quotes) and value in use calculations using discounted cash flows models. Pre-tax discount rates in these calculations vary from 8% to 11%. An amount of EUR 22.4 million has been impaired relating to several offshore geotechnical assets as a result of poor market circumstances and limited backlog opportunities. Furthermore, Fugro recognised an impairment of EUR 15.0 million on certain ocean bottom cable assets of Seabed Geosolutions (Geoscience operating segment) caused by significant reduced backlog in 2016 and beyond for these assets. Furthermore, total impairment of EUR 117.5 million includes an amount of EUR 5.2 million relating to other items within PP&E such as buildings and other equipment.

**Finder**

Fugro recognised an impairment loss of EUR 16.6 million on the profit sharing agreement with Finder as future projected cash flows were reduced on certain projects.

### Other intangible assets (and other non-financial fixed assets)

The impairment charge in 2016 of other intangible assets (and other non-financial fixed assets) mainly relate to an impairment loss of a software application within the Geotechnical operating segment of EUR 7.5 million following further review of capital expenditure and the decision to cease further development of certain functionalities.

In 2015, the following impairments were identified:

(EUR x 1,000)	2015
Goodwill Subsea Services	171,731
Goodwill Onshore Geotechnical Europe/Africa	31,544
Goodwill Geoscience other	3,797
Subtotal	207,072
Property, plant and equipment	115,732
Multi-client data libraries	37,670
Other intangible assets (and other non-financial fixed assets)	2,844
Total	363,318

### 5.34 Other expenses

(EUR x 1,000)	2016	2015
Maintenance and operational supplies	44,818	51,384
Indirect operating expenses	56,618	62,675
Occupancy costs	22,330	21,354
Property lease expense	24,328	27,576
Communication and office equipment	31,469	35,425
Write-off receivables	27,744	6,010
Restructuring costs	22,035	12,757
Research costs	(260)	3,653
Loss on disposal of property, plant and equipment	303	–
Marketing and advertising costs	5,115	6,094
Other	43,618	71,393
Total	278,118	298,321

Other expenses include amongst others professional services, training costs, audit fees, miscellaneous charges and sundry costs. Certain adviser and other costs amounting to EUR 6.0 million (2015: EUR 13.3 million), included in other, are considered as exceptional item under the covenant requirement. Refer to note 5.50.6. Write-off

receivables of EUR 27,744 thousand include an amount of EUR 12,041 thousand in respect of sale of the CGG senior secured term loan (refer to note 5.41.2). Audit fees, as charged by EY, are disclosed in note 9.18.

### 5.35 Net finance (income)/expenses

(EUR x 1,000)	2016	2015
Interest income on loans and receivables	(8,878)	(6,577)
Dividend income on available-for-sale financial assets and other investments in equity instruments	(2)	(873)
Net foreign exchange variance	–	(10,186)
Finance income	(8,880)	(17,636)
Interest expense on financial liabilities measured at amortised cost	64,993	62,017
Net change in fair value of financial assets at fair value through profit or loss	317	2,474
Net change in fair value of derivatives	–	79
Net foreign exchange variance	14,500	–
Finance expense	79,810	64,570
Net finance (income)/expenses recognised in profit or loss	70,930	46,934

The table set below summarises the net finance cost recognised in other comprehensive income and how they are categorised in the statement of changes in equity.

(EUR x 1,000)	2016	2015
<b>Recognised in other comprehensive income</b>		
Net change in fair value of hedge of net investment in foreign operations	5,079	(81,385)
Foreign currency translation differences of foreign operations	26,935	118,736
Foreign currency translation differences of equity-accounted investees	(1,425)	4,212
Net change in translation reserve transferred to profit or loss due to disposal	–	(8,286)
	30,589	33,277
Net change in fair value of cash flow hedges transferred to profit or loss	288	477
Net change in fair value of available-for-sale financial assets	34	37
Total	30,911	33,791
<b>Recognised in:</b>		
Hedging reserve	288	477
Translation reserve	27,308	33,615
Retained earnings	34	37
Non-controlling interests	3,281	(338)
Total	30,911	33,791

### 5.36 Income tax expense/(gain)

#### **Recognised in profit or loss**

(EUR x 1,000)	2016	2015
<b>Current income tax expense/(gain)</b>		
Current year	25,552	36,795
Adjustments for prior years	(11,902)	11,546
	13,650	48,341
<b>Deferred income tax expense/(gain)</b>		
Origination and reversal of temporary differences	(5,419)	10,614
Change in tax rate	2,240	1,606
Recognition of previously unrecognised tax losses and temporary differences	(22,738)	(13,988)
Write down of deferred tax asset	27,820	27,046
Liability for undistributed foreign earnings (deferred)	(1,190)	–
Adjustments for prior years	(5,211)	(3,982)
	(4,498)	21,296
Total income tax expense/(gain)	9,152	69,637

**Reconciliation of effective tax rate**

(EUR x 1,000)

	2016 %	2016	2015 %	2015
Profit/(loss) for the period from continuing operations		(300,983)		(358,689)
Income tax expense/(gain)		9,152		69,637
Profit/(loss) before income tax		(291,831)		(289,052)
Income tax using the weighted domestic average tax rates	30.8	(89,962)	19.9	(57,552)
Change in tax rate	(0.8)	2,240	(0.6)	1,606
Recognition of previously unrecognised tax losses and temporary differences	7.8	(22,738)	4.9	(13,988)
Current year tax losses and tax credits not recognised	(25.6)	74,692	(14.8)	42,698
Write down of deferred tax asset	(9.5)	27,820	(9.4)	27,046
Non-deductible expenses	(12.7)	37,119	(23.4)	67,634
Tax exempt income	1.5	(4,356)	3.7	(10,713)
Liability for undistributed foreign earnings (deferred)	0.4	(1,190)	–	–
Adjustments for prior years (deferred)	1.8	(5,211)	1.4	(3,982)
Adjustments for prior years (current)	4.1	(11,902)	(4.0)	11,546
Dividend and other income taxes	(0.9)	2,640	(1.8)	5,342
	(3.1)	9,152	(24.1)	69,637

The weighted domestic average tax rate is computed by multiplying the result before tax of each tax group with the applicable local corporate income tax rates that vary from 0% to 35%. The decreased weighted domestic average tax rate when compared to prior year is caused by a significant different mix of results in the various tax groups.

**Income tax recognised in other comprehensive income and in equity**

(EUR x 1,000)

	2016			2015		
	Before tax	Tax (expense)/ benefit	Net of tax	Before tax	Tax (expense)/ benefit	Net of tax
Defined benefit plan actuarial gains (losses)	(14,758)	613	(14,145)	12,781	(3,773)	9,008
Net change in fair value of cash flow hedges transferred to profit or loss	288	–	288	477	–	477
Net change in fair value of hedge of net investment in foreign operations	5,079	–	5,079	(81,385)	–	(81,385)
Share-based payment transactions	6,935	–	6,935	9,286	–	9,286
Net change in fair value of available-for-sale financial assets	34	–	34	37	–	37
Net change in translation reserves transferred to profit or loss	–	–	–	(8,286)	–	(8,286)
Subordinated unsecured convertible bonds	34,538	(8,822)	25,716	–	–	–
Foreign currency translation differences of foreign operations and equity-accounted investees	26,010	(500)	25,510	122,659	289	122,948
	58,126	(8,709)	49,417	55,569	(3,484)	52,085

Reference is also made to note 5.42.

**5.37 Current tax assets and liabilities**

The net current tax liability of EUR 11,176 thousand (2015: EUR 27,075 thousand liability) represents the balance of current tax assets and liabilities in respect of current and prior periods less advance tax payments.

**5.38 Property, plant and equipment**

(EUR x 1,000)

2016

	Land and buildings	Plant and equipment	Vessels	Fixed assets under construction	Other	Total
<b>Cost</b>						
Balance at 1 January 2016	213,625	1,267,914	948,416	38,865	235,716	2,704,536
Investments in assets under construction	–	–	–	10,285	–	10,285
Other additions	2,124	34,751	40,906	–	4,427	82,208
Capitalised fixed assets under construction	440	5,646	145	(7,777)	1,546	–
Disposals	(2,615)	(51,889)	(70,860)	–	(21,426)	(146,790)
Effects of movement in foreign exchange rates	(1,592)	1,872	35,397	(516)	928	36,089
<b>Balance at 31 December 2016</b>	<b>211,982</b>	<b>1,258,294</b>	<b>954,004</b>	<b>40,857</b>	<b>221,191</b>	<b>2,686,328</b>
<b>Depreciation and impairment losses</b>						
Balance at 1 January 2016	81,429	977,174	458,337	–	201,011	1,717,951
Depreciation	6,806	108,901	39,964	–	16,695	172,366
Impairment loss (note 5.33)	2,193	36,153	78,714	–	420	117,480
Disposals	(2,305)	(50,617)	(70,854)	–	(20,855)	(144,631)
Effects of movement in foreign exchange rates	(53)	982	15,879	–	362	17,170
<b>Balance at 31 December 2016</b>	<b>88,070</b>	<b>1,072,593</b>	<b>522,040</b>	<b>–</b>	<b>197,633</b>	<b>1,880,336</b>
<b>Carrying amount</b>						
At 1 January 2016	132,196	290,740	490,079	38,865	34,705	986,585
At 31 December 2016	123,912	185,701	431,964	40,857	23,558	805,992

(EUR x 1,000)

2015

	Land and buildings	Plant and equipment	Vessels	Fixed assets under construction	Other	Total
<b>Cost</b>						
Balance at 1 January 2015	214,643	1,168,465	825,294	178,664	219,168	2,606,234
Acquisitions through business combinations	–	8,751	–	8,337	–	17,088
Investments in assets under construction	–	–	–	43,062	–	43,062
Other additions	1,995	74,493	27,757	–	13,165	117,410
Capitalised fixed assets under construction	2,351	13,777	171,495	(195,058)	7,435	–
Disposals	(9,049)	(45,384)	(84,364)	–	(21,085)	(159,882)
Effect of movements in foreign exchange rates	9,331	47,812	70,237	3,860	17,033	148,273
Transfers to assets classified as held for sale (note 5.46)	(5,646)	–	(62,003)	–	–	(67,649)
Balance at 31 December 2015	213,625	1,267,914	948,416	38,865	235,716	2,704,536
<b>Depreciation and impairment losses</b>						
Balance at 1 January 2015	73,992	829,362	327,491	2,269	175,096	1,408,210
Depreciation	7,792	140,656	40,982	(2,269)	25,325	212,486
Impairment loss (note 5.33)	307	19,507	91,534	–	4,384	115,732
Disposals	(2,517)	(43,648)	(22,612)	–	(18,883)	(87,660)
Effect of movements in foreign exchange rates	4,487	31,297	24,927	–	15,089	75,800
Transfers to assets classified as held for sale (note 5.46)	(2,632)	–	(3,985)	–	–	(6,617)
Balance at 31 December 2015	81,429	977,174	458,337	–	201,011	1,717,951
<b>Carrying amount</b>						
At 1 January 2015	140,651	339,103	497,803	176,395	44,072	1,198,024
At 31 December 2015	132,196	290,740	490,079	38,865	34,705	986,585

### 5.38.1 Impairment loss and subsequent reversal

The Group has assessed whether any impairment triggers exist for its property, plant and equipment. Reference is made to note 5.33 Impairments. The Group has not reversed any material impairment losses.

### 5.38.2 Fixed assets under construction

This involves mainly a vessel under construction. At 31 December 2016, capitalised borrowing costs related to the construction of vessels amounted to EUR 1.8 million (2015: EUR 2.0 million), with an interest rate of 4.5% (2015: 4.6%).

### 5.38.3 Leased fixed assets

In 2016, Fugro entered into a finance lease arrangement for a certain vessel (Hugin Explorer). This non-cash transaction amounting to EUR 23.9 million has been reported in above movement schedule of property, plant and equipment as part of other additions. Reference is made to note 5.50.4.

## 5.39 Intangible assets

(EUR x 1,000)

2016

	Goodwill	Multi-client data libraries	Software	Other	Total
<b>Cost</b>					
Balance at 1 January 2016	851,005	32,469	33,766	80,662	997,902
Purchase of intangible assets	–	–	1,910	4,142	6,052
Internally developed intangible assets (including Finder)	–	5,060	–	–	5,060
Disposals	–	–	(8,099)	(125)	(8,224)
Effect of movements in foreign exchange rates	2,032	1,142	400	2,223	5,797
Balance at 31 December 2016	853,037	38,671	27,977	86,902	1,006,587
<b>Amortisation and impairment losses</b>					
Balance at 1 January 2016	454,426	823	19,798	56,228	531,275
Amortisation	–	–	3,847	4,715	8,562
Impairment loss (note 5.33)	51,088	16,633	7,515	–	75,236
Disposals	–	–	(8,091)	(125)	(8,216)
Effect of movements in foreign exchange rates	3,602	668	543	1,420	6,233
Balance at 31 December 2016	509,116	18,124	23,612	62,238	613,090
<b>Carrying amount</b>					
At 1 January 2016	396,579	31,646	13,968	24,434	466,627
At 31 December 2016	343,921	20,547	4,365	24,664	393,497

(EUR x 1,000)

2015

	Goodwill	Multi-client data libraries	Software	Other	Total
<b>Cost</b>					
Balance at 1 January 2015	805,319	999,158	29,423	68,110	1,902,010
Acquisitions through business combinations	2,709	–	–	–	2,709
Purchase of intangible assets	–	–	3,984	6,424	10,408
Transfer	–	2,577	–	(2,577)	–
Internally developed intangible assets (including Finder)	–	22,835	732	–	23,567
Disposals	–	(1,042,198)	–	–	(1,042,198)
Effect of movements in foreign exchange rates	42,977	50,097	(373)	8,705	101,406
Balance at 31 December 2015	851,005	32,469	33,766	80,662	997,902
<b>Amortisation and impairment losses</b>					
Balance at 1 January 2015	229,828	851,707	19,691	38,350	1,139,576
Amortisation	–	17,590	4,331	5,461	27,382
Impairment loss (note 5.33)	207,072	37,670	279	2,565	247,586
Disposals	–	(953,516)	–	–	(953,516)
Effect of movements in foreign exchange rates	17,526	47,372	(4,503)	9,852	70,247
Balance at 31 December 2015	454,426	823	19,798	56,228	531,275
<b>Carrying amount</b>					
At 1 January 2015	575,491	147,451	9,732	29,760	762,434
At 31 December 2015	396,579	31,646	13,968	24,434	466,627

#### 5.39.1 Impairment loss and subsequent reversal

For the impairment loss in 2016 reference is made to note 5.33. The Group has not reversed any material impairment losses.

#### 5.39.2 Impairment testing for cash-generating units containing goodwill

For the purpose of impairment testing, goodwill is allocated to cash-generating units which represent the lowest level within the Group at which the goodwill is monitored for internal management purposes. This is not higher than the Group's operating segments as reported in note 5.26.

The following CGU's have significant goodwill allocated as at 31 December 2016:

(EUR x 1,000)	Growth rate first year	Growth rate long-term	Pre-tax discount rate	Division	Goodwill 2016
Offshore Survey	(2.4%)	2.0%	10.1%	Survey	119,646
Geospatial Services	(3.5%)	2.0%	10.1%	Survey	17,793
Offshore Geotechnical	(10.3%)	2.0%	10.1%	Geotechnical	63,919
Onshore Geotechnical Middle East & India/Asia Pacific	5.6%	2.0%	10.1%	Geotechnical	30,884
Onshore Geotechnical Americas	(2.4%)	2.0%	10.1%	Geotechnical	42,664
Seabed Geosolutions	8.6%	2.0%	12.8%	Geoscience	69,015
<b>Total</b>					<b>343,921</b>

The capitalised goodwill was allocated to the following CGU's as at 31 December 2015:

(EUR x 1,000)	Growth rate first year	Growth rate long-term	Pre-tax discount rate	Division	Goodwill 2015
				Subsea	
Subsea Services	(18%)	2.0%	10.0%	Services	16,977
Offshore Survey	(14%)	2.0%	10.0%	Survey	123,278
Geospatial Services	(6%)	2.0%	10.0%	Survey	17,918
Offshore Geotechnical	(13%)	2.0%	10.0%	Geotechnical	63,339
Onshore Geotechnical Europe/Africa	11%	2.0%	10.0%	Geotechnical	12,933
Onshore Geotechnical Middle East & India/Asia Pacific	(7%)	2.0%	10.0%	Geotechnical	33,172
Onshore Geotechnical Americas	(20%)	2.0%	10.0%	Geotechnical	41,166
Seabed Geosolutions	(25%)	2.0%	15.0%	Geoscience	87,796
<b>Total</b>					<b>396,579</b>

The recoverable amounts of the cash-generating units have been determined based on value in use calculations. Value in use was determined by discounting the expected future cash flows from the continuing use of the CGU's.

The calculation of the value in use was based on the following key assumptions:

- The period for the discounted cash flow calculations is indefinite. About 66% of the Group's activities relate to the oil and gas industry. The services are in principle of such a nature that our clients use us to help them to explore and extract hydrocarbon and mineral resources in addition to provide services related to development, production decommission of the infrastructure. Industry experts believe that these resources will continue to be available for many decades and their reports indicate periods between fifty and hundred years.
- Cash flows in the first year of the forecast are based on management's approved financial budget. For all CGU's, the 2017 projections factor in, amongst others, already signed contracts, expected win rates on contracts out for bid, expected crew and vessel utilisation rates and/or industry developments. For further considerations on revenue and cash flow projections for Seabed Geosolutions see below. Cash flows for the CGU's beyond one year are extrapolated using an estimated growth rate based on expected market developments, taking into account strategic plans of the company.
- Cash flows for the CGU's beyond five years are extrapolated using an estimated long-term growth rate of 2.0% (2015: 2.0%). For individual significant CGU's the growth rates are based on an analysis of the long-term market price trends in the oil and gas industry adjusted for actual experience.

- The pre-tax discount rate used to discount the pre-tax cash flows for impairment testing purposes is determined through an iterative calculation using the projected post-tax cash flows, expected tax rate for the respective cash generating units and a post-tax discount rate for the group. The pre-tax discount rate used to discount the pre-tax cash flows for impairment testing purposes ranges for the CGU's from 10.1% to 12.8% (2015: 10.0%-15.0%).

The recoverable amounts for offshore survey, geospatial services, onshore geotechnical (Middle East & India/Asia Pacific and Americas) and offshore geotechnical exceed the carrying amounts of the CGU's with significant headroom.

The Seabed business mainly focuses on the development and production cycle of oil and gas fields. This business is considered as more volatile and less predictable than the other Fugro businesses because of its lumpy nature and related large projects.

In this respect, significant changes in the assumptions applied in the value in use calculation for Seabed Geosolutions, reflecting changed circumstances, are reasonably possible and could result in an impairment. For half-year Fugro Group reporting purposes, Seabed tested its goodwill for impairment, which outcome revealed an impairment of EUR 20.5 million as the CGU's recoverable amount was below the carrying amount (refer to note 5.33). As at 31 December 2016, an impairment test for Seabed was performed as well and the recoverable amount exceeds the carrying amount of the CGU with sufficient headroom. This is highly related to higher expected project opportunities from the ocean bottom seismic technology. It is therefore also reasonably assumed that as from 2019 onward, Seabed would get back to more standard and normalized asset utilization level. As a result, the assumptions for the impairment test at year-end 2016, contain significant forecasted revenue and cash flow growth for 2019 and after (based on EBITDAs) with a post-tax discount rate of 10.9% (pre-tax rate of 12.8%). If and when these underlying assumptions would give raise to changes in future, this might have significant impact on Seabed's recoverable amount following the outcome of value in use calculation. If the post-tax discount rate would be 11.9%, assuming all other assumptions used remain the same, the recoverable amount would be equal to the carrying amount.

#### 5.40 Investments in equity-accounted investees

The carrying amount of the equity-accounted investees which consist mainly of joint ventures amounts to EUR 20,068 thousand as at 31 December 2016 (31 December 2015: EUR 29,577 thousand). The Group's share in realised profit (or loss) in joint ventures amounted to a net loss of EUR 2,223 thousand in 2016 (2015: EUR 7,810 thousand gain). In 2016, the Group received dividends of EUR 5,580 thousand (2015: EUR 9,608 thousand) from its investments in equity-accounted investees. None of the group's equity-accounted investees are publicly listed entities and consequently they do not have published price quotations.

The following information is disclosed in aggregate as the joint ventures are not considered as individually material. Not adjusted for the percentage ownership held by the Group, the equity accounted investees have assets of EUR 86 million (2015: EUR 110 million), liabilities of EUR 46 million (2015: EUR 51 million), revenues of EUR 51 million (2015: EUR 91 million) and a net loss of EUR 4 million (2015: EUR 16 million gain). The total comprehensive result generated by the joint ventures is similar to the net loss.

The group has no significant commitments to its joint ventures.

#### 5.41 Other investments

The Group holds the following other investments:

(EUR x 1,000)	2016	2015
Other investments in equity instruments	1,095	1,095
Long-term loans	9,180	83,922
Deposits	11,971	4,836
Advance lease payment	9,074	5,514
Available-for-sale financial assets	372	328
Other long-term receivables	2,058	2,729
	33,750	98,424

In 2016, the Group received dividends of EUR 2 thousand (2015: EUR 873 thousand) from its other investments.

### 5.41.1 Other investments in equity instruments

The Group has the following other investments in equity instruments accounted for at cost:

#### **Name of the company**

Cash generating unit	Country	Ownership	Assets	Liabilities	Equity	Revenue	Profit/(loss)
La Coste & Romberg-Scintrex	USA	11%	17,289	6,333	10,956	10,743	(1,426)

The Group's other investments in equity instruments are not listed.

### 5.41.2 Long-term loans

In May 2016, Fugro sold its CGG senior secured term loan of USD 90 million. The proceeds amounted to around EUR 63 million (USD 71 million) have been fully applied to debt reduction and have been reported in the consolidated statement of cash flows as 'Proceeds from sale of interests in business, net of cash disposed of'. As a result, a transaction loss for the amount of EUR 12 million is included in other expenses as write-off receivables in the consolidated statement of comprehensive income. The transaction loss forms part of the reportable segment loss of the Geoscience division.

Fugro has a loan due from Wavewalker B.V. for the principal amount of EUR 8.3 million (31 December 2015: EUR 8.3 million). The loan bears annual interest of 5%. The loan has to be repaid, including interest, before 30 April 2027.

### 5.41.3 Available-for-sale financial assets

The fair value of the available for sale financial assets is based on quoted prices of these companies on the Australian Securities Exchange (ASX).

## 5.42 Deferred tax assets and liabilities

### 5.42.1 Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following items:

(EUR x 1,000)	Assets		Liabilities		Net	
	2016	2015	2016	2015	2016	2015
Property, plant and equipment	26,107	18,994	(136)	(12,205)	25,971	6,789
Intangible assets	2,951	2,949	(1,272)	(12,854)	1,679	(9,905)
Loans and borrowings	–	–	(997)	(4,288)	(997)	(4,288)
Subordinated unsecured convertible bonds	–	–	(8,503)	–	(8,503)	–
Employee benefits	15,415	18,638	–	–	15,415	18,638
Provisions for other liabilities and charges	3,752	5,017	(139)	(37)	3,613	4,980
Tax loss carry-forwards	39,222	60,876	–	–	39,222	60,876
Other items	7,744	9,531	(5,192)	(3,986)	2,552	5,545
Deferred tax assets/(liabilities)	95,191	116,005	(16,239)	(33,370)	78,952	82,635
Set off of tax components	(14,589)	(27,619)	14,589	27,619	–	–
Net deferred tax asset/(liability)	80,602	88,386	(1,650)	(5,751)	78,952	82,635

The recognised deferred tax assets are dependent on future taxable profits in excess of profits arising from the reversal of existing taxable temporary differences. The recognised

amounts relate to tax groups that are profitable or are expected to be profitable in the foreseeable future.

**Movement in temporary differences during the year**

(EUR x 1,000)

2016

	Balance 1 January 2016	Recognised in profit or loss	Recognised in other comprehensive income	Recognised directly in equity	Balance 31 December 2016
Property, plant and equipment	6,789	19,182	–	–	25,971
Intangible assets	(9,905)	11,584	–	–	1,679
Loans and borrowings	(4,288)	1,832	1,459	–	(997)
Subordinated unsecured convertible bonds	–	319	–	(8,822)	(8,503)
Employee benefits	18,638	(3,836)	613	–	15,415
Provisions for other liabilities and charges	4,980	(1,367)	–	–	3,613
Tax loss carry-forward	60,876	(21,654)	–	–	39,222
Exchange differences	–	1,431	(1,431)	–	–
Other items	5,545	(2,993)	–	–	2,552
<b>Total</b>	<b>82,635</b>	<b>4,498</b>	<b>641</b>	<b>(8,822)</b>	<b>78,952</b>

(EUR x 1,000)

2015

	Balance 1 January 2015	Acquired in business combinations	Recognised in profit or loss	Recognised in other comprehensive income	Balance 31 December 2015
Property, plant and equipment	(4,103)	6	10,886	–	6,789
Intangible assets	5,667	6,244	(21,816)	–	(9,905)
Loans and borrowings	(193)	–	(1,531)	(2,564)	(4,288)
Employee benefits	26,556	–	(4,145)	(3,773)	18,638
Provisions for other liabilities and charges	11,100	(954)	(5,166)	–	4,980
Tax loss carry-forward	56,852	–	4,024	–	60,876
Exchange differences	454	2	(3,364)	2,908	–
Other items	5,039	690	(184)	–	5,545
<b>Total</b>	<b>101,372</b>	<b>5,988</b>	<b>(21,296)</b>	<b>(3,429)</b>	<b>82,635</b>

#### 5.42.2 Unrecognised deferred tax assets and liabilities

Deferred tax has not been recognised in respect of the following items:

##### **Unrecognised deferred tax assets**

(EUR x 1,000)	2016	2015
Tax credits	2,170	1,414
Deductible temporary differences	28,823	26,396
Tax losses	176,010	108,480
<b>Total</b>	<b>207,003</b>	<b>136,290</b>

Unrecognised deferred tax assets relate to tax units previously suffering losses for which it is currently not probable that future taxable profit will be available to offset these losses, taking into account fiscal restrictions on the utilisation of loss compensation.

The deductible temporary differences and capital allowances do not expire under current tax legislation. Deferred tax assets have not been recognised in respect of these items, because it is not probable that future taxable profit will be available against which the Group can utilise these benefits. Unrecognised tax assets changed over the period as follows:

##### **Unrecognised deferred tax assets**

(EUR x 1,000)	2016	2015
As of 1 January	136,290	78,677
Movements during the period:		
Additional unrecognised losses and temporary differences	102,512	69,744
Recognition of previously unrecognised tax losses and temporary differences (profit or loss)	(22,738)	(13,988)
Recognition of previously unrecognised tax losses and temporary differences (equity)	465	–
Effect of change in tax rates	(316)	–
Exchange rate differences	9,775	(144)
Change from reassessment	(18,985)	5,542
Acquired from business acquisitions	–	(3,541)
<b>As of 31 December</b>	<b>207,003</b>	<b>136,290</b>

Of the total recognised and unrecognised deferred tax assets in respect of tax losses carried forward an amount of EUR 14,554 thousand expires in periods varying from two to

five years. An amount of EUR 10,194 thousand expires between five and ten years, an amount of EUR 74,384 thousand expires between ten and twenty years and an amount of EUR 116,100 thousand can be offset indefinitely. Based on forecasted results per tax jurisdiction, management considered it probable that sufficient future taxable profit will be generated to utilise recognised deferred tax assets depending on taxable profits in excess of the profits arising from the reversal of existing temporary differences.

##### **Unrecognised deferred tax liabilities**

At 31 December 2016, no deferred tax liabilities relating to investments in subsidiaries have been recognised (2015: EUR nil), because Fugro controls whether the liability will be incurred and it is satisfied that it will not be incurred in the foreseeable future due to permanent reinvestments. The aggregate amount of temporary differences for which these deferred tax liabilities have not been recognised is EUR nil (2015: EUR nil).

In some of the countries where the Group operates, local tax laws provide that gains on disposal of certain assets are tax exempt, provided that the gains are not distributed. The company does not intend to distribute such gains; therefore no tax liabilities are recognised in this respect.

#### 5.43 Inventories

In 2016 EUR 48,275 thousand (2015: EUR 67,102 thousand) of other inventories was recognised as an expense and EUR 96 thousand (2015: EUR 168 thousand) was written down. The write down is included in third party costs.

#### 5.44 Trade and other receivables

(EUR x 1,000)	2016	2015
Unbilled revenue on (completed) projects	151,991	286,928
Trade receivables	308,810	338,823
Non-trade receivables	85,425	124,769
Current portion vendor loan	–	5,382
	<b>546,226</b>	<b>755,902</b>

Unbilled revenue on (completed) projects represents the gross amount expected to be collected from customers for contract work performed to date. It is measured at costs incurred plus profits recognised to date less progress billings and recognised losses. The contracts in progress for which this amount exceeds progress billings are presented as unbilled revenue on (completed) projects.

The contracts in progress for which progress billing exceeds costs incurred plus profits recognised to date less progress billings and recognised losses are presented as advance instalments to work in progress. At 31 December 2016, trade receivables include retentions of EUR 13.5 million (2015: EUR 22.2 million) relating to completed projects.

Trade receivables are shown net of impairment losses amounting to EUR 39.5 million (2015: EUR 29.2 million) arising from identified doubtful receivables from customers. Trade receivables were impaired taking into account the financial position of the debtors, the days outstanding and expected outcome of negotiations and legal proceedings against debtors. Unbilled revenue on (completed) projects does not include impairment losses (2015: EUR nil).

Non-trade receivables include VAT receivables, prepayments for insurance and claims, deposits, current portion of long term receivables and sundry receivables.

#### 5.45 Cash and cash equivalents

(EUR x 1,000)	2016	2015
Cash and cash equivalents	248,488	304,993
Bank overdraft	(4,043)	(21,908)
Cash and cash equivalents in the consolidated statement of cash flows	244,445	283,085

#### 5.46 Assets classified as held for sale

The assets held for sale relate to a building which sale is going to take place in 2017. Last year, it was already classified as held for sale as the sale was expected to occur in 2016. As at 31 December 2015, the assets classified as held for sale also included a vessel, which delivery took place early 2016.

#### 5.47 Total equity

##### 5.47.1 Share capital

(In thousands of shares)	Ordinary shares	
	2016	2015
On issue and fully paid at 1 January	84,572	84,572
Repurchased for option programme at year-end	(3,628)	(3,628)
On issue and fully paid at 31 December – entitled to dividend	80,944	80,944

On 31 December 2016, the authorised share capital amounts to EUR 16 million (2015: EUR 16 million) divided into 96 million ordinary shares (2015: 96 million), each of EUR 0.05 nominal value and 224 million (2015: 224 million) various types of preference shares, each of EUR 0.05 nominal value.

On 31 December 2016, the issued share capital amounted to EUR 4,228,626.25. As of this date, 81% of the ordinary shares (84,572,525 shares) were issued. No preference shares have been issued. In 2016, no certificates of shares were issued by the Foundation Trust Office (2015: nil).

The holders of ordinary shares are entitled to dividends as approved by the Annual General Meeting from time to time. Furthermore, they are entitled to one vote per share in Fugro's shareholders meeting. The holders of certificates of shares are entitled to the same dividend but they are not entitled to voting rights. Under certain conditions the holder of certificates can exchange his/her certificates into ordinary shares and vice versa.

No dividend is (to be) paid for 2016 (2015: EUR nil).

##### 5.47.2 Share premium

The share premium can be considered as paid in capital.

##### 5.47.3 Translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations, as well as from the translation of liabilities that hedge the company's net investment in a foreign subsidiary.

##### 5.47.4 Hedging reserve

The hedging reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions that have not yet occurred.

##### 5.47.5 Reserve for own shares

Fugro purchases and sells own shares in relation to the share option scheme. The cost of these shares held by the Group is recorded as a reserve within shareholder's equity. Fugro has purchased no certificates of own shares to cover its option scheme in 2016 (2015: nil). No shares were sold in 2016 (2015: nil). As per 31 December 2016, Fugro holds 3,628,347 own certificates of shares (2015: 3,628,347) with respect to the option scheme. This was 4.3% of the issued capital (2015: 4.3%).

#### 5.47.6 Subordinated unsecured convertible bonds-equity component

The equity component of the Bonds as presented in the consolidated statement of financial position can be summarised as follows:

(EUR x 1,000)	2016
Subordinated unsecured convertible bonds- equity component	35,286
Tax on subordinated unsecured convertible bonds	(8,822)
Initial direct cost attributable to equity component	(748)
Issuance of subordinated unsecured convertible bonds, net of tax	25,716

Reference is made to 5.50.3.

#### 5.47.7 Unappropriated result

No dividend is proposed to be paid-out for 2016.

#### 5.48 Basic and diluted earnings per share

The basic and diluted earnings per share for 2016 amount to EUR 3.82 negative (2015: EUR 4.60 negative).

The calculation of basic earnings per share at 31 December 2016, is based on the loss from operations attributable to owners of the company consisting of a loss of EUR 300,983 thousand (2015: EUR 358,689 thousand loss) that is adjusted for the gain of the non-controlling interest of EUR 7,951 thousand (2015: EUR 13,833 thousand loss), and the weighted average number of shares outstanding at 31 December 2016 of 80,944 thousand (2015: 80,944 thousand). The weighted average number of shares amounts to 80,944 thousand as at 31 December 2016 (31 December 2015: 80,944 thousand). The share options on issue and the subordinated unsecured convertible bonds could have an impact on the weighted average number of (diluted) ordinary shares. However, their conversion to (certificates of) ordinary shares would not decrease earnings per share or increase loss per share and as such they have not been treated as dilutive.

#### 5.49 Non-controlling interest

##### 5.49.1 Subsidiaries with non-controlling interest

The total non-controlling interest for the period is EUR 55,250 thousand (surplus), of which EUR 41,187 thousand (surplus) is for Seabed Geosolutions B.V. and EUR 13,107 thousand (surplus) is attributable to Fugro-Suhaimi Ltd. The individual non-controlling interest of other subsidiaries is considered as insignificant.

##### 5.49.2 Summarised financial information on subsidiaries with material non-controlling interests

Set out below are the summarised financial information for the subsidiaries Seabed Geosolutions B.V. (Seabed) and Fugro-Suhaimi Ltd (Suhaimi) that have material non-controlling interests to the Group. The non-controlling interest in Seabed and Fugro-Suhaimi is 40% and 50% respectively, which also represent 40% respectively 50% of the companies' voting rights in the general meeting of shareholders.

Fugro controls the operations and management of Seabed and Suhaimi as it directs the relevant revenue generating activities of both companies. Fugro also determines the strategy, policies and day-to-day business of these activities; therefore both subsidiaries, with a significant non-controlling interest, are fully incorporated into these consolidated financial statements. The shareholders of these companies have certain customary rights on certain key decisions, such as decisions on the declaration and payment of dividend and any significant change to the scope of the business, which rights are considered as protective in nature and normally go beyond the normal scope of business. Such decisions must be taken by a majority of 75% of the votes cast in both entities, but do not affect Fugro's ability to control the activities of both companies.

**Summarised balance sheet**

(EUR x 1,000)

	Seabed		Suhaimi	
	As at 31 December		As at 31 December	
	2016	2015	2016	2015
<b>Current</b>				
Assets	90,709	197,294	33,286	36,753
Liabilities	(70,479)	(145,416)	(17,322)	(17,696)
Total current net assets	20,230	51,878	15,964	19,057
<b>Non-current</b>				
Assets	94,123	114,330	15,380	16,055
Liabilities	(11,386)	(114,293)	(5,131)	(4,368)
Total non-current net assets	82,737	37	10,249	11,687
Net assets	102,967	51,915	26,213	30,744
NCI percentage	40%	40%	50%	50%
Carrying amount of NCI	41,187	20,766	13,107	15,372

**Summarised income statement**

(EUR x 1,000)

	Seabed		Suhaimi	
	For period ended 31 December		For period ended 31 December	
	2016	2015	2016	2015
Revenue	172,978	343,815	30,435	39,772
Profit/(loss) before income tax	693	28,303	12,482	15,812
Income tax (expense)/income	3,883	(11,641)	–	–
Post-tax profit/(loss) from continuing operations	4,576	16,662	12,482	15,812
Post-tax profit from discontinued operations	–	–	–	–
Total comprehensive income/(loss)	4,576	16,662	12,482	15,812
Total comprehensive income/(loss) allocated to non-controlling interests	1,830	6,665	6,241	7,906
Dividends paid to non-controlling interests	–	–	9,972	8,868

**Summarised cash flows**

(EUR x 1,000)

	Seabed		Suhaimi	
	For period ended 31 December		For period ended 31 December	
	2016	2015	2016	2015
Net cash generated from operating activities	63,727	(17,317)	14,594	30,540*
Net cash used in investing activities	(12,526)	(37,002)	(901)	(2,047)
Net cash used in financing activities	(48,937)	80,298	(18,061)	(16,898)*
Net increase in cash and cash equivalents and bank overdrafts	2,264	25,979	(4,368)	11,595
Cash, cash equivalents and bank overdrafts at beginning of year	46,263	17,902	15,174	3,281
Exchange gains/(losses) on cash and cash equivalents	1,546	2,382	450	298
Cash and cash equivalents and bank overdrafts at end of year	50,073	46,263	11,256	15,174

\* An amount of EUR 8.4 million (negative) has been reclassified from net cash generated from operating activities to net cash used in financing activities. Last year, the net cash generated from operating activities and net cash used in financing activities amounted to EUR 22,091 thousand and EUR (8,449) thousand respectively.

The information above are the amounts before intercompany eliminations.

**5.50 Loans and borrowings**

This note provides information about the contractual terms of the Group's interest-bearing loans and borrowings, which are measured at amortised cost. For more information about the Group's exposure to liquidity risk, currency risk and interest rate risk and, refer to note 5.56, 5.57 and 5.58.

(EUR x 1,000)	2016	2015
Bank loans	243,537	183,337
Private placement loans 2011 in USD	133,058	478,651
Private placement loans 2011 in EUR	17,171	23,290
Private placement loans 2011 in GBP	14,108	66,235
Private placement loans 2002 in USD	14,862	29,980
Subordinated unsecured convertible bonds in EUR	153,900	–
Finance lease liabilities	18,336	–
Revolving credit facilities CGG	–	34,960
Other loans and long-term borrowings	537	1,351
<b>Subtotal</b>	<b>595,509</b>	<b>817,804</b>
Less: current portion of loans and borrowings	22,006	89,722
	<b>573,503</b>	<b>728,082</b>

The bank loans and private placement loans contain covenants. The Group is in compliance with these covenants as at 31 December 2016. Reference is made to 5.50.6.

As at 31 December 2016, Fugro has drawn a total amount of EUR 245 million under the committed multicurrency revolving facilities (31 December 2015: EUR 185 million).

### Terms and debt repayment schedule

Terms and conditions of outstanding loans were as follows:

(EUR x 1,000)				2016	2015		
	Currency	Nominal interest rate	Year of maturity	Face value	Carrying value	Face value	Carrying value
Bank loans	EUR	EURIBOR + 140 bps	2020	245,000	243,537	185,000	183,337
Private placement loans:							
320 million USD bonds 2011	USD	5.05%	2018	53,411	52,193	201,533	196,260
330 million USD bonds 2011	USD	5.78%	2021	56,381	53,998	214,746	209,282
100 million USD bonds 2011	USD	5.88%	2023	28,204	26,867	74,841	73,109
27.5 million GBP bonds 2011	GBP	5.06%	2018	5,521	5,380	25,557	24,889
40 million GBP bonds 2011	GBP	5.82%	2021	9,170	8,728	42,451	41,346
35 million EUR bonds 2011	EUR	5.81%	2021	18,212	17,171	23,917	23,290
37 million USD bonds 2002	USD	8.10%	2017	14,987	14,862	30,605	29,980
190 million EUR Subordinated unsecured convertible bonds 2016	EUR	4.00%	2021	190,000	153,900	–	–
Finance lease liabilities	USD	5.55%	2019	19,784	18,336	–	–
Revolving credit facilities CGG	USD	LIBOR + 500 bps		–	–	34,960	34,960
Mortgage and other loans and long-term borrowings	Variable	1.0% – 11.5%	2017–2024	537	537	1,351	1,351
				641,207	595,509	834,961	817,804

#### 5.50.1 Bank loans

On 3 December 2015, Fugro has reached agreement with seven banks for the refinancing of its multicurrency revolving credit facility. The 5-year multicurrency revolving credit facility of EUR 500 million has replaced the previous loan facility of EUR 775 million. Rabobank and ING Bank N.V. provided EUR 127.5 million each, HSBC Bank Plc. provided EUR 75 million, Barclays Bank plc and ABN AMRO Bank N.V. provided EUR 50 million each, Credit Suisse provided EUR 40 million and BNP Paribas S.A./N.V. provided EUR 30 million. The interest is LIBOR, or in relation to any loan in EUR, EURIBOR plus a margin based on the consolidated net debt/adjusted EBITDA at each period of twelve months ending on the last day of the company's financial quarters. At 31 December 2016, a total amount of EUR 245 million of the multicurrency revolving credit facility was in use and was denominated in euro (31 December 2015: EUR 185 million).

The total transaction costs amounts to EUR 0.2 million (31 December 2015: EUR 5.0 million) of which EUR 0.1 million relate to the drawn part of the bank loans. These are

included in the carrying amount of the bank loans for the drawn facility and recorded as other current assets for the undrawn portion and are amortised over the term. An amount of EUR 0.2 million was paid in 2016.

#### 5.50.2 Private placement loans

In May 2002 long-term loans were concluded with twenty American and two British institutional investors. As per 8 May 2007, the Group terminated a cross currency swap (foreign exchange contract related to the US Dollar exposure of the loans). The cumulative exchange differences as per termination date have been added to equity (Hedging reserve) and are being charged to profit or loss during the remaining term of the loan. This resulted during 2016 in an interest expense of EUR 288 thousand (2015: EUR 477 thousand).

In August 2011, long-term loans were concluded with twenty-five American and two British institutional investors for a total amount equivalent to USD 909 million, with maturities of 7, 10 and 12 years and fixed interest rates.

At reporting date all the private placement loans are valued at the closing rate. The currency exchange difference on the loans between the initial exchange rate and the exchange rate at the reporting date is accounted for in the translation reserve. For the year under review the currency exchange differences on the private placement loans amount to EUR 5,079 thousand gain (2015: EUR 81,385 thousand loss).

In 2016, a total amount of EUR 422 million has been repaid on the private placement loans following the sale of two Geotechnical vessels, the sale of senior secured term loan and the net proceeds of the issuance of the unsecured subordinated convertible bonds. The repayments are considered as non-substantial modifications to the (existing) loans and did not give raise to a change in accounting treatment on the loans accordingly. Transaction costs have been charged following the refinancing and temporary adjustment of the covenant and the related definitions last year. The transaction costs amount to EUR 17.5 million (31 December 2015: EUR 12.4 million) and has been paid in 2016. These transactions costs are included in the carrying amount of the private placement loans and are amortised over the remaining terms.

### 5.50.3 Subordinated unsecured convertible bonds

On 26 October 2016, Fugro has issued 1,900 subordinated unsecured convertible bonds (the Bonds) at a par value of EUR 190 million, which are publicly traded on Frankfurt Stock Exchange. The Bonds were issued at 100% par value. A coupon of 4.0% per annum will be paid semi-annually in arrear in equal instalments on 26 April and 26 October in each year. Unless previously redeemed, converted or purchased and cancelled, the Bonds will be redeemed at their principal amount on or around 26 October 2021.

Upon exercise of their conversion rights, the Bonds will be convertible into certificates (certificaten van aandelen) at a conversion rate of 5,144 for each bond held, representing ordinary shares in the capital of Fugro (the "certificates"). The certificates underlying the Bonds correspond to approximately 12% of the company's issued share capital. Fugro will have the option to convert all but not some of the outstanding Bonds into certificates at the then prevailing conversion price at any time from 18 November 2019, if the value of the certificates underlying a Bond exceeds EUR 150 thousand for a specified period of time.

The Bonds are presented in the consolidated statement of financial position and consolidated statement of comprehensive income as follows:

(EUR x 1,000)	2016
Face value of bonds issued on 26 October 2016	190,000
Subordinated unsecured convertible bonds- equity component	35,286
Liability component	154,714
Initial direct cost attributable to liability component	(3,283)
Interest expense*	2,469
Interest paid	–
Non-current liability	153,900

\* Interest expense is calculated by applying the effective interest rate of 9.2% to the liability component.

The initial fair value of the liability portion of the subordinated unsecured convertible bonds was determined using a market interest rate for an equivalent non-convertible bond at the issue date. The liability is subsequently recognised on an amortised cost basis until extinguished on conversion or maturity of the bonds. The remainder of the proceeds is allocated to the conversion option and recognised in shareholders' equity, net of income tax, and not subsequently remeasured. The total transaction costs attributable to the issuance of the subordinated unsecured convertible bonds amounted to EUR 4,031 thousand of which EUR 748 thousand has been allocated to the equity component of the subordinated unsecured convertible bonds.

### 5.50.4 Finance lease liabilities

Lease liabilities are effectively secured as the rights to the leased asset revert to the lessor in the event of default. On 1 July 2016, Fugro entered into a finance lease arrangement in connection with the purchase of a chartered vessel with a lease term of three years for the amount of EUR 23,850 thousand. At expiry of the charter period, Fugro will acquire and ownership will be transferred to Fugro by payment of the remaining purchase price.

Commitments in relation to finance leases and the present value of these liabilities are as follows:

(EUR x 1,000)	2016
<b>Gross finance lease liabilities- minimum lease payments</b>	
No later than one year	7,108
Later than one year and no later than 3 years	12,676
	19,784
<b>Future finance charges on finance lease liabilities</b>	
Present value of finance lease liabilities	1,366
Of which:	
Non-current *	11,228
Current	7,108

\* Are due later than 1 years and no later than three years.

#### 5.50.5 Revolving credit facilities

In 2016, the revolving credit facilities that were granted by CGG to Seabed Geosolutions B.V. have been partially repaid for an amount of approximately EUR 17 million (USD 19 million). These facilities formed part of four separate facilities in which Seabed has entered into with Fugro and CGG on a 60/40 percent basis. On 31 August 2016, CGG made a capital contribution on the shares of Seabed for an amount of USD 19 million by converting part of the revolving credit facilities to share premium, resulting in a closing balance of nil (31 December 2016: EUR 35 million). The facility carried an interest of LIBOR plus 500 bps.

#### 5.50.6 Covenant requirements

The multicurrency revolving credit facility as well as the US private placement loans contain certain covenant requirements.

Last year, Fugro has reached agreement with its lenders on the refinancing of the multicurrency revolving credit facility, and has aligned the terms and conditions of the private placement loans with new multicurrency revolving credit facility. Upon the refinancing, the margin fixed charge coverage (fixed charge cover) has been adjusted as shown in the table below:

Relevant period ended or ending	Net leverage		Fixed charge cover	
	Covenant	Original covenant	Adjusted covenant	
March 2016	< 3.00x	> 2.25x	> 1.80x	
June 2016 onwards	< 3.00x	> 2.50x	> 1.80x	
December 2017	< 3.00x	> 2.50x	> 1.80x	
March, June, September and December 2018	< 3.00x	> 2.50x	> 2.00x	
March 2019 onwards	< 3.00x	> 2.50x	> 2.50x	

The covenant requirements consist of the following:

- Equity > EUR 200 million (only applicable to private placement loans 2002).
- Net leverage (EBITDA coverage): Net financial indebtedness (loans and borrowings less net cash) plus outstanding guarantees in excess of EUR 250 million / Adjusted consolidated EBITDA.
- Margin fixed charge cover(age): Adjusted consolidated EBITDA plus operating lease expense / net interest expense plus operating lease expense.
- Solvency: Consolidated net worth / Balance sheet total > 1.0: 3.0.
- Consolidated financial indebtedness of the subsidiaries < 10% for the private placement loans of the consolidated balance sheet total.
- Consolidated financial indebtedness of the subsidiaries, excluding Seabed, < EUR 55 million for the bank loans.
- Declared dividend < 60% of the profit of the group for such financial year (dividend payment in 2017 (over the year 2016) is conditional on covenant compliance at original levels).

The covenant requirements are applicable at each period of twelve months ending on the last day of the company's financial quarters.

The Adjusted consolidated EBITDA for purpose of the covenant calculations comprises the income (or loss) from operations before interest expense, depreciation, amortisation and taxes, but not including any exceptional items as listed below, and are further adjusted by:

- Including pre-acquisition income or (loss) from businesses acquired.
- Excluding the income or (loss) from businesses disposed of, for the period for which they formed part of the Group.

Exceptional items comprise:

- Onerous contract charges (note 5.30).
- Restructuring costs (note 5.34).
- Write-off receivables (note 5.34).
- Certain adviser and other fees (to the extent not capitalised as transaction costs on loans and borrowings (note 5.34).
- Excluding the income or (loss) on disposal of property, plant and equipment (note 5.31 and 5.34).

For purpose of the calculation of the net interest expense, any amortised transaction costs directly attributable to covenant amendments (advisor and other fees) as well as interest expenses related to the subordinated unsecured convertible bonds are not included. For purpose of the calculation of the net financial indebtedness, the amount of the subordinated unsecured convertible bonds is not included.

The operating lease expense comprises operational lease expense under third party costs as well as the property lease expense under other expenses. For covenant requirements (a) part of the operational lease expense is excluded for amounts that relate to maintenance, repairs, taxes, insurance, assessments or other similar charges, and additional rentals (in excess of fixed minimums) based on gross receipts. Amounts required to be paid pursuant to (i) any lease or agreement with a term of less than one year or (ii) any project-based lease or agreement with a term that begins at the start of a specific project and ends upon completion of such project are reported as costs of other rentals under third party costs, are not included for covenant requirements to an amount equal or less than EUR 175 million as from 2015. Total operational lease expense relating to (a) amounts to EUR 31,672 thousand (2015: EUR 35,133 thousand) and is therefore excluded from operating lease expense. The property lease expense for the amount of EUR 24,328 thousand (2015: EUR 27,576 thousand) is therefore included in the operating lease expense as from 2016. Total operating lease expense for covenant requirements therefore amounts to EUR 84,416 thousand in 2016 (2015: EUR 91,913 thousand).

As from 31 December 2016, an aggregate maximum amount of EUR 35 million is applied in respect of exceptional items excluded from Adjusted consolidated EBITDA, excluding any gains from exceptional items unless such gains represent an adjustment or reversal relating to a loss previously counted as an exceptional item. Some of the covenant requirements such as the margin fixed charge

cover(age), solvency and net leverage (EBITDA coverage) are incorporated in certain sale and lease back arrangements.

As can be concluded from the table below, Fugro complies with all (adjusted) covenant requirements and also complied with all covenant requirements during 2016. In case Fugro would not comply with the (adjusted) covenant requirements, both the private placement loans and multicurrency revolving credit facility will become immediately due.

(EUR x 1,000)	2016
Adjusted consolidated EBITDA	184,605
(5.30) Operating lease expense	84,416
(5.35) Net interest expense	29,390
Margin fixed charge coverage > 1.8	2.36
Net consolidated financial indebtedness (loans and borrowings less net cash)	198,386
Bank guarantees exceeding cap of EUR 250 million	–
Total	198,386
EBITDA coverage < 3.0	1.07
Consolidated net worth	934,859
Balance sheet total	2,174,449
Solvency > 33.33%	43.0%
Margin Indebtedness subsidiaries < 10%	2.4%
Financial indebtedness < EUR 55 million	23,361
Dividend < 60% of the profit	–

The table below summarises the covenant requirements of 2015:

(EUR x 1,000)	2015
Adjusted consolidated EBITDA	339,733
(5.30) Operating lease expense	91,913
(5.35) Net interest expense	47,963
Margin fixed charge coverage > 1.8	3.09
Net consolidated financial indebtedness (loans and borrowings less net cash)	534,893
Bank guarantees exceeding cap of EUR 250 million	–
Total	534,893
EBITDA coverage < 3.0	1.57
Consolidated net worth	1,197,655
Balance sheet total	2,841,184
Solvency > 33.33%	42.2%
Margin Indebtedness subsidiaries < 10%	2.8%
Financial indebtedness < EUR 55 million	23,259
Dividend < 60% of the profit	–

In October 2016, following the issuing of the subordinated unsecured convertible bonds, two covenant requirements have been introduced comprising total net debt (that includes the subordinated unsecured convertible bonds) is at all times less than or equal to EUR 475 million and the consolidated EBITDA for each relevant period is not less than or equal to EUR 105 million.

#### 5.50.7 Mortgage and other loans and long-term borrowings

The interest rate on mortgage loans and other loans and long-term borrowings over one year amounts to 1.0%-11.5% (2015: 1.3%-13.6%).

#### 5.50.8 Change of control provisions

A change of control of Fugro could result in early repayment of the bank loans (note 5.50.1), the private placement loans (note 5.50.2) and the unsecured subordinated convertible bond (note 5.50.3). An amount of EUR 245 million was drawn from the bank facilities as at 31 December 2016 (31 December 2015: EUR 185 million). The sale and lease back arrangement contains certain change of control clauses. Reference is made to note 5.29.

#### 5.51 Employee benefits

(EUR x 1,000)	2016	2015
Present value of funded obligations	441,449	431,190
Fair value of plan assets	(359,565)	(354,001)
Recognised net liability for defined benefit obligations	81,884	77,189
Liability for long-service leave	13,593	14,213
Total employee benefit liabilities	95,477	91,402

The Group makes contributions to a number of pension plans, both defined benefit plans as well as defined contribution plans, that provide pension benefits for employees upon retirement in a number of countries. The retirement age is in line with the provisions in the different plans. The most important plans relate to plans in the Netherlands, United Kingdom and the United States.

Details of these plans are as follows:

- In the Netherlands the Group provides a pension plan based on average salary. This plan qualifies as a defined benefit scheme. The pension entitlements from this plan are insured with an insurance company that guarantees the accrued pension entitlements. The group pays additional amounts to fund (part of) the indexation for active participants. For the deferred pensioners, the scheme includes a (conditional) indexation of pension benefits as far as the return on the separated investments exceeds the unwinding of interest.
- In the United Kingdom (UK) the Group operates two defined benefit pension schemes. For Fugro Holdings, the company operates a final salary defined benefit pension scheme. The scheme is an HMRC registered pension schemes and is subject to standard UK pensions and tax law. The Robertson Research International Group Pension Scheme is a funded, defined benefit pension plan. The pension schemes have been closed in previous years for new participants, but include the on-going obligations to their members (both former and present employees). The pension schemes assets are held in separate Trustee-administered funds. The schemes includes indexation in line with RPI.

- In the United States of America the Group operates a 401K plan for its employees. The Group contributes towards the deposits of its employees in accordance with agreed rules and taking into account the regulations of the IRS, the US tax authority. This plan qualifies as a defined contribution plan.

Plan assets consist of the following:

(EUR x 1,000)	2016	2015
Equity securities	72,405	105,223
Government bonds	4,628	158,053
Corporate bonds	39,785	41,925
Investment funds	20,553	18,874
Insurance policies	190,264	–
Real estate	19,959	23,508
Cash	11,971	6,418
	359,565	354,001

#### **Movements in the present value of the funded obligations**

(EUR x 1,000)	2016	2015
Present value of the funded obligation at 1 January	431,190	454,345
Current service costs (see below)	7,482	12,053
Interest expenses	12,047	13,263
	19,529	25,316

#### **Remeasurements:**

(Gain)/loss from change in demographic assumptions	(1,726)	(12,806)
(Gain)/loss from change in financial assumptions	38,076	(9,423)
Experience (gains)/losses	(4,222)	(545)
	32,128	(22,774)
Exchange differences	(35,072)	13,164
Paid by plan participants	1,871	2,221
Benefits paid by the plan	(11,665)	(10,623)
Plan amendments and curtailments	3,468	(30,459)
Present value of the funded obligation at 31 December	441,449	431,190

#### **Movement in the fair value of plan assets**

(EUR x 1,000)	2016	2015
Fair value of plan assets at 1 January	354,001	352,063
Interest income	9,870	10,035
<b>Remeasurement:</b>		
Return on plan assets, excluding amounts included in interest income	17,370	(9,993)
Exchange differences	(25,198)	9,125
Paid by the employer	14,004	17,932
Contributions paid by plan participants	1,865	2,212
Benefits paid by the plan	(11,665)	(10,623)
Plan amendments	–	(15,850)
Administrative expenses	(682)	(900)
Fair value of plan assets at 31 December	359,565	354,001

#### **Expenses recognised in profit or loss**

(EUR x 1,000)	2016	2015
Current service costs	7,482	12,053
Past service costs	3,468	(14,609)
Administrative expenses	682	900
Interest on obligation	12,047	13,263
	23,679	11,607
Interest income	(9,870)	(10,035)
	13,809	1,572

The expenses are recognised in the following line items in the statement of comprehensive income:

(EUR x 1,000)	2016	2015
Personnel expenses	13,809	1,572

#### **Actual return on plan assets**

(EUR x 1,000)	2016	2015
Actual return on plan assets	27,240	42

**Remeasurements recognised directly in other comprehensive income**

(EUR x 1,000)	2016	2015
Cumulative amount at 1 January	(61,151)	(73,895)
Recognised during the year	(14,758)	12,781
Plan amendments	–	2,865
Effect of movement in exchange rates	8,044	(2,902)
Cumulative amount at 31 December	(67,865)	(61,151)

Refer to note 5.36 with respect to the income tax impact on the actuarial gains / (losses) of EUR 14,758 thousand loss (2015: EUR 12,781 thousand gain).

**Actuarial assumptions**

Principal actuarial assumptions at the reporting date (expressed as a range of weighted averages):

	2016		2015	
	UK	Netherlands	UK	Netherlands
Discount rate at 31 December	2.7%	1.9%	3.8%	2.2%
Future salary increases	0.0%	1.5%	2.8%	1.5%
Medical cost trend rate	n/a	n/a	n/a	n/a
Future pension increases	2.7%	0.0%	2.6%	0.4%

The financial effects of differences between the actuarial assumptions and actuals for the pension liability and plan assets are included in the remeasurements.

Assumptions regarding future mortality are based on published statistics and mortality tables:  
 Netherlands: AG2016 Generation table for men and women with an age correction according to ES-P2.  
 United Kingdom: 90% of S2NxA with improvements in line with CMI 2014 and a long-term rate of improvements of 1.5% per annum and SAPS2 CMI 2015 1% long term + 1 year adjustment.

The sensitivity of the defined benefit obligation to changes in the weighted principal assumptions is:

Change in assumption	Impact on defined benefit obligation	
	Increase in assumption	Decrease in assumption
Discount rate	0.50%	Decrease by 10.4%
Salary growth rate	0.50%	Increase by 0.4%
Pension growth rate	0.50%	Increase by 2.6%
		Increase by 1 year in assumption
Life expectancy		Increase by 0.1%
		Decrease by 1 year in assumption
		Decrease by 0.1%

The sensitivity analyses are based on a change in one assumption while holding all other assumptions constant, so that interdependencies between the assumptions are excluded.

**Historical information**

(EUR x 1,000)	2016	2015	2014	2013	2012
Present value of the defined obligation	441,449	431,190	454,345	352,301	337,999
Fair value of plan assets	359,565	354,001	352,063	268,451	259,454
Deficit in the plan	(81,884)	(77,189)	(102,282)	(83,850)	(78,545)
Experience adjustments arising on plan liabilities	(4,222)	(545)	2,552	(4,403)	1,879
Experience adjustments arising on plan assets	17,370	(9,993)	52,814	(1,814)	12,559

Plan assets are comprised as follows:

(EUR x 1,000)	2016				2015			
	Quoted	Unquoted	Total	%	Quoted	Unquoted	Total	%
<b>Equity instruments</b>	72,405	–	72,405	20%	105,223	–	105,223	29%
<b>Debt instruments</b>	64,966	–	64,966	18%	218,852	–	218,852	62%
Government	4,628	–	4,628	1%	158,053	–	158,053	45%
Corporate bonds (Investment grade)	39,785	–	39,785	11%	41,925	–	41,925	12%
Corporate bonds (Non-investment grade)	20,553	–	20,553	6%	18,874	–	18,874	5%
<b>Insurance policies</b>								
Insurance policies	–	190,264	190,264	53%	–	–	–	–
<b>Property</b>	19,959	–	19,959	6%	23,508*	–	23,508	7%
UK	19,959	–	19,959	6%	23,508*	–	23,508	7%
Cash and cash equivalents	11,971	–	11,971	3%	6,418	–	6,418	2%
<b>Total</b>	<b>169,301</b>	<b>190,264</b>	<b>359,565</b>	<b>100%</b>	<b>354,001</b>	<b>–</b>	<b>354,001</b>	<b>100%</b>

\* Previously stated as unquoted.

Previously, Fugro had an insured pension plan in the Netherlands based on a separate account including an indexation depot. The termination date of that insurance contract was 31 December 2015. As at 1 January 2016, the insurance contract including the separate account has been closed and has been replaced by a new insurance contract without profit sharing. As a result, the value of plan assets is no longer based on the values of the separate account, but based on the present value of the accrued benefits insured

at the insurer and adjusted with the available means in the indexation depot for (deferred) pensioners and active employees; the so called insurance policies.

Through its defined benefit pension plans, the Group is exposed to a number of risks. Most of these risks come with the nature of a defined benefit plan, and are therefore not country specific. The most significant risks are detailed below:

**Asset volatility**

The plan liabilities are calculated using a discount rate set with reference to AA credit-rated corporate bond yields; if plan assets underperform this yield, the deficits will increase. The UK plans hold a significant proportion of equities, which are expected to outperform corporate bonds in the long-term while providing volatility and risk in the short-term.

**Changes in bond yields**

A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.

**Inflation risk**

Some of the group pension obligations are linked to inflation, and higher inflation will lead to higher liabilities (although, in most cases, caps on the level of inflationary increases are in place to protect the plan against extreme inflation).

The majority of the plan's assets are either unaffected by (fixed interest bonds) or loosely correlated with (equities) inflation, meaning that an increase in inflation will also increase the deficit.

**Life expectancy**

The majority of the plans' obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plans' liabilities. This is particularly significant in the UK plan, where inflationary increases result in higher sensitivity to changes in life expectancy. This risk is limited in the Netherlands where the insurer guarantees the payment of the accrued benefits.

In addition, the Group is exposed to a number of local risks. This is considered to be limited for the Netherlands as in the Netherlands the company has taken out an insurance contract to cover the pension plan. The insurance company guarantees all accrued entitlements. The insurance contract includes a separate account in which 80% of the investments are used to match the liability on a funding basis and 20% of the investments are used to invest in equity. The insurance company ultimately decides on investment policies and governance, as they run the downside risk. Returns over the unwinding interest are used to increase pensions. Fugro pays additional amounts to fund the indexation for active participants, but otherwise is only responsible for the annual cost of pension accrual.

The pension increases for deferred and pensioners are depending on the means available in the investment depot and therefore changes in the value of the investment depot will affect future pension increases as well.

In the UK, the Trustees set the Scheme's investment strategy, in consultation with the employer. The Robertson and UK Holdings plan include return seeking assets and bonds. The Robertson plan also includes matching assets to cover the pensioner liabilities. The employer is ultimately responsible for funding the accrued pensions and the pension increases.

The expected 2017 contributions amount to EUR 16.6 million (2016: EUR 21.7 million).

The weighted average duration of the defined benefit obligation is 22 years (2015: 22 years).

As at 31 December 2016	Netherlands	United Kingdom	Total weighted
Duration of plan	24	19	22

**5.52 Provisions for other liabilities and charges**

(EUR x 1,000)

2016

2015

	Asset					Asset				
	Onerous contracts	retirement obligations	Procedures	Restructuring	Total	Onerous contracts	retirement obligations	Procedures	Restructuring	Total
Balance at 1 January	37,454	13,900	22,642	2,734	76,730	83,273	11,832	22,820	–	117,925
Provisions made during the year	9,623	–	657	22,702	32,982	20,467	–	4,903	12,757	38,127
Provisions used during the year	(18,848)	–	(1,397)	(17,361)	(37,606)	(31,411)	–	(3,779)	(10,026)	(45,216)
Provisions reversed during the year	(15,710)	(14,056)	(1,292)	(667)	(31,725)	(39,737)	–	(859)	–	(40,596)
Unwinding of discount	–	308	–	–	308	–	618	–	–	618
Effect of movements in foreign exchange rates	498	(152)	563	57	966	4,862	1,450	(443)	3	5,872
Balance at 31 December	13,017	–	21,173	7,465	41,655	37,454	13,900	22,642	2,734	76,730
Non-current	5,682	–	21,163	10	26,845	25,285	13,900	22,642	–	61,827
Current	7,335	–	10	7,455	14,810	12,169	–	–	2,734	14,903

In 2016, the restructuring costs amounted to EUR 22.0 million (2015: EUR 12.8 million), including a reversal of EUR 0.7 million, and EUR 17.4 million has been used (2015: EUR 10.0 million). An amount of EUR 15.7 million in respect of onerous contract provisions was reversed during 2016, mainly due to improved project performance and more firm backlog positions. Further, an amount of EUR 14.0 million has been reversed from the asset retirement obligations following the purchase of the underlying chartered vessel (Hugin Explorer) in 2016. Fugro has accounted for certain tax indemnities and warranties under procedures in respect of the sale of the majority of the Geoscience business to CGG for liabilities arising from tax exposures amounting to EUR 17.9 million as at 31 December 2016 (31 December 2015: EUR 19.0 million).

**5.53 Trade and other payables**

(EUR x 1,000)

2016

2015

Trade payables	109,232	169,392
Advance instalments to work in progress	47,010	34,954
Non-trade payables	219,135	298,867
Balance at 31 December	375,377	503,213

Non-trade payables include accrued expenses of invoices to be received, employee related accruals, interest payable and considerations payable regarding acquisitions.

**5.54 Financial risk management****5.54.1 Overview**

The company's risk management policy includes the long-term sustainable management of its business activities and where possible, the mitigation of the associated business risks. Based on the nature and relative significance of the risks related to the Group's wide diversity of markets, clients and regions and its broad portfolio of activities the risks have been quantified to the extent possible.

The Group has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- Market risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital.

The Board of Management has overall responsibility for the establishment and oversight of the Group's risk management framework.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their role and obligations.

The audit committee oversees how management monitors compliance with the group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the group. The audit committee is assisted in its oversight role by internal audit. Both regular and ad hoc reviews of risk management controls and procedures are performed, the results of which are reported directly to the Board of Management. A summary of important observations is reported to the audit committee.

#### 5.54.2 Credit risk

Credit risk is the risk of financial loss to the group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the group's receivables from customers.

##### *Trade and other receivables*

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each client. However, management also considers the composition of the Group's client base, including the default risk of the industry and country in which clients operate, as these factors may have an influence on credit risk. As the Group operates to a large extent in the oil and gas industry a significant portion of trade and other receivables relates to clients from this industry.

Some of the Group's orders are awarded on the basis of long-term preferred supplier agreements. In the course of a year Fugro often carries out multiple projects for the same client. Fugro typically has no single client that generates more than 5% of its revenue in the year. On occasion one client may generate more than 5%, which can happen in case of exceptionally large contracts where most of the

revenue falls in the accounting year. Having a large number of clients and short project time spans mitigates Fugro's credit risk as the individual amounts receivable with the same client are limited.

New customers are analysed individually for creditworthiness before payment and delivery terms and conditions are offered. The Group's review may include external ratings, where available, and in some cases bank references. Customers that fail to meet the Group's benchmark creditworthiness may transact with the Group only on a prepayment basis or have to provide a bank guarantee.

The majority of the Group's clients has done business with the Group for many years and significant losses have only occurred incidentally in prior years. However, as a result of the expected negative effects of the current crisis in the oil and gas industry the credit risk has increased significantly. Clients that are known to have negative credit characteristics are individually monitored by the group controllers. If clients fail to pay timely the Group re-assesses the creditworthiness and stronger debt collection is started if deemed necessary. The Group publishes an internal list of clients that need extra attention before a contract is closed.

The Board of Management reviews frequently the outstanding trade receivables. Local management is requested to take additional precaution in working with these clients. The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for groups of similar receivables in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets.

The Group held cash and cash equivalents of EUR 248.5 million at 31 December 2016 (2015: EUR 305.0 million), which represents its maximum credit exposure on these assets. The cash and cash equivalents are held with bank and financial institution counterparties, which have 'investment grade' credit ratings.

##### *Guarantees*

In principle Fugro does not provide parent company guarantees to its subsidiaries, unless commercial reasons

exist. Fugro has filed declarations of joint and several liabilities for a number of subsidiaries at the Chambers of Commerce. Fugro has filed a list with the Chamber of Commerce which includes all financial interests of Fugro as well as a reference to each subsidiary for which such a declaration of liability has been deposited.

#### 5.54.3 Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. The global cash pool was introduced in the last quarter of 2015, which made it possible for the company to use the cash surplus within the group to reduce the overdrafts at its main uncommitted facilities.

Although the result of the United Kingdom referendum to leave the EU leads to uncertainties, its impact on Fugro's business will not be fully visible until negotiation between UK and EU are completed.

As at 31 December 2016, Fugro holds cash balances for the amount of EUR 53 million (31 December 2015: EUR 48 million) in Angola where exchange controls apply.

Ninety-nine percent of total cash balances is held in Angolan Kwanza's (2015: ninety-seven percent). The company expects that these exchange controls will become less when the oil and gas market conditions are expected to improve and when Angola will have increased inflow of USD in relation to their oil business. In addition, several actions have been explored to further lower this amount in the coming year and thereafter.

The Group monitors cash flow on a regular basis and operates with a global cash pool. Consolidated cash flow information, including a projection for the year, is reported on a monthly basis to the Board of Management, ensuring that the Group has sufficient cash on demand (or available lines of credit) to meet expected near term operational expenditures, including the servicing of financial obligations from lease commitments not included in the statement of financial position. Cash flows exclude the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. The Group maintains the following lines of credit:

- A total amount of multicurrency revolving credit facility agreements with seven banks totalling EUR 500 million. Rabobank and ING Bank N.V. provided EUR 127.5 million each, HSBC Bank Plc. provided EUR 75 million, Barclays Bank Plc. and ABN AMRO Bank N.V. provided EUR 50 million each, Credit Suisse provided EUR 40 million and BNP Paribas S.A./N.V. provided EUR 30 million. At 31 December 2016, an amount of EUR 245 million has been drawn. These bank facilities have been secured until December 2020.
- A variety of unsecured overdraft facilities in various currencies totalling around EUR 219 million of which EUR 4 million has been drawn at 31 December 2016 (31 December 2015: around EUR 379 million with EUR 22 million drawn).
- US private placement loans totally amount to EUR 614 million. In 2016, an amount of EUR 422 million was repaid following the sale and leaseback transactions, the sale of the CGG senior secured term loan (vendor loan), net proceeds from the issuance of the unsecured subordinated convertible bonds and cash-flows generated from ordinary course of business. The facility needs further to be repaid, in fixed instalments denominated in the several currencies, as follows: in 2017 EUR 16 million, in 2018 EUR 59 million, in 2021 EUR 84 million and in 2023 EUR 28 million. Refer to note 5.50.4 Covenant requirements.

#### 5.54.4 Market risk

Market risk includes changes in market prices, such as foreign exchange rates, interest rates and equity prices which will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return. About 66% of the Group's activities relate to the oil and gas industry. The general downturn in the oil and gas market has resulted in pressure on work volume and pricing for oil services companies. Fugro expects the market for oil services to decline in the first half of 2017 and anticipates possible stabilisation thereafter. For the maximum exposure to credit risk for trade receivables and unbilled revenue on (completed) contracts in the oil and gas industry reference is made to note 5.54.2.

#### Currency risk

The global nature of the business of the Group exposes the operations and reported financial results and cash flows to

the risks arising from fluctuations in exchange rates. The Group's business is exposed to currency risk whenever it has revenues in a currency that is different from the currency in which it incurs the costs of generating those revenues. In the case that the revenues can be offset against the costs incurred in the same currency, the balance may be affected if the value of the currency in which the revenues and costs are generated varies relative to the Euro.

Cash inflows and outflows of the operating segments are offset if they are denominated in the same currency. This means that revenue generated in a particular currency balance out costs in the same currency, even if the revenues arise from a different transaction than that in which the costs are incurred. As a result, only the unmatched amounts are subject to currency risk.

To mitigate the impact of currency exchange rate fluctuations, the Group continually assesses the exposure to currency risks and if deemed necessary a portion of those risks is hedged by using derivative financial instruments. The principal derivative financial instruments used to cover foreign currency exposure are forward foreign currency exchange contracts. An amount of EUR 53 million (31 December 2015: EUR 48 million) is in Angolan Kwanza's which is subject to significant currency risk at year-end 2016.

Interest on borrowings is denominated in the currency of the borrowing. Generally, borrowings are denominated in currencies that match the cash flows generated by the underlying operations of the Group, primarily Euro, US dollar and British pound. This provides an economic hedge without derivatives being entered into and therefore hedge accounting is not applied in these circumstances. The Group's investment in its subsidiaries with US dollar as functional currency is partly hedged by means of the US dollar private placement loans, which reduces the currency risk arising from the subsidiary's net assets. The Group's investment in its subsidiaries in the United Kingdom is partly hedged by means of the private placement loans denominated in British pound. The Group's investments in other subsidiaries are not hedged.

The hedge on the investment on foreign operations is fully effective. Consequently all exchange differences relating to this hedge have been accounted for in other comprehensive income. The Group is sensitive to translation differences resulting from translation of its operations in non-Euro currencies to Euros. In 2016, significant exchange

differences arose from the US dollar, British pound and Brazilian real.

#### *Interest rate risk*

The Group's liabilities bear both fixed and variable interests. The Group's objective is to limit the effect of interest rate changes on the results by matching long term investment with long term (fixed interest) financing as much as possible.

#### **5.54.5 Capital management**

The Board of Management's policy is to maintain a strong capital base in order to retain investor, creditor and market confidence and to sustain future development of the business. Capital consists of share capital, retained earnings and non-controlling interests of the Group. The Board of Management monitors the geographic spread of shareholders, the return on capital as well as the level of dividends to ordinary shareholders. The Board strives for a dividend pay-out ratio of 35 to 55% of the net result. No dividend is proposed to be paid-out for 2016.

The targeted solvency is set > 33.33%. The solvency at the end of 2016 was 43.0% (2015: 42.2%). The Group's objective is to achieve a healthy return on shareholders' equity. However, as in previous year(s) the return is significantly affected by the current market conditions and impairments identified in the current and prior years. As a result the return is 28.9% (negative) in 2016 (2015: 27.4% negative).

From time to time Fugro purchases its own certificates of shares. These certificates are used to cover the options and shares granted by Fugro. Purchase and sale decisions are made on a specific transaction basis by the Board of Management. Fugro does not have a defined share buy-back plan.

There were no changes to the Group's approach to capital management during the year.

The Group is subject to the externally imposed capital requirements related to covenant requirements as set out in note 5.50.6. As per 31 December 2016 and 31 December 2015 the Group complied with all imposed external capital requirements.

**5.55 Credit risk****Exposure to credit risk**

(EUR x 1,000)	Carrying amount	
	2016	2015
Other investments in equity instruments	1,095	1,095
Available-for-sale financial assets	372	328
Long-term loans	9,180	83,922
Deposits	11,971	4,836
Other long-term receivables	2,058	2,729
Unbilled revenue on (completed) projects	151,991	286,928
Trade receivables	308,810	338,823
Non-trade receivables	85,425	124,769
Current portion long term loans	–	5,382
Cash and cash equivalents	248,488	304,993
	819,390	1,153,805

The maximum exposure to credit risk at the reporting date is the carrying amount of each class of financial assets mentioned above. The group holds no collateral as security on the long-term loans.

The maximum exposure for trade receivables and unbilled revenue on completed contracts at the reporting date by geographic region was:

(EUR x 1,000)	Carrying amount	
	2016	2015
Netherlands	73,965	39,664
Europe other	101,443	131,880
Africa	28,603	40,274
Middle East	87,297	133,512
Asia	58,093	57,863
Australia	11,508	32,532
Americas	99,892	190,026
	460,801	625,751

The maximum exposure to credit risk for trade receivables and unbilled revenue on (completed) contracts at the reporting date by type of customer was:

(EUR x 1,000)	Carrying amount	
	2016	2015
Oil and gas	304,128	465,559
Infrastructure	95,846	98,869
Mining	8,294	9,386
Other	52,533	51,937
	460,801	625,751

**Impairment losses**

The ageing of trade receivables and unbilled revenue on (completed) contracts at the reporting date was:

- As of 31 December 2016, trade receivables and unbilled revenue on (completed) projects of EUR 460,801 thousand (31 December 2015: EUR 625,751 thousand) were fully performing
- As of 31 December 2016, trade receivables of EUR 134,499 thousand (31 December 2015: EUR 171,587 thousand), included in EUR 460,801 thousand (31 December 2015: EUR 625,751 thousand), were past due but not impaired. These relate to a number of independent customers for whom there is no recent history of default. The average credit term for these trade receivables is 30 days
- As of 31 December 2016, trade receivables and unbilled revenue on (completed) projects of EUR 39,482 thousand (31 December 2015: EUR 29,211 thousand) were impaired and provided for.

The individually impaired receivables mainly relate to customers, which are in difficult economic situations. It was assessed that a portion of the receivables is expected to be recovered. The ageing of trade receivables and unbilled revenue on (completed) projects is as follows:

(EUR x 1,000)	2016		2015	
	Gross	Impairment	Gross	Impairment
From 0 to 30 days	326,836	535	454,216	52
From 31 to 60 days	47,899	566	53,834	–
From 61 to 90 days	16,916	627	20,528	41
Over 90 days	91,763	37,754	98,776	29,118
Retentions and special items	16,869	–	27,608	–
	500,283	39,482	654,962	29,211

The movement in the allowance for impairment in respect of trade receivables and unbilled revenue on (completed) contracts during the year was as follows:

(EUR x 1,000)	2016	2015
Balance at 1 January	29,211	50,590
Impairment loss recognised	18,590	9,128
Impairment loss reversed	(2,887)	(3,118)
Trade receivables written off	(5,435)	(28,955)
Effect of movements in exchange rates	1	1,566
Balance at 31 December	39,482	29,211

The allowance accounts in respect of trade receivables and unbilled revenue on (completed) contracts are used to record impairment losses unless the Group is satisfied that no recovery of the amount owing is possible; at that point the amount considered irrecoverable is written off directly against the allowance.

The impairment loss recognised is mainly attributable to a limited number of clients for which receipt is doubtful or no longer probable.

Besides the transaction loss on the CGG senior secured term loan (refer to 5.41.2, no impairments related to other financial assets than trade receivables and unbilled revenue on (completed) contracts are recognised. In general, the Group considers credit risk on other receivables and cash and cash equivalents to be limited. Cash and cash equivalents are held with large well known banks with adequate credit ratings only. Refer to 5.54.2.

## 5.56 Liquidity risk

The following are the contractual maturities of financial liabilities, including interest payments:

(EUR x 1,000)

2016

	Carrying amount	Contractual cash flows	6 months or less	6 – 12 months	1 – 2 years	2 – 5 years	More than 5 years
Bank loans	243,537	254,489	1,245	1,191	4,728	247,325	–
Private placement loans:							
320 million USD bonds	52,193	56,558	1,349	1,349	53,860	–	–
330 million USD bonds	53,998	70,300	1,629	1,629	3,259	63,783	–
100 million USD bonds	26,867	38,625	829	829	1,658	6,634	28,675
27.5 million GBP bonds	5,380	6,354	128	140	6,086	–	–
40 million GBP bonds	8,728	12,292	245	267	534	11,246	–
35 million EUR bonds	17,171	23,503	529	529	1,058	21,387	–
37 million USD bonds	14,862	14,937	14,937	–	–	–	–
Subordinated unsecured convertible bonds in EUR	153,900	228,021	3,790	3,810	7,600	212,821	–
Finance lease liabilities	18,336	19,784	3,525	3,584	7,108	5,567	–
Other loans and long-term borrowings	537	585	141	53	66	190	135
Trade and other payables	375,377	375,376	375,376	–	–	–	–
Bank overdraft	4,043	4,043	4,043	–	–	–	–
	974,929	1,104,867	407,766	13,381	85,957	568,953	28,810

The interest included in the above table is based on the current amounts borrowed with current interest rates against the current exchange rate (if applicable). No assumptions are included for possible future changes in borrowings or interest payments. It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

(EUR x 1,000)

2015

	Carrying amount	Contractual cash flows	6 months or less	6 – 12 months	1 – 2 years	2 – 5 years	More than 5 years
Bank loans	183,337	199,274	1,574	1,424	2,852	193,424	–
Private placement loans:							
320 million USD bonds	196,260	219,563	32,035	4,213	8,426	174,889	–
330 million USD bonds	209,282	268,908	33,642	5,160	10,321	30,962	188,823
100 million USD bonds	73,109	101,665	10,750	1,858	3,717	11,151	74,189
27.5 million GBP bonds	24,889	28,887	4,214	555	1,111	23,007	–
40 million GBP bonds	41,346	55,172	7,057	1,061	2,122	6,365	38,567
35 million EUR bonds	23,290	30,622	3,918	588	1,176	3,528	21,412
37 million USD bonds	29,980	32,927	4,538	1,065	27,324	–	–
Revolving credit facilities CGG	34,960	37,033	908	874	35,251	–	–
Other loans and long-term borrowings	1,351	1,359	1,359	–	–	–	–
Trade and other payables	503,213	503,213	503,213	–	–	–	–
Bank overdraft	21,908	21,908	21,908	–	–	–	–
	1,342,925	1,500,531	625,116	16,798	92,300	443,326	322,991

### 5.57 Currency risk

The following significant exchange rates applied during the year:

(in EUR)	Average rate	Reporting date mid-spot rate
USD	0.910	0.950
GBP	1.220	1.160
NOK	0.108	0.110
AUD	0.670	0.690

### Sensitivity analysis

A 10 percent strengthening of the Euro against the above currencies at 31 December would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis is based on foreign currency exchange rate variances that the Group considered to be reasonably possible at the reporting date. This analysis assumes that all other variables, in particular interest rates, remain constant and ignores any impact of forecasted sales and purchases. The analysis is performed on the same basis as for 2015. Refer to note 5.54.4 Currency risk.

Effect in EUR x 1,000	Equity	Profit or loss
<b>31 December 2016</b>		
USD	(47,265)	13,881
GBP	(16,090)	2,506
NOK	(8,749)	(61)
AUD	(8,518)	3,785
<b>31 December 2015</b>		
USD	(33,807)	7,819
GBP	(23,231)	6,314
NOK	(10,496)	1,405
AUD	(12,561)	8,699

A 10 percent weakening of the euro against the above currencies at 31 December would have had the equal but opposite effect on the amounts shown above, on the basis that all other variables remain constant. The effect for 2016 in the table above on profit or loss is positive as the losses reduce if the euro would increase against the other currencies.

### 5.58 Interest rate risk

#### Profile

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

(EUR x 1,000)	Carrying amount	
	2016	2015
<b>Fixed rate instruments</b>		
Financial assets	9,180	9,917
Financial liabilities	(351,972)	(599,507)
<b>Variable rate instruments</b>		
Financial assets	248,488	378,998
Financial liabilities	(247,580)	(240,205)
	(341,884)	(450,797)

#### Fair value sensitivity analysis for fixed rate instruments

The Group does not account for any fixed rate financial assets and liabilities at fair value through profit or loss, and the Group does not designate derivatives (interest rate swaps) as hedging instruments under a fair value hedge accounting model. Therefore a change in interest rates at the reporting date would not affect profit or loss.

#### Cash flow sensitivity analysis for variable rate instruments

A change of 100 basis points in interest rates at the reporting date would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. This analysis is performed on the same basis as in 2015.

(EUR x 1,000)	Profit or loss		Equity	
	100 bp increase	100 bp decrease	100 bp increase	100 bp decrease
<b>31 December 2016</b>				
Variable rate instruments	9	(9)	–	–
Cash flow sensitivity (net)	9	(9)	–	–
<b>31 December 2015</b>				
Variable rate instruments	1,388	(1,388)	–	–
Cash flow sensitivity (net)	1,388	(1,388)	–	–

At 31 December 2016, it is estimated that a general increase of 100 basis points in interest rates would decrease the Group's profit before income tax by approximately EUR 9 thousand (2015: EUR 1,388 thousand negative).

## 5.59 Fair values

### 5.59.1 Financial assets and liabilities

The fair values of financial assets and liabilities, together with the carrying amounts shown in the statement of financial position, are as follows:

(EUR x 1,000)	2016		2015	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Loans and receivables</b>				
Trade receivables and other receivables*	546,226	546,226	755,902	755,902
Cash and cash equivalents	248,488	248,488	304,993	304,993
Deposits	11,971	11,971	4,836	4,836
Long-term loans	9,180	9,180	83,922	83,922
Other long-term receivables	2,058	2,058	2,729	2,729
<b>Available-for-sale financial assets</b>				
Other investments in equity instruments**	1,095	1,095	1,095	1,095
Available-for-sale financial assets	372	372	328	328
<b>Financial liabilities measured at amortised cost</b>				
Bank loans	(243,537)	(243,537)	(183,337)	(183,337)
Mortgage and other loans and long-term borrowings	(537)	(537)	(1,351)	(1,351)
Private placement loans in USD	(147,920)	(170,664)	(508,631)	(530,213)
Private placement loans in GBP	(14,108)	(17,168)	(66,235)	(69,149)
Private placement loans in EUR	(17,171)	(23,212)	(23,290)	(24,343)
Subordinated unsecured convertible bonds	(153,900)	(157,102)	–	–
Finance lease liabilities	(18,336)	(18,336)	–	–
Revolving credit facilities CGG	–	–	(34,960)	(34,960)
Bank overdraft	(4,043)	(4,043)	(21,908)	(21,908)
Trade and other payables	(375,377)	(375,377)	(503,213)	(503,213)
<b>Total</b>	<b>(155,539)</b>	<b>(190,586)</b>	<b>(189,120)</b>	<b>(214,669)</b>
<b>Unrecognised gains/(losses)</b>		<b>(35,047)</b>		<b>(25,549)</b>

\* Due to the short-term nature of the trade receivables and other receivables, their carrying amount is considered to be the same as their fair value.

\*\* The other investments in equity instruments do not have a quoted market price in an active market and are stated at cost.

The private placement loans carried for which fair value is disclosed are categorised within level 2 of the fair value hierarchy. The fair values of the subordinated unsecured convertible bonds are based on discounted cash flows using a current borrowing rate.

They are classified as level 3 fair values in the fair value hierarchy due to the use of unobservable inputs, including own credit risk.

The fair value for several Fugro vessels and other assets were based on bids received, broker quotes and value-in-use calculations. Management considers the value to be within level 3 of the fair value hierarchy. Refer to note 5.33.

**Interest rates used for determining fair value**

The Group uses the government yield curve as per the reporting date plus an adequate constant credit spread to discount financial instruments. The interest rates used are as follows:

(EUR x 1,000)	2016	2015
Loans and borrowings*	1.0% – 11.5%	1.3% – 13.6%
Long term receivables	5.0%	5.0% – 6.5%

\* The majority of the loans and borrowing bears interest rates varying from 1.6% to 8.1% as at 31 December 2016. Refer to note 5.50.

**Fair value hierarchy**

The different fair value hierarchy levels have been defined as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).

- Level 3: inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

Fugro has available-for-sale financial assets of EUR 372 thousand as at 31 December 2016 (31 December 2015: EUR 328 thousand), which are categorised within level 1. As in last year, there are no assets or liabilities categorised within level 2 or 3.

**5.59.2 Fugro's valuation processes**

The group's finance department performs the valuations of financial assets required for financial reporting purposes, including Level 3 fair values. The valuations are directly reported to the Chief Financial Officer.

Changes in Level 2 and Level 3 values are analysed at each reporting date.

**5.59.3 Offsetting financial assets and liabilities**

The following financial assets and liabilities are subject to offsetting, enforceable master netting arrangements and similar agreements.

**Financial assets**

(EUR x 1,000)	Gross amounts of recognised financial assets	Gross amounts of recognised financial liabilities set off in the statement of financial position	Net amounts of financial assets presented in the statement of financial position
<b>As at 31 December 2016</b>			
Cash and cash equivalents	248,488	–	248,488
<b>As at 31 December 2015</b>			
Cash and cash equivalents	305,492	(499)	304,993

**Financial liabilities**

(EUR x 1,000)	Gross amounts of recognised financial liabilities	Gross amounts of recognised financial assets set off in the statement of financial position	Net amounts of financial liabilities presented in the statement of financial position
<b>As at 31 December 2016</b>			
Bank overdraft	(4,043)	–	(4,043)
<b>As at 31 December 2015</b>			
Bank overdraft	(77,879)	55,971	(21,908)

## 5.60 Commitments not included in the statement of financial position

### 5.60.1 Operating leases as lessee

Non-cancellable operating lease rentals are payable as follows:

(EUR x 1,000)	2016	2015
Less than one year	84,268	142,800
Between one and five years	192,963	240,109
More than five years	77,471	116,543
	354,702	499,452

The Group leases a number of offices and warehouse/ laboratory facilities and vessels under operating leases. The leases typically run for an initial period of between three and ten years, with in most cases an option to renew the lease after that date. Lease payments are adjusted annually to reflect market rentals. None of the leases include contingent rentals. During the year an amount of EUR 166 million was recognised as an expense in profit or loss in respect of operating leases and other rentals (2015: EUR 277 million).

### 5.60.2 Bank guarantees

Per 31 December 2016, Fugro's bank has issued bank guarantees to clients for an amount of EUR 96 million (2015: EUR 85 million).

### 5.60.3 Capital commitments

At 31 December 2016, the Group has contractual obligations to purchase property, plant and equipment for EUR 6.8 million (2015: EUR 6.9 million).

### 5.60.4 Contingencies

Some Group companies are, as a result of their normal business activities, involved either as plaintiffs or defendants in claims. Based on information presently available and management's best estimate, it is not probable that the financial position of the Group will be significantly influenced by any of these matters. Should the actual outcome differ from the assumptions and estimates, the financial position of the Group would be impacted. Fugro N.V. and its Dutch operating companies form a fiscal unity for corporate tax. Each of the operating companies is severally liable for corporate tax to be paid by the fiscal unity.

### 5.61 Subsequent events

No significant subsequent events to be noted.

## 5.62 Related parties

### 5.62.1 Identity of related parties

The Group has a related party relationship with its subsidiaries, its equity-accounted investees and other investments, its Directors and its Supervisory Board.

### 5.62.2 Transactions with the Board of Management

Members of the Board of Management of Fugro hold 0.3% (2015: 0.3%) of the outstanding voting shares and certificates of shares in Fugro. Members of the Board of Management also participate in Fugro's share option scheme (refer note 5.32). In April 2016, Mr. B.M.R. Bouffard has been appointed as member of the Board of Management.

The remuneration of the Board of Management for 2016 and 2015 is as follows:

(in EUR)	P. van Riel		P.A.H. Verhagen		M.R.F. Heine	
	2016	2015	2016	2015	2016	2015
Fixed base salary	600,000	600,000	450,000	450,000	450,000	412,500
Compensation pension contribution	95,135	95,550	75,708	69,930	58,545	215,238
Bonus	130,200	–	97,650	67,500	97,650	60,000
Pension costs (including disability insurance)	41,315	36,129	42,362	39,367	27,335	1,274
	866,650	731,679	665,720	626,797	633,530	689,012
Long-term incentive plan (see note 5.32.1)	63,570	63,900	47,678	47,925	47,678	47,925
Total	930,220	795,579	713,398	674,722	681,208	736,937

(in EUR)	B.M.R. Bouffard		S.J. Thomson		W.S. Rainey	
	2016	2015	2016	2015	2016	2015
Fixed base salary	339,312	–	450,000	450,000	–	350,000
Compensation pension contribution	40,674	–	89,908	87,885	–	–
Bonus	73,630	–	52,650*	45,000	–	15,000
Pension costs (including disability insurance)	34,057	–	34,268	11,249	–	275,000
	487,673	–	626,826	594,134	–	640,000
Long-term incentive plan (see note 5.32.1)	34,675	–	47,678	47,925	–	–
Total	522,348	–	674,504	642,059	–	640,000

\* S.J. Thomson decided in 2016 to reject his bonus of EUR 45,000 which was granted over 2015. The bonus granted over 2016 amounts to EUR 97,650.

There are no guarantees or obligations towards or on behalf of the Board of Management.

The current remuneration policy was adopted by the AGM in 2014 and took effect retroactively as of 1 January 2014. The policy was slightly amended by the AGM in 2015. Within the framework of the policy, the remuneration for the Board of Management is determined by the Supervisory Board on the advice of the remuneration committee. The remuneration policy will be reviewed once every three years to verify its market conformity, potentially leading to adjustments. This remuneration policy is available on Fugro's website: [www.fugro.com](http://www.fugro.com).

#### Annual Bonus

Each member of the Board of Management is eligible for an annual bonus. The bonus may vary from 0% to 100% of fixed base salary, with 66.7% being applicable when targets are achieved.

Targets are set yearly by the Supervisory Board, based on the budget and taking into account the strategy aspirations. Financial targets determine 75% of the bonus, non-financial or personal targets determine the remaining 25%. For each of the financial targets, a performance zone is set, with no bonus below the threshold level and the maximum bonus when performance exceeds the upper end of the performance zone. There will be no overshoot possibility for personal targets. The maximum multiplier for financial targets is therefore 1.67. The Supervisory Board ensures that the targets are challenging, realistic and consistent with Fugro's strategy.

The measures used and their relative weight are as follows:

Financial targets:	Earnings Per Share (EPS)	35%
	EBIT margin	20%
	Working capital	20%
Non-financial (personal) targets		25%

The non-financial targets give the possibility to include health and safety, corporate social responsibility, personal development goals, etc. as targets into the bonus programme.

Based on input from the remuneration committee, the Supervisory Board discussed the granting of bonuses to the members of the Board of Management. The Supervisory Board concluded, also based on advice of the Board of Management, that rewarding bonuses based on the performance of the company in relation to the financial criteria set for the year, would result in bonuses that would not be justifiable, given the negative earnings per share and

the still difficult market circumstances that the company is experiencing. In view of what has been achieved in 2016 despite these difficult circumstances, the Supervisory Board decided to grant a bonus based on achievement of 100% of the personal targets, leading to a bonus of 16.7% of base salary. In addition, 5% of base salary was added to reward the strong performance in working capital, resulting in a total bonus pay-out of 21.7% of fixed base salary.

As at 31 December the following performance options for the Board of Management under the long-term incentive plan were outstanding:

Year of issue	Duration	Number of participants	Granted	Outstanding at 01-01-2016	Forfeited in 2016	Exercised in 2016	Outstanding at 31-12-2016	Exercisable at 31-12-2016	Exercise price (EUR)
2014	6 years	4	97,500	97,500	–	–	97,500	–	17.26
2015	6 years	4	97,500	97,500	–	–	97,500	–	15.06
2016	6 years	5	120,000	–	–	–	120,000	–	14.55
			315,000	195,000	–	–	315,000	–	

The chairman of the Board of Management received 30,000 performance options in 2016 (2015: 30,000). The other board members received each 22,500 performance options in 2016 (2015: 22,500). Refer to note 5.32.1.

As at 31 December the following performance shares for the Board of Management under the long-term incentive plan were outstanding:

Year of issue	Duration	Number of participants	Granted	Outstanding at 01-01-2016	Forfeited in 2016	Vested in 2016	Outstanding at 31-12-2016
2014	3 years	4	48,750	48,750	–	–	48,750
2015	3 years	4	48,750	48,750	–	–	48,750
2016	3 years	5	60,000	–	–	–	60,000
			157,500	97,500	–	–	157,500

The chairman of the Board of Management received 15,000 performance shares in 2016 (2015: 15,000). The other board members received each 11,250 performance shares in 2016 (2015: 11,250). Refer to note 5.32.1.

The table below provides an overview of the outstanding number of options for the board of management in respect of the share option scheme:

**Board of Management**

	Year	Number of options				Number at 31-12-16	Exercise price	In EUR at exercise day	Share price at exercise day	Expiring date	Number of months	Bonus
		Number at 01-01-16	Granted in 2016	Exercised in 2016	Forfeited in 2016							
P. van Riel	2010	52,900	-	-	52,900	-	61.50		31-12-2016	10		
	2011	53,000	-	-	-	53,000	44.895		31-12-2017	9		
	2012	60,000	-	-	-	60,000	44.52		31-12-2018	8		
	2013	55,000	-	-	-	55,000	43.315		31-12-2019	8		
<b>Total</b>		220,900	-	-	52,900	168,000						
P.A.H. Verhagen	2013-2014	30,000	-	-	-	30,000	43.315		31-12-2019			
<b>Total</b>		30,000	-	-	-	30,000						
W.S. Rainey	2009-2010	31,700	-	-	31,700	-	50.35*		31-12-2016	-		
	2011	53,000	-	-	-	53,000	44.895		31-12-2017	9		
	2012	53,000	-	-	-	53,000	44.52		31-12-2018	8		
	2013	47,000	-	-	-	47,000	43.315		31-12-2019	8		
<b>Total</b>		184,700	-	-	31,700	153,000						
S.J. Thomson	2009-2012	95,700	-	-	31,700	64,000	41.864*		31-12-2018	-		
	2013	47,000	-	-	-	47,000	43.315		31-12-2019	5		
<b>Total</b>		142,700	-	-	31,700	111,000						
J. Rüegg	2010	52,900	-	-	52,900	-	61.50		31-12-2016	10		
	2011	53,000	-	-	-	53,000	44.895		31-12-2017	9		
	2012	53,000	-	-	-	53,000	44.52		31-12-2018	9		
<b>Total</b>		158,900	-	-	52,900	106,000						
A. Jonkman	2010	52,900	-	-	52,900	-	61.50		31-12-2016	10		
	2011	53,000	-	-	-	53,000	44.895		31-12-2017	9		
	2012	53,000	-	-	-	53,000	44.52		31-12-2018	8		
	2013	47,000	-	-	-	47,000	43.315		31-12-2019	8		
<b>Total</b>		205,900	-	-	52,900	153,000						

	Year	Number of options				Number at 31-12-16	Exercise price	Share price at exercise day	Number of months Expiring date	Bonus
		Number at 01-01-16	Granted in 2016	Exercised in 2016	Forfeited in 2016					
K.S. Wester	2010	79,400	-	-	79,400	-	61.50	31-12-2016	10	
	2011	80,000	-	-	-	80,000	44.895	31-12-2017	9	
<b>Total</b>		<b>159,400</b>			<b>79,400</b>	<b>80,000</b>				
<b>Total</b>		<b>1,102,500</b>			<b>301,500</b>	<b>801,000</b>				

\* Weighted average.

### 5.62.3 The Board of Management

The Group also provides non-cash benefits to the Board of Management and contributes to their post-retirement plan. The members of the Board of Management also participate in Fugro's long-term incentive plan. The compensation comprises:

	2016	2015
Fixed salary	2,289,312	2,262,500
Compensation pension contribution	359,970	468,603
Bonus	451,780	187,500
Pension costs (including disability insurance)	179,337	363,019
Long-term incentive plan	241,279	207,675
	<b>3,521,678</b>	<b>3,489,297</b>

### 5.62.4 Supervisory Board

The remuneration of the Supervisory Board is as follows:

	2016	2015
H.L.J. Noy, Chairman	80,000	80,000
J.C.M. Schönfeld, Vice-Chairman	65,000	65,000
A.J. Campo	88,000	88,000
P.H.M. Hofsté	58,000	38,666
A.H. Montijn	58,000	38,666
D.J. Wall	88,000	88,000
J.A. Colligan	-	19,333
	<b>437,000</b>	<b>417,665</b>

There are no loans outstanding to the members of the Supervisory Board and no guarantees given on behalf of members of the Supervisory Board.

### 5.62.5 Other related party transactions

#### 5.62.5.1 Joint ventures

The Group has not entered into any significant joint ventures in 2016.

### 5.63 Subsidiaries

#### 5.63.1 Significant subsidiaries

For an overview of (significant) subsidiaries we refer to chapter 6.

### 5.64 Estimates and management judgements

Management discussed with the audit committee the development in and choice of critical accounting principles and estimates and the application of such principles and estimates.

#### Key sources of estimation uncertainty

The preparation of financial statements in conformity with EU-IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Information about critical judgements in applying accounting policies that have the most significant effect on the amounts recognised in the consolidated financial statements is included in the following notes:

- Impairments: Impairment analyses, amongst other relating to vessels, are performed whenever a triggering event has occurred to determine whether the carrying amount exceeds the recoverable amount. Goodwill is at least tested for impairment annually. Impairment tests are based on estimates of future cash flows. The accounting policies regarding impairments are included in accounting policy 5.16. Note 5.39.2 contains information about the key assumptions used to determine the recoverable amount of the various cash generating units. Specific information on credit risk is disclosed in notes 5.54.2 and 5.55. These notes contain information about the assumptions used relating to impairment of trade receivables, unbilled revenue on (completed) projects and other receivables and appropriate sensitivity analysis.
- Deferred tax: The assumptions used in recognition and measurement of deferred taxes are disclosed in note 5.42.
- Assets and liabilities from employee benefits: Actuarial assumptions are established to anticipate future events and are used in calculating pension and other post-retirement benefit and liabilities. These factors include assumptions with respect to interest rates, expected investment returns on plan assets, rates of future compensation increases, turnover rates and life expectancy. Note 5.51 contains information about the (actuarial) assumptions related to employee benefits. Actuarial gains and losses related to defined benefit plans are accounted for in other comprehensive income.
- Other provisions, tax and other contingencies: Information on the assumptions used in estimating the effect of legal claims, asset retirement obligations and onerous contract provisions are included in accounting policy 5.20 and note 5.52. The provisions in respect of onerous contracts are based on the obligation that the Group has with counterparties involved and represent the best estimate of the obligation.

## 6 SUBSIDIARIES AND INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD OF FUGRO N.V.

(including statutory seat and percentage of interest)

Unless stated otherwise, the direct or indirect interest of Fugro in the subsidiaries listed below is 100%. Insignificant, but consolidated, subsidiaries in terms of third party recompense for goods and services supplied and balance sheet totals have not been included. For entities where the direct or indirect interest of Fugro is less than 50%, the Group consolidates financial information of such entities based on the definition of control.

The subsidiaries listed below have been fully incorporated into the consolidated financial statements of Fugro, unless indicated otherwise.

The information as required by sections 2:379 and 2:414 of the Dutch Civil Code has been filed at the trade registry of the Chamber of Commerce in The Hague.

Company	%	Office, Country
Fugro Albania sh.p.k.		Tirana, Albania
Fugro Angola Limitada	49%	Luanda, Angola
Fugro ROAMES Pty Ltd		Brisbane, Australia
Fugro TSM Finance Pty Ltd		Perth, Australia
Fugro Exploration Pty Ltd		Perth, Australia
Fugro Survey Pty. Ltd.		Balcatta, Australia
Fugro LADS Corporation Pty Ltd		Kidman Park, Australia
Fugro Holdings (Australia) Pty Ltd		Perth, Australia
Fugro Spatial Solutions Pty Ltd		Perth, Australia
Fugro TSM Pty Ltd		Perth, Australia
Fugro Satellite Positioning Pty Ltd		Perth, Australia
Fugro AG Pty Ltd		Perth, Australia
Fugro Austria GmbH		Bruck an der Mur, Austria
SOCAR-Fugro LLC	49%*	Baku, Azerbaijan
Fugro Belgique/België S.A./N.V.		Brussels, Belgium
Fugro In Situ Geotecnia Ltda.		Pinhais, Brazil
Fugro Brasil Levantamentos Ltda.		Rio de Janeiro, Brazil
Sudeste Serviços Ltda.		Rio de Janeiro, Brazil
Fugro Sdn. Bhd. (Brunei)		Bandar Seri Begawan, Brunei Darussalam
Fugro Survey (B) Sdn. Bhd.	70%	Kuala Belait, Brunei Darussalam
Geofor Cameroon SA		Douala, Cameroon
GIE GEOFOR Afrique		Douala, Cameroon
Fugro Canada, Corp.		St. John's, Canada
Fugro Chile S.A.		Santiago, Chile
Fugro Technical Services (Beijing) Ltd.		Beijing, China
Fugro Technical Services (Guangzhou) Ltd.		Guangzhou, China
Fugro Pacifica Qinhuangdao Co., Ltd.		Qinhuangdao, China
China Offshore Fugro GeoSolutions (Shenzhen) Co., Ltd.	50%*	Shekou, Shenzhen, China

Company	%	Office, Country
Geofor Congo SA		Pointe Noire, Congo
Fugro Curaçao N.V.		Willemstad, Curaçao
Fugro Consultants International N.V.		Willemstad, Curaçao
Fugro Financial International N.V.		Willemstad, Curaçao
Fugro Survey Caribbean N.V.		Willemstad, Curaçao
Fugro S.A.E.		Cairo, Egypt
Fugro Geoid S.A.S.		Jacou, France
Fugro GeoConsulting S.A.S.		Nanterre, France
Fugro Holding France S.A.S.		Nanterre, France
Fugro Topnav S.A.S.		Palaiseau, France
GEOTER S.A.S.		Clapiers, France
Geofor Gabon SA		Libreville, Gabon
Fugro Gabon SARL		Port Gentil, Gabon
Fugro Consult GmbH		Berlin, Germany
Fugro Holding (Deutschland) GmbH		Berlin, Germany
Fugro-OSAE GmbH		Bremen, Germany
Fugro Ghana Ltd.	90%	Accra, Ghana
Fugro Certification Services Ltd.		Kwai Fong, Hong Kong
Fugro Technical Services Ltd.		Tuen Mun, Hong Kong
Fugro Geotechnical Services Ltd.		Fo Tan, Hong Kong
Fugro (Hong Kong) Ltd.		Wanchai, Hong Kong
Fugro Geosciences International Ltd.		Wanchai, Hong Kong
Fugro Holdings (Hong Kong) Ltd.		Wanchai, Hong Kong
Fugro Hydrographic Surveys Ltd.		Wanchai, Hong Kong
Fugro Geospatial Services (Hong Kong) Ltd.		Wanchai, Hong Kong
Fugro Geotechnics Vietnam (Hong Kong) Ltd.		Wanchai, Hong Kong
Fugro Marine Survey International Ltd.		Wanchai, Hong Kong
Fugro SEA Ltd.		Wanchai, Hong Kong
Fugro Subsea Services Ltd.		Wanchai, Hong Kong
Fugro Survey Ltd.		Wanchai, Hong Kong
Fugro Survey Management Ltd.		Wanchai, Hong Kong
MateriaLab Consultants Ltd.		Kwai Fong, Hong Kong
Fugro Consult Kft		Budapest, Hungary
Fugro Geotech (India) Private Limited		Navi Mumbai, India
Fugro Survey (India) Private Limited	90%	Navi Mumbai, India
PT Fugro Indonesia	80%	Jakarta Selatan, Indonesia
Fugro-ETW LLC	50%*	Basra, Iraq
FAZ Technology Ltd.	96.5%	Dublin, Ireland
FAZ Research Ltd.	96.5%	Dublin, Ireland
Fugro Oceansismica S.p.A.		Rome, Italy
Fugro Japan Co., Ltd.		Tokyo, Japan
Fugro-KGNT LLP	50%*	Almaty, Kazakhstan Republic
MAPS SARL		Beirut, Lebanon
UAB Fugro Baltic		Vilnius, Lithuania
Fugro Eco Consult S.a.r.l.		Munsbach, Luxembourg
Fugro Technical Services (Macau) Ltd.		Macau, Macau

Company	%	Office, Country
Fugro Geodetic (Malaysia) Sdn Bhd	30%	Kuala Lumpur, Malaysia
Fugro Geosciences (Malaysia) Sdn Bhd	30%	Kuala Lumpur, Malaysia
Fugro Loadtest (Malaysia) Sdn Bhd		Puchong, Malaysia
		Federal Territory of Labuan,
Fugro TSM Labuan Pty Ltd		Malaysia
Fugro Holding Malta Ltd.		Luqa, Malta
Fugro Malta Ltd.		Luqa, Malta
Geofor International SA		Quatre Bornes, Mauritius
Fugro Mauritius Ltd.		Quatre Bornes, Mauritius
		Ciudad Del Carmen,
Fugro Mexico S.A. de C.V.		Campeche, Mexico
		Ciudad Del Carmen,
Geomundo S.A. de C.V.		Campeche, Mexico
Fugro Mozambique Ltda.		Maputo, Mozambique
Fugro CIS B.V.		Leidschendam, The Netherlands
Fugro-Elbocon B.V.		Leidschendam, The Netherlands
Fugro Engineers B.V.		Nootdorp, The Netherlands
Fugro Financial Resources B.V.		Leidschendam, The Netherlands
Fugro GeoServices B.V.		Leidschendam, The Netherlands
Fugro Intersite B.V.		Leidschendam, The Netherlands
Fugro Marine Services B.V.		Leidschendam, The Netherlands
Fugro Nederland B.V.		Leidschendam, The Netherlands
Fugro South America B.V.		Leidschendam, The Netherlands
Fugro Survey B.V.		Leidschendam, The Netherlands
Fugro Vastgoed B.V.		Leidschendam, The Netherlands
Fugro Geospatial B.V.		Leidschendam, The Netherlands
Fugro Satellite Positioning B.V.		Leidschendam, The Netherlands
Seabed Geosolutions B.V.	60%	Leidschendam, The Netherlands
Fugro BTW Ltd.		New Plymouth, New Zealand
Fugro Survey (Nigeria) Ltd.		Port Harcourt, Nigeria
Fugro Nigeria Ltd.		Port Harcourt, Nigeria
Fugro Subsea AS		Oslo, Norway
Fugro Norway AS		Oslo, Norway
Fugro Middle East & Partners LLC	70%	Muscat, Oman
Fugro Panama S.A.		Panama City, Panama
Fugro Symphony Inc.		Panama City, Panama
Fugro TerraLaser S.A.		Lima, Peru
Fugro Peninsular Services	49%	Doha, Qatar
GEOINGSERVICE LLP		Moscow, Russia
Geofor Sao Tome Ltda.		Sao Tome City, Sao Tome
Fugro-Suhaimi Ltd.	50%	Dammam, Saudi Arabia
Decca Survey Saudi Arabia Ltd.	40%	Dammam, Saudi Arabia
Fugro Saudi Arabia Ltd.		Dammam, Saudi Arabia
Fugro Satellite Positioning Pte Ltd		Singapore, Singapore
Fugro Singapore Pte Ltd		Singapore, Singapore
Fugro Survey Pte Ltd		Singapore, Singapore
Fugro TSM Pte Ltd		Singapore, Singapore
Fugro Subsea Technologies Pte Ltd		Singapore, Singapore

Company	%	Office, Country
Fugro Global Environmental and Ocean Sciences Pte Ltd		Singapore, Singapore
Setouchi Services Pte Ltd		Singapore, Singapore
Fugro Survey Africa (Pty) Ltd.		Cape Town, South Africa
Fugro Maps South Africa (Pty) Ltd.		Cape Town, South Africa
Fugro Earth Resources (Pty) Ltd.		Johannesburg, South Africa
Fugro Finance AG		Zug, Switzerland
Fugro Geodetic AG		Zug, Switzerland
Fugro International Holding AG		Zug, Switzerland
Fugro South America GmbH		Zug, Switzerland
Fugro Survey GmbH		Zug, Switzerland
Middle East Investment GmbH		Zug, Switzerland
Fugro Survey Caribbean Inc.		St. Clair, Trinidad and Tobago
Fugro Sial Ltd.		Ankara, Turkey
Fugro Subsea LLC	49%	Abu Dhabi, United Arab Emirates
Fugro Survey Limited		Aberdeen, United Kingdom
Fugro Synergy Limited		Aberdeen, United Kingdom
Fugro-ImPROV Limited		Aberdeen, United Kingdom
Fugro Subsea Services Limited		Aberdeen, United Kingdom
Fugro-BKS Limited		Coleraine, United Kingdom
Fugro GeoServices Limited		Falmouth, United Kingdom
Fugro Alluvial Offshore Limited		Great Yarmouth, United Kingdom
Fugro GB Marine Limited		Wallingford, United Kingdom
Fugro Holdings Limited		Wallingford, United Kingdom
Fugro (USA), Inc.		Houston, United States
Fugro Americas, Inc.		Houston, United States
Fugro Synergy, Inc.		Houston, United States
Fugro Roadware, Inc.		Richmond, United States
Fugro Pelagos, Inc.		San Diego, United States
Fugro Geotechnics Vietnam LLC		Ho Chi Minh City, Vietnam

\* Joint arrangements which classify as joint ventures, which are equity-accounted.

## 7 COMPANY BALANCE SHEET

As at 31 December, before result appropriation

(EUR x 1,000)	2016	2015
<b>Assets</b>		
(9.1) Intangible assets	804	1,430
(9.2) Tangible fixed assets	3	24
(9.3) Financial fixed assets	1,634,156	2,098,176
<b>Total non-current assets</b>	1,634,963	2,099,630
(9.4) Trade and other receivables	12,365	22,893
Current tax assets	6,735	–
Cash and cash equivalents	127	–
<b>Total current assets</b>	19,227	22,893
<b>Total assets</b>	1,654,190	2,122,523
<b>Equity</b>		
Share capital	4,228	4,228
Share premium	431,227	431,227
Translation reserve	(20,715)	(48,023)
Hedging reserve	(103)	(391)
Other reserves	(328,242)	(353,958)
Retained earnings	1,157,398	1,537,094
Unappropriated result	(308,934)	(372,522)
(9.5) <b>Total equity</b>	934,859	1,197,655
<b>Provisions</b>		
(9.6) Provisions for other liabilities and charges	18,694	21,538
Deferred tax liabilities	682	2,711
<b>Liabilities</b>		
(9.7) Loans and borrowings	318,237	508,435
<b>Total non-current liabilities</b>	337,613	532,684
Bank overdraft	60	151,097
(9.7) Loans and borrowings	14,862	89,722
(9.8) Trade and other payables	365,230	147,447
Current tax liabilities	–	3,564
Other taxes and social security charges	1,566	354
<b>Total current liabilities</b>	381,718	392,184
<b>Total liabilities</b>	719,331	924,868
<b>Total equity and liabilities</b>	1,654,190	2,122,523

## 8 COMPANY INCOME STATEMENT

For the year ended 31 December

(EUR x 1,000)		2016	2015
(9.9)	Revenue	39,994	54,563
	Other income	67	787
(9.10)	Personnel expenses	(20,928)	(23,607)
	Depreciation	(31)	(116)
	Amortisation	(647)	(496)
(9.11)	Other expenses	(51,713)	(43,345)
	<b>Results from operating activities (EBIT)</b>	<b>(33,258)</b>	<b>(12,214)</b>
	Finance income	30,711	46,212
	Finance expenses	(64,457)	(49,150)
(9.12)	Net finance income/(expenses)	(33,746)	(2,938)
	<b>Profit/(loss) before income tax</b>	<b>(67,004)</b>	<b>(15,152)</b>
	Income tax gain/(expense)	21,006	(4,930)
	Share in results from participating interests, after taxation	(262,936)	(352,440)
	<b>Profit/(loss) for the period</b>	<b>(308,934)</b>	<b>(372,522)</b>

## 9 NOTES TO THE COMPANY FINANCIAL STATEMENTS

**General**

The company financial statements form part of the 2016 consolidated financial statements of Fugro.

**Accounting policies**

For setting the principles for the recognition and measurement of assets and liabilities and determination of the result for its company financial statements, Fugro makes use of the option provided in Clause 8 Section 2:362 of the Netherlands Civil Code. This means that the principles for the recognition and measurement of assets and liabilities and determination of the result (hereinafter referred to as principles for recognition and measurement) of the company financial statements of Fugro N.V. are the same as those applied for the consolidated EU-IFRS financial statements. Investments in subsidiaries are accounted for at net asset value which comprises the cost, excluding goodwill, of Fugro's share in the net assets of the subsidiaries. Participating interests, over which significant influence is exercised, are stated on the basis of the equity method. These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Netherlands Civil Code. Reference is made to pages 108 to 121 for a description of these principles.

The share in the result of participating interests consists of the share of Fugro in the result of these participating interests. Results on transactions, where the transfer of assets and liabilities between Fugro and its participating interests, and mutually between participating interests themselves, are not incorporated as far as they can be deemed to be unrealised.

**9.1 Intangible assets**

(EUR x 1,000)	2016	2015
<b>Cost</b>		
Balance at 1 January	1,857	1,297
Additions	21	560
Balance at 31 December	1,878	1,857
<b>Amortisation</b>		
Balance at 1 January	427	8
Amortisation of intangible assets	647	496
Disposals	-	(77)

(EUR x 1,000)	2016	2015
Balance at 31 December	1,074	427
<b>Carrying amount</b>		
At 1 January	1,430	1,289
At 31 December	804	1,430

The intangible assets comprise capitalised software which are amortised over a period of 3 years.

**9.2 Tangible fixed assets**

(EUR x 1,000)	2016	2015
<b>Cost</b>		
Balance at 1 January	1,242	2,069
Other investments	9	53
Disposals	(433)	(880)
Balance at 31 December	818	1,242
<b>Depreciation</b>		
Balance at 1 January	1,218	1,678
Depreciation	30	116
Disposals	(433)	(576)
Balance at 31 December	815	1,218
<b>Carrying amount</b>		
At 1 January	24	391
At 31 December	3	24

The tangible fixed assets comprise mainly office equipment which is depreciated over a period of 3 to 4 years.

**9.3 Financial fixed assets**

(EUR x 1,000)	2016	2015
Subsidiaries	1,235,774	1,172,025
Long-term loans to group companies	398,382	926,151
	1,634,156	2,098,176

**9.3.1 Subsidiaries**

(EUR x 1,000)	2016	2015
Balance at 1 January	1,172,025	1,205,542
Share in result of participating interests	(262,936)	(352,440)
Capital increase	321,650	285,406
Dividends	(9,972)	(10,459)
Currency exchange differences	28,654	29,874
Other	(13,647)	14,102
Balance 31 December	1,235,774	1,172,025

**9.3.2 Long-term loans to group companies**

(EUR x 1,000)	2016	2015
Balance at 1 January	926,151	1,200,931
Loans issued	235,761	55,525
Write-off receivable*	(12,042)	–
Redemptions	(742,379)	(419,416)
Currency exchange differences	(9,109)	89,111
Balance 31 December	398,382	926,151

\* The write-off relates to the sale of the CGG secured term loan in 2016. Refer to note 5.41.2.

This concerns long-term loans due from to subsidiaries at an average interest rate of 3.6% (2015: 3.7%). The long-term loans mature in the years between 2018 and 2023.

**9.4 Trade and other receivables**

(EUR x 1,000)	2016	2015
Receivables from Group companies	11,022	10,078
Other taxes and social security charges	–	3,916
Other receivables	1,343	8,899
Balance 31 December	12,365	22,893

**9.5 Equity**

The equity movement schedule is included in chapter 3 of the consolidated financial statements. For the notes to the equity reference is made to note 5.47 of the consolidated financial statements. The translation reserve and hedging reserve qualify as legal reserves (Dutch: 'wettelijke reserve') in accordance with Part 9 of Book 2 of the Netherlands Civil Code.

**9.6 Provisions for other liabilities and charges**

For the notes on provisions reference is made to note 5.52 of the consolidated financial statements. Fugro has accounted for certain tax indemnities and warranties under procedures in respect of the sale of the majority of the Geoscience business to CGG for liabilities arising from tax exposures amounting to EUR 17.9 million as at 31 December 2016 (31 December 2015: EUR 19.0 million). An amount of EUR 0.5 million (31 December 2015: EUR nil) and EUR 0.3 million (31 December 2015: EUR 2.5 million) relate to a restructuring provision respectively employee benefit obligations. An amount of EUR 0.5 million is expected to be settled within one year.

**9.7 Loans and borrowings**

(EUR x 1,000)	2016	2015
Private placement loans, non-current portion	164,337	508,435
Subordinated unsecured convertible bonds	153,900	–
Private placement loans, current portion	14,862	89,722
Balance 31 December	333,099	598,157

For the notes on private placement loans reference is made to note 5.50 of the consolidated financial statements. The average interest on loans and borrowings amounts to 4.9% per annum (2015: 5.6%).

**9.8 Trade and other payables**

(EUR x 1,000)	2016	2015
Trade payables	3,934	4,081
Payables to Group companies	355,108	127,385
Interest payables*	–	8,505
Non-trade payables and accrued expenses	6,188	7,476
Balance 31 December	365,230	147,447

\* Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest method and form part of the loans and borrowings. Previously, interest payables were separately reported as part of other payables.

The payables to group companies mainly relate to the cash-pool overdraft of Fugro N.V. The interest is calculated on the total balance of the cash pool. Reference is made to note 5.45 of the consolidated financial statements.

**9.9 Revenue**

Revenue relates to the services provided by Fugro N.V. to subsidiaries in respect of their management activities and responsibilities.

**9.10 Personnel expenses**

(EUR x 1,000)	2016	2015
Wages and salaries	16,673	21,073
Compulsory social security contributions	523	1,028
Equity-settled share-based payments	2,195	2,205
Contributions to defined contribution plans	612	(1,526)
Expense related to defined benefit plans	925	827
	20,928	23,607

Refer to note 5.62 of the consolidated financial statements for remuneration of the Board of Management.

The average number of employees within Fugro N.V. during the year was 42 (2015: 43).

**9.11 Other expenses**

(EUR x 1,000)	2016	2015
Indirect operating expenses	2,750	670
Occupancy costs	91	258
Communication and office equipment	2,084	1,198
Write-off receivables	12,041	–
Restructuring costs	589	–
Marketing and advertising costs	2,302	2,374
Other	31,856	38,845
Total	51,713	43,345

Other expenses include amongst others professional services, training costs, audit fees, miscellaneous charges and sundry costs. Refer to note 5.34 of the consolidated financial statements. Audit fees, as charged by EY are disclosed in note 9.18.

**9.12 Net finance (income)/expenses**

(EUR x 1,000)	2016	2015
Interest income on loans and receivables from Group companies	(29,136)	(36,387)
Interest income on loans and receivables	(1,575)	(3,284)
Net foreign exchange variance	–	(6,541)
Finance income	(30,711)	(46,212)
Interest expense on financial liabilities measured at amortised cost	54,989	46,684
Net change in fair value of financial assets at fair value through profit or loss (refer to note 5.41.3)	–	2,466
Net foreign exchange variance	9,468	–
Finance expense	64,457	49,150
Net finance (income)/expenses recognised in profit or loss	33,746	2,938

**9.13 Commitments not included in the balance sheet****Fiscal unity**

Fugro N.V. and the Dutch operating companies form a fiscal unit for corporate tax. Each of the operating companies is severally liable for corporate tax to be paid by the fiscal unity.

**9.14 Bank guarantees**

Per 31 December 2016, Fugro's bank has issued bank guarantees to clients for an amount of EUR 67 million (2015: EUR 65 million).

**9.15 Guarantees**

Fugro has filed declarations of joint and several liabilities for a number of subsidiaries at the Chambers of Commerce. Fugro has filed a list with the Chamber of Commerce, which includes all financial interests of the Group in subsidiaries as well as a reference to each subsidiary for which such a declaration of liability has been deposited. On 3 December 2015, Fugro has reached agreement with seven banks for the refinancing of its multicurrency revolving credit facility. Fugro N.V. is borrower and guarantor under this multicurrency revolving credit facility agreement.

In August 2016, Fugro and CCG decided to make a capital contribution of USD 47.5 million on the shares of Seabed by converting part of the revolving credit facilities into share premium on a 60/40 pro rata basis. In this respect, Fugro

N.V. has transferred USD 28.5 million of revolving credit facilities to the Fugro entity which holds the 60 percent of Seabed's voting shares. Subsequently, these facilities were contributed as share premium to Seabed. The remaining amount of USD 28.5 million has been repaid by Seabed resulting in a closing balance of nil as at 31 December 2016 (31 December 2015: EUR 52.4 million or the equivalent of USD 57 million).

#### 9.16 Contingencies

For the notes to contingencies reference is made to note 5.60.4 of the consolidated financial statements.

#### 9.17 Related parties

For the notes to related parties, reference is made to note 5.62 of the consolidated financial statements.

In note 5.62.2 of the consolidated financial statements the remuneration of the Board of Management and Supervisory Board is disclosed.

#### 9.18 Audit fees

With reference to Section 2:382a of the Netherlands Civil Code, the following fees for the financial year have been charged by EY (2015: KPMG) to the company and its subsidiaries:

(EUR x 1,000)	2016			2015		
	Ernst & Young Accountants LLP	Other EY network	Total EY	KPMG Accountants N.V.	Other KPMG network	Total KPMG
Statutory audit of financial statements	1,470	2,215	3,685	1,805	1,232	3,037
Other assurance services	–	86	86	–	31	31
Tax advisory services	–	902	902	–	43	43
Other non-audit services	–	72	72	–	–	–
<b>Total</b>	<b>1,470</b>	<b>3,275</b>	<b>4,745</b>	<b>1,805</b>	<b>1,306</b>	<b>3,111</b>

Tax advisory services primarily consist of tax compliance work. The majority of tax advisory fees incurred in 2016 relate to prior tax years. With the appointment of EY as auditor, the provision of non-assurance services is significantly reduced, in accordance with Fugro's global independence policy. Audit and (non-)audit related fees for the respective years are charged to the income statement on an accrual basis.

The fees paid for the above mentioned services, which are included in profit or loss of the consolidated financial statements in the line other expenses, are evaluated on a regular basis and in line with the market.

The members of the Supervisory Board have signed the financial statements pursuant to their statutory obligations under Section 2:101 sub 2 Netherlands Civil Code.

The members of the Board of Management have signed the financial statements pursuant to their statutory obligations under Section 2:101 sub 2 Netherlands Civil Code and Section 5:25c sub 2 (c) Financial Markets Supervision Act.

Fugro will not propose to the Annual General Meeting on 2 May 2017 to declare a dividend for 2016 to shareholders.

Leidschendam, 23 February 2017

#### Board of Management

P. van Riel, Chairman Board of Management, Chief Executive Officer  
P.A.H. Verhagen, Chief Financial Officer  
M.R.F. Heine, Director Marine division  
B.M.R. Bouffard, Director Land division  
S.J. Thomson, member of the Board of Management

#### Supervisory Board

H.L.J. Noy, Chairman  
J.C.M. Schönfeld, Vice-Chairman  
A.J. Campo  
P.H.M. Hofsté  
A.H. Montijn  
D.J. Wall

## OTHER INFORMATION

### INDEPENDENT AUDITOR'S REPORT

To: the Annual Meeting of Shareholders and Supervisory Board of Fugro N.V.

#### Report on the audit of the financial statements 2016

##### Our opinion

We have audited the financial statements 2016 of Fugro N.V. (the Company), based in Leidschendam. The financial statements include the consolidated financial statements and the company financial statements.

In our opinion:

- The accompanying consolidated financial statements give a true and fair view of the financial position of Fugro N.V. as at 31 December 2016 and of its result and its cash flows for 2016 in accordance with International Financial Reporting Standards as adopted by the European Union (EU-IFRS) and with Part 9 of Book 2 of the Dutch Civil Code.
- The accompanying company financial statements give a true and fair view of the financial position of Fugro N.V. as at 31 December 2016 and of its result for 2016 in accordance with Part 9 of Book 2 of the Dutch Civil Code.

The consolidated financial statements comprise:

- The consolidated statement of financial position as at 31 December 2016.
- The following statements for 2016: the consolidated statements of comprehensive income, changes in equity and cash flows.
- The notes comprising a summary of the significant accounting policies and other explanatory information.

The company financial statements comprise:

- The company balance sheet as at 31 December 2016.
- The company income statement for 2016.
- The notes comprising a summary of the accounting policies and other explanatory information.

##### Basis for our opinion

We conducted our audit in accordance with Dutch law, including the Dutch Standards on Auditing.

Our responsibilities under those standards are further described in the "Our responsibilities for the audit of the financial statements" section of our report.

We are independent of Fugro N.V. in accordance with the Code of Ethics for Professional Auditors (Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore we have complied with the Dutch Code of Ethics (Verordening gedrags- en beroepsregels accountants).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

##### Materiality

###### Materiality

- € 8,000,000

###### Benchmark applied

- Approximately 0.5% of revenue

###### Explanation

We have applied this benchmark based on our professional judgment and taking into account the users of the financial statements. Earnings based measures are not considered to be an appropriate benchmark, given the volatility of results over the years.

We have also taken misstatements into account and/or possible misstatements that in our opinion are material for the users of the financial statements for qualitative reasons.

We agreed with the Supervisory Board that misstatements in excess of € 400,000, which are identified during the audit, would be reported to them, as well as smaller misstatements that in our view must be reported on qualitative grounds.

##### Scope of the group audit

Fugro N.V. is at the head of a group of entities. Our group audit mainly focused on group entities that are either significant based on their size or risk relative to the consolidated financial statements. All entities exceeding 1.5% of revenues are included within our audit scope.

We used the work of other EY member firms when auditing entities outside The Netherlands. We performed audit procedures ourselves at certain group entities located in The Netherlands and performed analytical review procedures at group entities without an audit scope.

The procedures performed for group entities with an audit scope represent 78% of revenue and 74% of property, plant and equipment and intangible assets. Group entities not included in the audit scope are subject to analytical review procedures.

By performing the procedures mentioned above over group entities, together with additional procedures at group level, we have been able to obtain sufficient and appropriate audit

evidence about the group's financial information to provide an opinion about the consolidated financial statements.

#### Our key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements. We have communicated the key audit matters to the Supervisory Board. The key audit matters are not a comprehensive reflection of all matters discussed.

These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

## Risk

### Sensitivities and estimates with respect to the valuation of goodwill, vessels and other operational equipment (see Note 5.33, 5.38 and Note 5.39)

As at 31 December 2016, property, plant and equipment and intangible assets amount to € 806 million and € 393 million, which together amount to approximately 55% of the balance sheet total.

The impairment tests carried out by management are complex and require significant management judgement. The recoverable amounts of the cash-generating units have been determined based on value in use calculations. Value in use was determined by discounting the expected future cash flows from the continuing use of the CGU's. Cash flows in the first year of the forecast are based on management's approved financial forecast. The cash flows for the first five years are made explicit and long term growth rate is assumed for the remaining period. During 2016, the prior year's forecast has not been met due to an ongoing decline of market conditions resulting in new projects being deferred or cancelled and strong price pressure as a result of overcapacity.

Management performed impairment tests for the half year ended 30 June 2016 as well as the year ended 31 December 2016. These impairment tests resulted in € 20.5 million impairment of goodwill related to the Seabed Geosolutions CGU, € 17.7 million impairment of goodwill related to the Subsea CGU, € 12.9 million impairment of goodwill related to the Geotechnical Europe/Africa CGU, € 117.5 million impairment of property, plant and equipment, € 16.3 million impairment of Finder intangible assets and € 7.5 million of other impairments of intangible assets.

## Our audit approach

Our audit procedures included an assessment of the historical accuracy of management's estimates through retrospective review, evaluating and testing the assumptions, methodologies, CGU determination, the discount rates and other data used by the Company, for example by comparing them to external data.

We evaluated the 2017 financial forecast, the solidity of the financial forecast preparation process and the reasonability of the 2017 forecasts at the level of individual entities as well as at group level. Furthermore, we evaluated management's outlook in the explicit period as well as the long term growth rate, in particular around forecasted revenues, EBITDAs and capital expenditures. We assessed whether the CGU structure is aligned with the organizational structure.

We involved our valuation experts to assist us with our assessment of the discount rates, expected inflation rates, the appropriateness of the model used and the reasonability of the overall outcome in relation to the market capitalization of the Company. Furthermore, we assessed management's sensitivity analysis.

We focused on what the impact would be of a reasonably possible change in assumptions such as forecasted EBITDAs, growth rate in the first year, long term growth rate and discount rates on the recoverable amount and as a result on the carrying amount.

We assessed the adequacy of the Company's disclosures included in notes 5.33, 5.38 and 5.39 of the consolidated financial statements including those assumptions to which the outcome of the impairment test is most sensitive.

**Risk****Our audit approach****Revenue recognition, project accounting and valuation with respect to unbilled receivables and trade receivables (see Note 5.44)**

The project revenue recognition process, including determining the appropriate cut-off of revenues, involves significant management estimates. The valuation of work in progress is affected by subjective elements including estimated costs and projected revenue, whether impacted by additional/reduced services, project progress and disputes or potential disputes.

Our audit included testing internal controls with respect to project management, project accounting and the project results estimation process whenever possible. In addition, we performed amongst others (substantive) audit procedures relating to contractual terms and conditions, revenue, costs incurred, including local representatives' fees, and disputes or potential disputes. For individually significant projects, we performed detailed procedures, such as substantiating transactions with underlying documentation, including contracts and third party correspondence, to obtain evidence for the accuracy and collectability of work-in-progress. We have involved subject matter experts when performing inquiry of the project controllers, review of contracts and underlying documentation, review of the project progress, forecasts and appropriateness of the (planned) result and whether the project status has been appropriately reflected in the consolidated financial statements.

**Availability of finance and compliance with debt covenant requirements (see Note 5.50.6)**

The multicurrency revolving credit facility as well as the US private placement notes contain certain covenant requirements as described in note 5.50.6. The decrease in actual financial performance compared to the forecast could have a significant impact on the debt covenants. Compliance with debt covenant is part of management's assessment of the going concern assumption.

In October 2016, Fugro N.V. issued € 190 million subordinated unsecured convertible bonds. The related bond amount and interest costs are excluded from the covenant ratios.

At 31 December 2016, headroom remains available within the facilities and debt covenant requirements. Management's forecasts and assessments also presents sufficient headroom in connection with the going concern assessment.

As part of our audit procedures, we analyzed Fugro's finance facilities, covenants and headroom.

Furthermore, we evaluated the debt covenant requirements including the covenant ratios and events of default. The most critical covenants are the EBITDA to net debt ratio and fixed charged cover considering the decreasing EBITDA levels and market outlook. Therefore we paid special attention to the correct classification of items in EBITDA and specific and exceptional items included in and excluded from Adjusted EBITDA in accordance with criteria as stated in the loan agreements. The exclusion of the subordinated unsecured convertible bonds from the debt covenant requirement had a positive impact on the headroom of the covenants.

For the verification of the debt covenant compliance, as part of our evaluation of management's going concern assumption, we evaluated the 2017 financial forecast, the solidity of the financial forecast preparation process and the reasonability of the 2017 forecasts at the level of individual entities as well as at group level.

**Risk****Our audit approach****Estimates in respect to income tax positions (see Note 5.36 and 5.42)**

The Group's results on operations are subject to income taxes in various jurisdictions and the assessment process is complex and involves a high degree of judgement. Fugro reassessed the recoverability of deferred tax assets and recorded an impairment of € 27.8 million. The remaining deferred tax assets amount to € 80.6 million.

Our audit procedures included amongst others analyses of tax positions and the effective tax rate reconciliation. We have involved specialists for the audit of the accuracy of the amounts recognized in the income statements and assessment of judgmental (deferred) tax positions.

For tax positions where management's assumptions are used to determine the probability that deferred tax assets recognized in the balance sheet will be recovered through taxable income in future years and available tax planning strategies, we evaluated the 2017 financial forecast, the solidity of the financial forecast preparation process and the reasonability of the 2017 forecasts at the level of individual entities as well as at group level.

We also assessed the adequacy of the Group's disclosure in notes 5.36 and 5.42 of the consolidated financial statements.

**Report on other information included in the annual report**

In addition to the financial statements and our independent auditor's report thereon, the annual report contains other information that consists of:

- Management report.
- The Report of the Supervisory Board.
- Other information (including Other information pursuant to Part 9 of Book 2 of the Dutch Civil Code).

Based on the following procedures performed, we conclude that the other information:

- Is consistent with the financial statements and does not contain material misstatements.
- Contains the information as required by Part 9 of Book 2 of the Dutch Civil Code.

We have read the other information. Based on our knowledge and understanding obtained through our audit of the financial statements or otherwise, we have considered whether the other information contains material misstatements. By performing these procedures, we comply with the requirements of Part 9 of Book 2 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is less than the scope of those performed in our audit of the financial statements.

Management is responsible for the preparation of the other information, including the Management report in accordance with Part 9 of Book 2 of the Dutch Civil Code and other

information pursuant to Part 9 of Book 2 of the Dutch Civil Code.

**Report on other legal and regulatory requirements**  
**Engagement**

We were engaged by the Supervisory Board as auditor of Fugro N.V. on 7 December 2015, as of the audit for the year 2016 and have operated as statutory auditor since that date.

**Description of responsibilities for the financial statements****Responsibilities of management and the Supervisory Board for the financial statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with EU-IFRS and Part 9 of Book 2 of the Dutch Civil Code. Furthermore, management is responsible for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

As part of the preparation of the financial statements, management is responsible for assessing the Company's ability to continue as a going concern. Based on the financial reporting frameworks mentioned, management should prepare the financial statements using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so. Management should disclose events and circumstances that may cast significant

doubt on the Company's ability to continue as a going concern in the financial statements.

The Supervisory Board is responsible for overseeing the Company's financial reporting process.

### Our responsibilities for the audit of the financial statements

Our objective is to plan and perform the audit assignment in a manner that allows us to obtain sufficient and appropriate audit evidence for our opinion.

Our audit has been performed with a high, but not absolute, level of assurance, which means we may not have detected all material errors and fraud.

Misstatements can arise from fraud or error and are considered 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 financial statements. The materiality affects the nature, timing and extent of our audit procedures and the evaluation of the effect of identified misstatements on our opinion.

We have exercised professional judgment and have maintained professional skepticism throughout the audit, in accordance with Dutch Standards on Auditing, ethical requirements and independence requirements. Our audit included amongst others:

- Identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud or error, designing and performing audit procedures responsive to those risks, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtaining an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concluding on the appropriateness of management's use of the going concern basis of accounting, and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast

significant doubt on the Company's ability to continue as a going concern.

If we conclude that a material uncertainty exists, we are required to draw attention in our independent auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our independent auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern.

- Evaluating the overall presentation, structure and content of the financial statements, including the disclosures.
- Evaluating whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Because we are ultimately responsible for the opinion, we are also responsible for directing, supervising and performing the group audit. In this respect we have determined the nature and extent of the audit procedures to be carried out for group entities. Decisive were the size and/or the risk profile of the group entities or operations. On this basis, we selected group entities for which an audit or review had to be carried out on the complete set of financial information or on specific items.

We communicate with the Supervisory Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant findings in internal control that we identify during our audit.

We provide the Supervisory Board 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 with the Supervisory Board, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our independent auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, not communicating the matter is in the public interest.

Amsterdam, 23 February 2017

Ernst & Young Accountants LLP  
signed by A.A. van Eimeren

## FOUNDATION BOARDS

### Stichting Administratiekantoor Fugro (‘Foundation Trust Office’)

The Board of the Foundation Trust Office, Leidschendam, The Netherlands, is currently composed as follows:

Name	Function	Term
M. van Gelder, Chairman	Board member	2019
A.L. Asscher	Board member	2019
J.A.W.M. van Rooijen	Board member	2017

The (Board of the) Foundation Trust Office operates completely independent of Fugro.

### Stichting Beschermingspreferente aandelen Fugro (‘Foundation Protective Preference Shares’)

The Board of Foundation Protective Preference Shares, Leidschendam, The Netherlands, is currently composed as follows:

Name	Function	Term
M.W. den Boogert, Chairman	Board member	2017
J.J. Nooitgedagt	Board member	2021
S.C.J.J. Kortmann	Board member	2020
M.A.M. Boersma	Board member	2018
J.C. de Mos	Board member	2017

The (Board of the) Foundation operates completely independent of Fugro.

### Stichting Continuïteit Fugro (‘Foundation Continuity’)

The Board of Foundation Continuity, Curaçao, is currently composed as follows:

Name	Function	Term
G.E. Elias, Chairman	Board member B	2020
R. de Paus	Board member B	2019
M. van der Plank	Board member B	2018
A.C.M. Goede	Board member B	2017
G-J. Kramer	Board member A	2017

The (Board of the) Foundation operates completely independent of Fugro.

Board member A is appointed by the Board of Management of Fugro with the approval of the Supervisory Board of Fugro.

## STATUTORY PROVISIONS REGARDING THE APPROPRIATION OF NET RESULT

The provisions regarding the appropriation of profit are contained in article 36 of the Articles of Association of Fugro and, as far as relevant, read as follows:

- 36.2 a. The profit shall, if sufficient, be applied first in payment to the holders of protective preference shares of a percentage as specified below of the compulsory amount paid on these shares as at the commencement of the financial year for which the distribution is made.
- b. The percentage referred to above in subparagraph a. shall be equal to the average of the Euribor interest charged for loans with a term of one year – weighted by the number of days for which this interest was applicable – during the financial year for which the distribution is made, increased by at most four percentage points; this increase shall each time be fixed by the Board of Management for a period of five years, after approval by the Supervisory Board.
- 36.3 a. Next, if possible, a dividend shall be paid on the financing preference shares of each series and on the convertible financing preference shares of each series, equal to a percentage calculated on the amount effectively paid on the financing preference shares of the respective series and the convertible financing preference shares of the respective series, including a share premium, if any, upon the first issue of the series in question, and which percentage shall be related to the average effective return on ‘state loans general with a term of 7 – 8 years’, calculated and determined in the manner as described hereinafter.
- b. The percentage of the dividend for the financing preference shares of each or for the convertible financing preference shares of each series, as the case may be, shall be calculated by taking the arithmetic mean of the average effective return on the aforesaid loans, as published by Bloomberg, or if Bloomberg does not publish this information, by Reuters, for the last five stock market trading days preceding the day of the first issue of financing preference shares of the respective series or the convertible financing preference shares of the respective series, as the case may be, or preceding the day on which the dividend percentage is adjusted, increased or decreased, if applicable, by a mark-up or mark-down set by the Board of Management upon issue and approved by the Supervisory Board of at most two

- percentage points, depending on the market conditions then obtaining, which mark-up or mark-down may differ for each series, or, if Reuters does not publish this information or if such state loan and information source that is or are most comparable thereto as to be determined by the board of Management and approved by the Supervisory Board.
- 36.4 If in any financial year the profit is insufficient to make the distributions referred to above in paragraph 3 of this article, then in subsequent financial years the provisions of paragraph 3 shall not apply until the deficit has been made good and until the provisions of paragraph 3 have been applied or until the Board of Management, with the approval of the Supervisory Board, resolves to charge an amount equal to the deficit to the freely distributable reserves, with the exception of the reserves which have been set aside as share premium upon the issue of financing preference shares or convertible financing preference shares.
- 36.5 If the first issue of financing preference shares or convertible financing preference shares of a series takes place during the course of a financial year, the dividend for that financial year on the respective series of financing preference shares or convertible financing preference shares shall be decreased proportionately up to the first day of such issue.
- 36.6 After application of paragraphs 2 to 5 no further distribution of shall be made on the protective preference shares, the financing preference shares or the convertible financing preference shares.
- 36.7 Of any profit remaining after application of the paragraphs 2 to 5 such amount shall be allocated to the reserves by the Board of Management with the approval of the Supervisory Board as the Board of Management shall deem necessary. Insofar as the profit is not allocated to the reserves pursuant to the provisions of the preceding sentence, it shall be at the disposal of the General Meeting of Shareholders either for allocation in whole or in part to the reserves or for distribution in whole or in part to the holders of ordinary shares pro rata to the aggregate amount of their ordinary shares.

## REPORT OF STICHTING ADMINISTRATIEKANTOOR FUGRO ('FOUNDATION TRUST OFFICE')

In accordance with article 19 of the administration terms and conditions of the Foundation Trust Office ('Trust Office') and best practice provision IV.2.6 of the Corporate Governance Code, the undersigned issues the following report to the holders of certificates of ordinary shares in the share capital of Fugro N.V. ('Fugro').

During the 2016 reporting year all the Trust Office's activities were related to the administration of ordinary shares against which certificates have been issued.

During 2016 the Board met five times. The meeting of 6 April 2016 was dedicated, among other things, to the preparation for the annual general meeting of Fugro on 29 April 2016 and to the situation with respect to Boskalis who meanwhile had increased its holding in Fugro to 28%. Also, Mr. R. Willems was appointed as a new member of the Trust Office's board during this meeting (also see below). In the meetings in September and October we discussed, amongst other things, general business developments (after the publication of Fugro's half-yearly results) and issues related to Boskalis' holding in Fugro. In the meeting on 5 October 2016 we also discussed Fugro's intention to issue a subordinated convertible bond. In the meetings in April and on 5 October 2016, it was also discussed whether it would be necessary or useful to convene a meeting of holders of certificates. All times it was decided that at that particular moment this was not the case. Prior to the meeting in April the Board discussed with members of the Board of Management and the Supervisory Board of Fugro the activities and performance of Fugro on the basis of the annual report 2015. Corporate Governance within Fugro and the Trust Office was also discussed in the various meetings.

All the Trust Office's Board members are independent of Fugro. The Board may offer holders of certificates the opportunity to recommend candidates for appointment to the Board. The voting policy of the Trust Office has been laid down in a document that can be found on the website: <http://www.fugro.com/about-fugro/corporate-governance/fugro-trust-office>. The Trust Office is authorised to accept voting instructions from holders of certificates and to cast these votes during a general meeting of Fugro.

The Board attended the annual general meeting of Fugro held on 29 April 2016. In this meeting the Trust Office represented 27.7% of the votes cast. The Trust Office voted

in favour of all the proposals submitted to the meeting. In accordance with the administration terms and conditions, holders of certificates were offered the opportunity to vote, in accordance with their own opinion, as authorised representatives of the Trust Office. This opportunity was taken by holders of certificates representing 71% of the votes cast at the annual general meeting.

The previous report of the Trust Office stated that the Board intended appointing Mr. R. Willems as member of the Board for a period of four years. In accordance with article 4.3 of the articles of association, the Board offered holders of certificates who represent at least 15% of the issued certificates the opportunity to request, until 25 March 2016, that the Board convenes a meeting of holders of certificates in order to recommend a candidate to the Trust Office's Board. As no request for such a meeting was submitted, in its meeting of 6 April 2016, the Board, in accordance with its announced intention, appointed Mr. Willems as member of the Board for a period of four years as of 6 April 2016.

In accordance with the roster of the Board, Mr. J.A.W.M. van Rooijen will step down on 30 June 2017 because his second four-year term expires. In order to maintain continuity in the Board, the Board intends reappointing Mr. Van Rooijen as member of the Board for a period of two years.

In accordance with article 4.3 of the articles of association, the Board offers holders of certificates who represent at least 15% of the issued certificates the opportunity to request, until 3 April 2017, that the Board convenes a meeting of holders of certificates in order to recommend a candidate to the Trust Office's Board. The request for such a meeting should be submitted in writing and should state the name and address of the recommended candidate.

At present the Board of the Trust Office comprises:

1. Mr. M.C. van Gelder, Chairman
2. Mr. A.L. Asscher
3. Mr. J.A.W.M. van Rooijen
4. Mr. R. Willems

Mr. Van Gelder was amongst others Chairman of the Board of Management and Chief Executive

Officer of Mediq N.V. He presently serves, amongst others, as supervisory board member of VastNed Retail.

Mr. Asscher was a partner in the law firm of Houthoff Buruma until January 2005 and is presently active as arbitrator and advisory counsel.

Mr. Van Rooijen was, amongst others, Chairman of KPMG Corporate finance N.V. and member (CFO) of the Board of Management of KPMG Holding N.V.

Mr. Willems was in a 38 year career with Royal Dutch Shell. He presently serves, amongst others, as supervisory board member of Essent, Caldic Chemie and the Netherlands Investment Institute (NLII).

In 2016 the total costs of the Trust Office amounted to EUR 304,273 including the total remuneration of the members of the Board of EUR 45,750 (excluding VAT).

On 31 December 2016, 83,393,588 ordinary shares with a nominal value of EUR 0.05 were in administration against which 83,393,588 certificates of ordinary shares had been issued. During the financial year 16,744 ordinary shares were exchanged into certificates. No certificates were exchanged into ordinary shares. The activities related to the administration of the shares are carried out by the administrator of the Trust Office: Administratiekantoor van het Algemeen Administratie en Trustkantoor B.V. in Amsterdam, the Netherlands.

The Trust Office's address is: Veurse Achterweg 10, 2264 SG Leidschendam, the Netherlands.

Leidschendam, 15 February 2017

The Board

## HISTORICAL REVIEW

	IFRS 2016 <sup>5)</sup> *	IFRS 2015 <sup>5)</sup> *	IFRS 2014 <sup>5)</sup> *	IFRS 2013 <sup>5)</sup> *)	IFRS 2012	IFRS 2011 <sup>10)</sup>	IFRS 2010
<b>Income and expenses (x EUR 1,000)</b>							
Revenue	1,775,874	2,362,986	2,572,191	2,423,971	2,164,996	1,858,043	2,280,391
Third party costs	(678,757)	918,396	1,227,011	915,412	793,250	617,107	765,587
Net revenue own services (revenue less third party costs)	1,097,117	1,444,590	1,345,180	1,508,559	1,371,746	1,240,936	1,514,804
Impairments	(192,716)	(363,318)	(509,048)	–	–	–	–
Results from operating activities (EBIT) <sup>2)</sup>	(218,678)	(249,928)	(548,568)	267,020	306,624	352,016	351,479
EBITDA <sup>8)</sup>	154,966	353,258	251,746	545,467	465,368	481,925	561,083
Cash flow <sup>9)</sup>	130,760	324,930	336,696	365,381	400,148	431,495	489,757
Net result (including discontinued operations) <sup>2)</sup>	(308,934)	(372,522)	(458,870)	428,303	289,745	287,595	272,219
Net result for continuing operations	(308,934)	(372,522)	(457,870)	224,230	231,535	293,911	–
<b>Balance sheet (x EUR 1,000)</b>							
Property, plant and equipment	805,992	986,585	1,198,024	1,129,920	1,065,873	981,104	1,291,314
Investments	92,493	177,560	296,934	318,767	261,687	359,238	446,755
of which in acquisitions	–	17,088	16,724	65,427	3,371	117,500	2,931
Depreciation of property, plant and equipment	172,365	212,486	200,403	179,036	155,619	127,196	201,493
Net current assets <sup>1)</sup>	353,676	451,820	451,703	413,446	264,477	521,017	253,186
Total assets	2,174,449	2,841,184	3,565,672	3,630,602	4,169,716	3,861,595	3,089,991
Provisions for other liabilities and charges	26,845	61,827	61,046	225	1,165	4,215	5,204
Loans and borrowings	573,503	728,082	949,954	689,023	1,166,734	1,215,173	590,862
Equity attributable to owners of the company <sup>1)</sup>	934,859	1,197,655	1,517,766	2,024,971	1,956,729	1,655,785	1,508,318
<b>Key ratios (in %) <sup>2)</sup></b>							
Results from operating activities (EBIT)/revenue	(12.3)	(10.6)	(21.3)	11.0	14.2	18.9	15.4
Profit/revenue	(17.4)	(15.8)	(17.8)	9.3	10.7	15.8	11.9
Profit/net revenue own services	(28.2)	(25.8)	(34.0)	14.9	16.9	23.7	18.0
Profit/average capital and reserves <sup>1)</sup>	(29.0)	(27.4)	(25.8)	11.3	12.8	18.6	22.3
Total equity/total assets <sup>1)</sup>	45.5	43.4	42.4	58.1	47.4	43.4	49.3
Interest cover	(3.9)	(4.5)	(20.8)	22.4	17.1	48.9	29.0
<b>Data per share (x EUR 1.-) <sup>2)</sup> 4)</b>							
Equity attributable to owners of the company <sup>1)</sup>	11.05	14.16	17.95	23.94	23.62	20.34	18.79
Results from operating activities (EBIT) <sup>3)</sup>	(2.70)	(3.09)	(6.78)	3.30	3.82	4.44	4.49
Cash flow <sup>3)</sup>	1.62	4.01	4.16	4.52	4.99	5.45	6.25
Net result <sup>3)</sup>	(3.82)	(4.60)	(5.65)	5.29	3.61	3.63	3.47
Dividend paid in year under review <sup>6)</sup>	–	–	–	1.50	1.50	1.50	1.50
One-off extra dividend in connection with the divestment of the majority of the Geoscience business	–	–	–	–	0.50	–	–
<b>Share price (x EUR 1.-) <sup>4)</sup></b>							
Year-end share price	14.55	15.06	17.26	43.32	44.52	44.895	61.50
Highest share price	19.21	27.21	47.72	48.81	57.88	63.53	62.06
Lowest share price	10.34	13.86	9.07	35.24	37.65	34.47	37.095
<b>Number of employees</b>							
At year-end	10,530	11,960	13,537	12,591	12,165	11,495	13,463
<b>Shares in issue (x 1,000) <sup>4)</sup></b>							
Of nominal EUR 0.05 at year-end	84,573	84,573	84,573	84,573	82,844	81,393	80,270

1) As of 2002 no accrued dividend has been incorporated.

2) For 2002 and earlier years, before amortisation of goodwill.

3) Unlike preceding years the figures as from the year 1999 have been calculated based upon the weighted average number of outstanding shares.

4) As a result of the share split (4:1) in 2005, the historical figures have been restated.

5) On a continued basis, unless otherwise stated.

IFRS 2009	IFRS 2008	IFRS 2007	IFRS 2006	IFRS 2005	IFRS 2004	IFRS 2003	Dutch GAAP 2002	Dutch GAAP 2001	Dutch GAAP 2000	Dutch GAAP 1999
2,052,988	2,154,474	1,802,730	1,434,319	1,160,615	1,008,008	822,372	945,899	909,817	712,934	546,760
624,413	722,321	604,855	503,096	405,701	364,644	273,372	328,401	331,685	250,132	176,067
1,428,575	1,432,153	1,197,875	931,223	754,914	643,364	549,000	617,498	578,132	462,765	370,648
-	-	-	-	-	-	-	-	-	-	-
367,422	385,732	324,813	211,567	144,070	104,236	63,272	111,873	98,470	73,697	61,805
551,130	535,178	439,590	295,948	218,833	177,453	124,056	158,814	142,039	113,269	98,334
456,773	438,902	337,106	226,130	176,093	125,802	80,480	119,161	105,301	85,596	77,233
263,410	283,412	216,213	141,011	99,412	49,317	18,872	72,220	61,732	46,024	40,704
-	-	-	-	-	-	-	-	-	-	-
1,043,227	859,088	599,298	412,232	262,759	232,956	268,801	192,293	163,298	120,526	114,035
330,244	337,469	299,699	203,944	90,414	71,028	123,983	100,036	89,352	49,008	37,301
9,882	14,423	8,666	21,041	10,057	2,296	70,888	24,852	11,196	3,686	9,257
173,593	140,429	107,684	78,169	69,445	66,139	54,004	46,941	43,569	39,572	36,529
140,301	56,060	171,347	150,733	222,485	(95,348)	114,852	129,071	(50,514)	92,269	15,066
2,366,317	2,123,306	1,700,130	1,405,698	1,138,660	983,350	1,056,003	793,245	814,772	474,741	380,495
6,240	13,155	16,278	13,888	398	1,075	584	12,706	8,056	6,746	10,573
441,339	395,384	449,957	341,997	300,753	184,268	431,895	273,520	121,450	120,713	23,234
1,187,731	928,329	699,989	562,417	465,460	223,913	211,196	271,698	244,660	101,453	107,909
17.9	17.9	18.0	14.8	12.9	10.3	9.2	11.8	10.8	10.3	11.3
12.8	13.2	12.0	9.8	8.6	4.9	2.3	7.6	6.8	6.5	7.4
18.4	19.8	18.0	15.1	13.2	7.7	8.3	11.7	10.7	9.9	11.0
24.9	34.8	34.3	27.4	28.8	22.7	17.6	27.4	35.7	45.4	41.0
50.7	44.1	41.6	40.2	41.3	23.2	20.2	34.6	30.4	22.1	29.3
47.8	13.9	13.1	10.9	7.2	3.7	2.2	6.1	7.8	8.1	13.1
15.08	12.12	9.94	8.08	6.76	3.60	3.48	4.57	4.17	2.10	2.29
4.82	5.29	4.67	3.08	2.18	1.76	1.09	1.95	1.86	1.48	1.27
5.99	6.01	4.84	3.29	2.67	2.12	1.39	2.08	1.98	1.72	1.59
3.46	3.88	3.11	2.05	1.51	0.83	0.33	1.26	1.16	0.92	0.84
1.50	1.25	0.83	0.60	0.48	0.48	0.46	0.46	0.40	0.34	0.31
-	-	-	-	-	-	-	-	-	-	-
40.26	20.485	52.80	36.20	27.13	15.35	10.20	10.78	12.53	17.19	9.23
41.85	59.95	62.00	36.64	27.40	16.41	12.86	16.50	18.91	17.81	9.98
19.085	19.32	34.91	27.13	15.14	10.05	6.13	9.88	10.75	9.31	4.10
13,482	13,627	11,472	9,837	8,534	7,615	8,472	6,923	6,953	5,756	5,114
78,772	76,608	70,421	69,582	68,825	62,192	60,664	59,449	58,679	51,048	50,449

6) Including a one off extra dividend of EUR 0.50 in 2013.

\* Including effect change of presentation multi-client data libraries.

7) As of 2013 the amortization on multi-client data libraries is reclassified from third party costs to amortization costs.

8) EBITDA is excluding impairments.

9) As of 2013 the cash flow represents the net cash generated from operating activities.

10) Excluding the revenue and results of the majority of the Geoscience division which have been sold as per 31 January 2013.

## GLOSSARY

*Technical terms*

**Asset integrity** Monitoring and inspection of assets and their condition, combined with relevant geo-intelligence (see Geo-intelligence below). Clients use these solutions to optimise operational uptime and performance of their assets, to increase life time and support eventual decommissioning. In case of inspection, it is often desirable to immediately provide remedial services when needed. This is particularly the case offshore.

**AUV (autonomous underwater vehicle)** Unmanned submersible launched from a 'mother-vessel' but not connected to it via a cable. Propulsion and control are autonomous and use pre-defined mission protocols.

**Bathymetry** Study of underwater depth of lake or ocean floors. Underwater equivalent of topography.

**Brent crude** Major trading classification of sweet light crude oil that serves as a major benchmark price for purchases of oil worldwide. Brent Crude is sourced from the North Sea.

**Construction support** Offshore services related to the installation and construction of structures such as pipelines, drilling platforms and other oil and gas related infrastructure, usually involving the use of ROVs.

**CPT** Cone penetration test(ing). Pushing a steel cone-tipped probe into the soil, measuring resistance, in order to identify soil composition.

**CPT truck** Truck that can be used for estimation of soil type and soil properties.

**FLI-MAP®** Fugro's airborne laser scanning system for obtaining highly accurate topographic data.

**Gas hydrates** Mixture of semi-solid methane gas and water molecules that are created by water pressure and cold temperatures found deep in the ocean.

**Geo-intelligence** Acquisition and analysis of data on topography and the subsurface, soil composition, spatial reference, meteorological and environmental conditions, and the related advice

**Geophysics** Mapping of subterranean soil characteristics using non-invasive techniques such as sound.

**Geoscience** Range of scientific disciplines (geology, geophysics, petroleum engineering, bio stratification, geochemistry, etc.) related to the study of rocks, fossils and fluids.

**Geotechnics** Determination of subterranean soil characteristics using invasive techniques such as probing, drilling and sampling.

**In situ** In original situation, position.

**IRM (inspection, repair, maintenance)** IRM services are a core service of Fugro's subsea services portfolio.

**Jack-up platform** Self-elevating platform. The buoyant hull is fitted with a number of movable legs, capable of raising its hull over the surface of the sea.

**(Q)HSSE** (Quality,) health, safety, security and environment.

**LiDAR** Measuring system based on laser technology that can make extremely accurate recordings.

**LNG** Liquefied natural gas.

**Metocean** Meteorological and oceanographic.

**NOC** National oil company.

**Node** Autonomous battery powered component recording device deployed by ROV.

**Ocean bottom node (OBN)** 4D imaging through individual nodes placed on the seabed.

**Ocean bottom cable (OBC)** 4D imaging through nodes attached to a cable on the seabed.

**OHSAS** British standard for occupational health and safety management systems. It is widely seen as the world's most recognised occupational health and safety management systems standard.

**Positioning** Subscription based service which enhances public satellite positioning data (GPS, GLONASS etc.) and the provision of positioning equipment, expertise and solutions to support a wide variety of marine operations. Highly reliable, centimetre accuracy 3D positioning services, available in any weather condition, anytime and anywhere to make offshore operations more predictable, faster and safer.

**ROV (remotely operated vehicle)** Unmanned submersible launched from a vessel and equipped with measuring and manipulation equipment. A cable to the mother-vessel provides power, video and data communication.

**Site characterisation** Solutions focused on recommendations for the location and specification of constructions and foundations during the planning and design phases. Fugro also provides solution to support the exploration to production life cycle of natural resources. Integrated solutions are often requested in case of complex ground conditions, very large and heavy constructions, and risk of geo-hazards such as earthquakes and flooding.

**Saturation diving** Method of prolonged diving, using an underwater habitat to allow divers to remain in the high-pressure environment of the ocean depths long enough for their body tissues to become saturated with the inert components of the pressurised gas mixture that they breathe.

**Work class ROV** Large remotely operated vehicle with the ability to operate multiple tools and sensors. With their ability to operate across the depth range required by the client base, these systems operate in support of subsea operations across all business line segments.

#### *Financial terms*

Fugro uses non-GAAP financial measures or alternative performance measures (as defined by European Securities and Market Authority). These measures adjust the reported GAAP results, which facilitate a users' understanding of a company's underlying operational performance, liquidity or financial position. This information provide or may provide additional insights into the company's business, its past results, and its potential for future prospects. All of these measures, disclosed in the list of financial terms below and used by management, are included in this annual report.

**Backlog** the amount of revenue related to signed contracts and work that can reasonably be expected based on framework contracts and outstanding tenders and proposals of which a good chance of success is expected (>50%) weighted with the likelihood of winning this work. Regarding Seabed Geosolutions, only signed contracts are taken into account.

**Capital employed** total equity plus net interest bearing debt minus the interest bearing senior secured term loan (CGG vendor loan) and related warrant. The capital employed is calculated at the end of the (full or half year) reporting period.

**Currency comparable growth** reported revenue growth versus comparable period last year at last year's exchange rates.

**Days of revenue outstanding** Trade receivables plus the unbilled revenue minus advances expressed as a number of days. The number of days is calculated backwards based on monthly revenue.

**Dividend yield** dividend as a percentage of the (average) share price.

**EBIT** reported result from operating activities before interest and taxation.

**EBIT excluding exceptional items** result from operating activities before interest and taxation, excluding

- Impairment losses
- Onerous contract charges
- Restructuring costs
- Certain adviser and other costs (to the extent not capitalised as transaction costs on loans and borrowings)

**EBITDA** reported result from operating activities before interest, taxation, depreciation, amortisation, and impairments related to goodwill, intangible fixed assets, and property, plant and equipment.

**EBITDA excluding exceptional items** result from operating activities before interest, taxation, depreciation, amortisation, and impairments related to goodwill, intangible fixed assets, and property, plant and equipment, excluding

- Onerous contract charges
- Restructuring costs
- Certain adviser and other costs (to the extent not capitalised as transaction costs on loans and borrowings)

**Adjusted consolidated EBITDA for purpose of covenant calculations** EBITDA, excluding exceptional items for covenant purposes

- Onerous contract charges.
- Restructuring costs.
- Write-off receivables.
- Certain adviser and other costs (to the extent not capitalised as transaction costs on loans and borrowings).
- Excluding profit / (loss) on disposal of property, plant and equipment.

adjusted by:

- Including pre-acquisition profit / (loss) from businesses acquired.
- Excluding profit / (loss) from businesses disposed of, for the period for which they formed part of the Group.

**Gearing** loans and borrowings plus bank overdraft minus cash and cash equivalents, divided by shareholders equity.

**Interest cover** result from operating activities (EBIT) divided by the net interest charges.

**Net debt** loans and borrowings, bank overdraft minus cash and cash equivalents.

**Net debt for covenant purposes** loans and borrowings (not including the subordinated unsecured convertible bonds), net liabilities under or pursuant to swaps, bank overdraft minus cash and cash equivalents.

**Net profit margin** profit as a percentage of revenue.

**NOPAT** net operating profit after tax excluding net finance income/(expenses).

**Pay-out ratio** proposed dividend, multiplied by the number of shares entitled to dividend, divided by one thousand, divided by the net result.

**Return on capital employed** NOPAT as a percentage of a three points average capital employed. The three points consists of the last three reporting periods. Exceptional items (post-tax) are added back both in the NOPAT as well as the capital employed for the same period.

**Solvency** shareholders' equity as a percentage of the balance sheet total.

## **Colophon**

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**Fugro N.V.**

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