

# 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

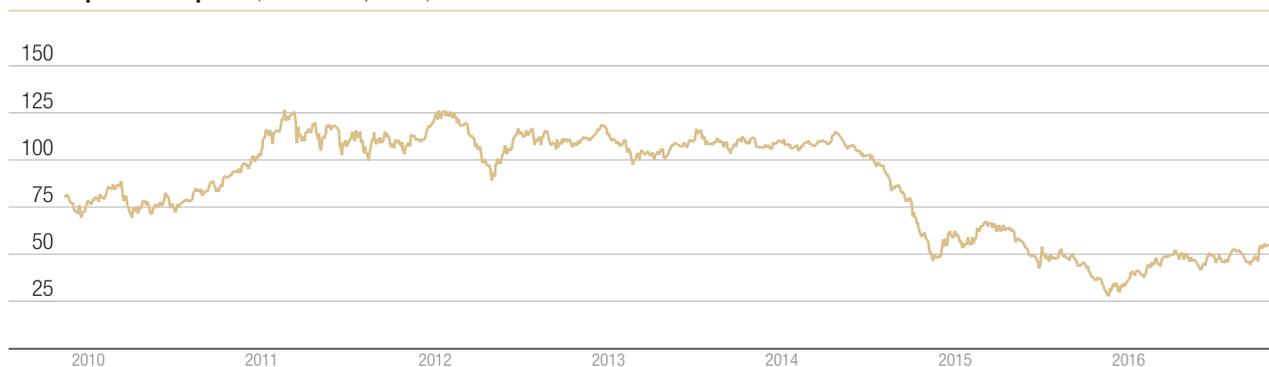
of America, continued high production from the OPEC countries in general and incremental production from Iran and Iraq.

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**

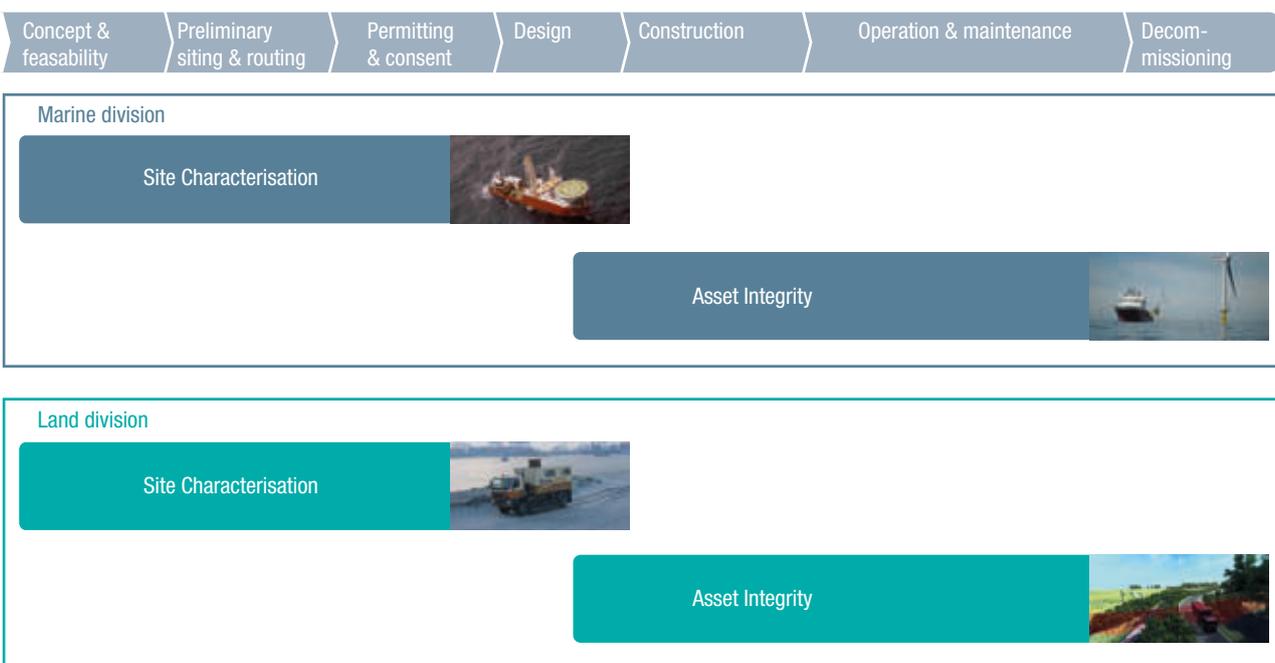
Fugro’s geotechnical, survey and subsea services were traditionally contracted separately. Increasingly clients require integrated solutions which Fugro is uniquely capable of providing as it has a very large portfolio of related services in-house. In 2016 Fugro decided to regroup the survey, geotechnical 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.

