Boskalis

ANNUAL REPORT 2019

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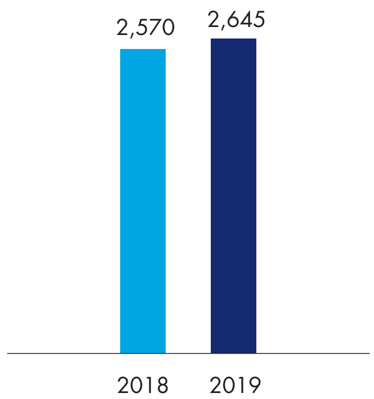
KEY FIGURES

(in EUR million, unless stated otherwise)	**2019**	2018
Revenue	**2,645**	2,570
Order book	**4,722**	4,292
EBITDA	**375.8**	353.6*
Net result from joint ventures and associates	**25.6**	28.4*
Depreciation and amortization	**265.1**	234.6
Operating result	**28.5**	119.0
Extraordinary items	**82.3**	-519.5
EBIT	**110.7**	-400.5
Net profit adjusted for extraordinary charges after tax	**74.9**	82.8
Net profit (loss)	**74.9**	-435.9
Net group profit (loss)	**74.9**	-433.7
Cash flow	**340.0**	319.5*
Shareholders' equity	**2,491**	2,544
RATIOS (IN PERCENTAGES)		
EBIT as % of revenue	**4.2**	4.6*
Return on capital employed	**2.9**	2.9*
Return on equity	**3.0**	3.0*
Solvency	**54.3**	56.1
FIGURES PER SHARE (IN EUR)		
Profit	**0.56**	0.63*
Dividend	**0.50**	0.50
Cash flow	**2.55**	2.41*
NON-FINANCIAL INDICATORS		
Employees including associated companies	**9,604**	11,345
Employees in Boskalis majority owned entities	**5,812**	5,912
Ratio women/men within Boskalis' majority owned entities	**14/86**	12/88
Number of nationalities within Boskalis' majority owned entities	**79**	68
Lost Time Injuries (LTI)	**6**	10
Lost Time Injury Frequency (LTIF)	**0.03**	0.05
Total Recordable Injury Rate (TRIR)	**0.37**	0.40
Strategic suppliers: percentage spend covered by Supplier Code of Conduct	**81**	70
CO_2 emissions scope 1+2 (MT ('000))	**1,110**	1,180

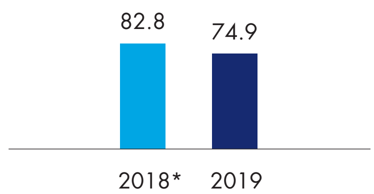
Please refer to the glossary for definitions of the terms used

** Excluding extraordinary charges*

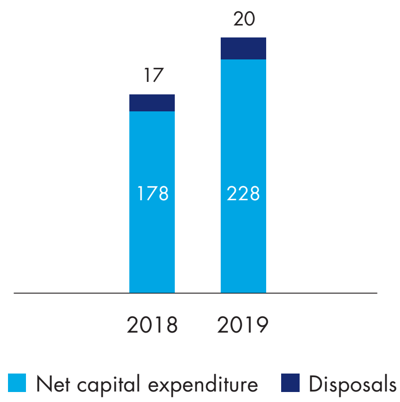
REVENUE (in EUR million)



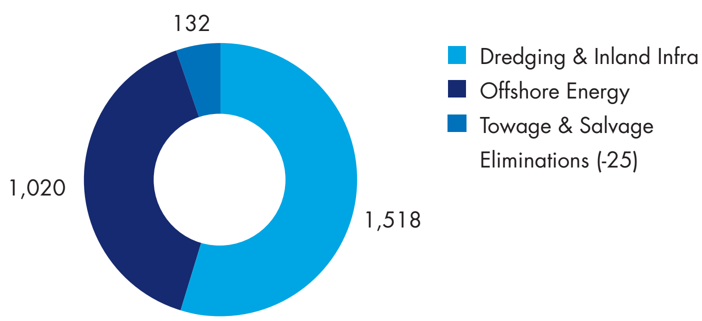
NET PROFIT (in EUR million)



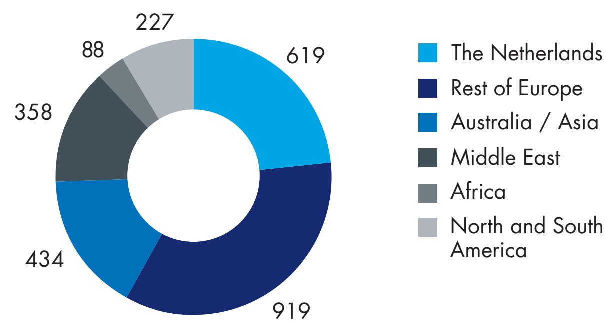
CAPITAL EXPENDITURE (in EUR million)



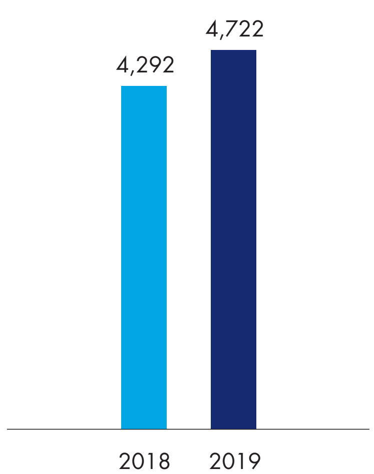
REVENUE BY SEGMENT (in EUR million)



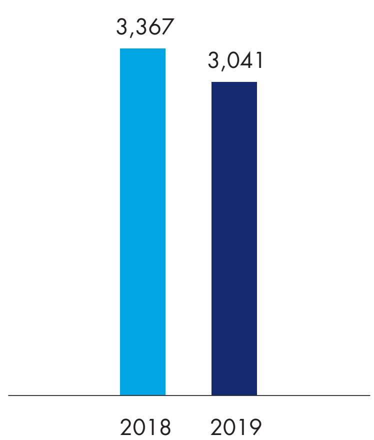
REVENUE BY GEOGRAPHICAL AREA (in EUR million)



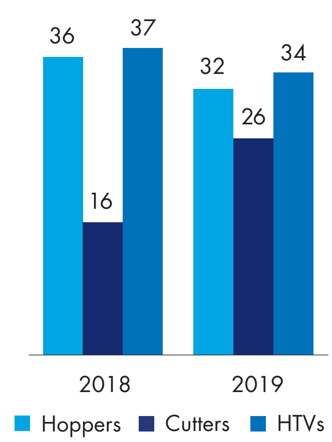
ORDER BOOK (in EUR million)



ACQUIRED ORDERS (in EUR million)



FLEET UTILIZATION (in weeks per year)



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Dredging and land reclamation activities for the Duqm Liquid Berths Project in Oman

CHAIRMAN'S STATEMENT

2019 was again a challenging year for Boskalis, with a first half of the year that was negatively impacted by the earnings of the Offshore Energy division. However, the second half showed a sharp improvement of our profitability and increasingly more signs of recovery in several of our markets. In 2019, our revenue increased to more than EUR 2.6 billion, the utilization of our vessels was healthy and the order book grew to a record amount of EUR 4.7 billion. Due to the sharp improvement in the second half we realized a net profit of EUR 75 million for the year. We propose a cash dividend of EUR 0.50 per share.

We took major strides in the expansion and optimization of the company during 2019. On the one hand we parted ways with the Saam Smit and Kotug Smit towage joint ventures, allowing us to strengthen our balance sheet by over EUR 260 million. On the other hand, we acquired Horizon Geoscience in the Middle East strengthening our position in the offshore survey market, thus providing us with a huge opportunity to play a leading role in this market together with Gardline.

DREDGING & INLAND INFRA

In the Dredging & Inland Infra division a lot of work was undertaken in Duqm, Oman, as this massive project is nearing completion. In early 2019 the new port area was submerged using siphons and the impressive kilometer-long quay wall and two 400-meter-long jetties largely disappeared under water. In Singapore we booked significant progress on the two impressive projects we are involved in: Finger Pier 3 and Pulau Tekong, the first polder to be created in Southeast Asia. There are strong signs that Singapore intends to use polders to protect more of its coastline from the consequences of climate change in the coming years. This is a great example of the important role we play in providing the necessary climate-adaptive solutions. In addition, we were active on many projects around the world including Australia, Indonesia, Canada, Kenya and the Netherlands.

We were also successful in acquiring new contracts in Australia (Port Adelaide), Bahrain (Manama land reclamation), Romania (Mamaia beach replenishment), United Kingdom (Southsea coastal defense), the Netherlands (RijnlandRoute) and Maldives (Gulhifalhu). The latter relates to a land reclamation and coastal defense project for one of the islands in the Maldives to protect against the consequences of climate change. At the end of the year we were also awarded a provisional letter of acceptance for Pasay, a sizable land reclamation project in Manila Bay in the Philippines. The climate change resilient islands will accommodate real estate needed in light of the strong population growth in this region.

OFFSHORE ENERGY

Many projects were also undertaken within Offshore Energy. Within the area of renewables, the Borssele Alpha export cable installation project was a compelling example of our unique combination of activities ranging from dredging work to soil compaction and cable-laying, to rock installation for which we deployed a broad range of our specialized vessels and equipment. The crane vessel Bokalift 1 was once again well-utilized in its second year of operation: until August at the East Anglia wind farm and subsequently for the removal of platforms in the Vulcan Viking field. The most spectacular Offshore Energy project was the dry-docking of the 325-meter-long Carnival Vista cruise ship on board the BOKA Vanguard in the Bahamas. This unique operation caught the attention of many media outlets and millions of people around the world last year. This was followed by the record-breaking transport of the FPSO P70 from China to Brazil. With a weight of 91,000 tons this is the heaviest load ever transported by a semi-submersible heavy transport vessel.

A number of interesting new projects were also acquired. The recovery of the offshore oil and gas market is slowly becoming apparent at Heavy Marine Transport demonstrated by the many contracts that were signed in the last quarter of 2019. These contracts included the transportation of LNG modules, two FPSOs and two floating production systems signaling that after a period of low capex levels, activity levels are picking up. Furthermore, we acquired sizable seabed intervention contracts across the globe including the Scarborough contract in Australia, Yunlin in Taiwan (scour protection around wind turbine foundations), El Salvador (connecting an FSRU) and the Lillebaelt Baltic Pipeline project. Within the area of renewables, a sizable contract was awarded for the installation of three export cables for the Hornsea 2 offshore wind farm. The operation will involve the use of a new multifunctional plough that will be pulled by the CSV Boka Falcon that was chartered in 2019. The game-changing renewables contract award for the Offshore Energy division was Changfang Xidao. It is a game changer because it concerns our first foundation work for wind turbines outside Europe. And more particularly because the contract has resulted in the decision to invest in a second crane vessel: the Bokalift 2. This is yet another groundbreaking concept. It combines a crane with a lifting capacity of 4,000 tons, capable of hoisting structures more than 100 meters tall and has a free deck space of 7,500 m^2.

SALVAGE

Salvage also had an extremely busy and above all successful year with its most notable projects being salvaging the tankers Front Altair and the Kokuka Courageous in the Gulf of Oman as vessels that fell victim to the rising tensions in the region. Other projects included salvaging the 300-meter-long Yantian Express container ship and the Golden Ray car carrier with 4,100 cars on board off the US coast.

SAFETY

Whilst it was a busy year across the board, we nevertheless were able to once again improve company safety. The Lost Time Injury Frequency continued to drop, falling to a record low of 0.03 per 200,000 hours worked. Our NINA (No Injuries No Accidents) program plays an important role in our ability to improve safety. 2020 marks the tenth anniversary of NINA; its values are now an integral part of everything we do. It is a great example of a program developed in-house that has a massive impact on our culture.

TRANSITION

As set out in our Corporate Business Plan 2020-2022, of which the main points can be found in this annual report, the coming decades will be characterized by further growth of the global population and increasing wealth per capita. Populations will mainly grow in urban areas, largely in continental coastal areas. This, together with increasing prosperity, will fuel the need for infrastructure – infrastructure that we can create with ports, waterways and land reclamation. It also drives demand for energy, which is expected to continue to increase. Energy that will not only be found on land, but also offshore. Looking at this demand, we expect that fossil fuels will continue to be important for quite some time. The importance of renewable energy will furthermore increase as part of the energy transition.

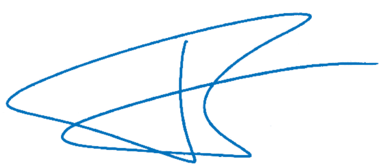
The rate at which this transition looks to take place will however not avert further global warming. Climate change will become ever more apparent, gradually through rising sea levels and already apparent through more intense and frequent forms of extreme weather. That will have various profound effects, one being that many of these coastal areas with growing populations and prosperity will be under threat. We can play an important role by offering an array of protective measures ranging from beach replenishment to polders, and from dikes to mangroves – many creative ways to protect coastlines and introduce adaptive measures aimed at combatting the effects of climate change.

Boskalis is exceptionally positioned to play a significant role as we create and protect welfare and advance the energy transition. We offer a unique combination of people, vessels and capabilities through which we provide innovative solutions.

CLIMATE NEUTRAL

It goes without saying that Boskalis too has a responsibility when it comes to reducing our CO_2 emissions. That is why we have set ourselves a goal of being completely climate-neutral by 2050. The vast majority of our CO_2 footprint is linked to our vessels with their installed base that run on fossil fuels. We have set out a defined path for how we can become climate neutral. This is based on the vision that hydrogen, in some type of bound form, will be the fuel of the future to power vessels, both for existing and next-generation engines. In the coming years we aim to develop more initiatives with alternative climate-neutral fuels for existing engines, such as biofuel, but also methanol or ammonia. What's more, we are gaining experience with new types of conversion technologies. In this context we intend to install a fuel cell later this year on board of one of our hopper dredgers as an auxiliary power unit.

In many ways the future will be characterized by transition. After a turbulent period, we look ahead with confidence. We have the best people in the industry, ready to provide solutions to the many challenges in the rapidly changing world around us. On behalf of the Board of Management I want to thank all of them for their excellent achievements during the past year, and thank our clients, partners and shareholders for the trust and confidence they place in us.



Peter Berdowski

BOSKALIS AT A GLANCE

The Bokalift 1 demonstrating its unique capabilities by transporting and installing five giant foundations in one go for the East Anglia wind farm

COMPANY PROFILE

Boskalis is a leading dredging and marine expert creating new horizons for all its stakeholders.

In addition to our traditional dredging activities we offer a broad range of maritime services for the offshore energy and renewables sectors. Furthermore, we provide towage services as well as emergency response and salvage-related services.

As a partner we are able to realize complex infrastructural works for our clients within the chain of design, project management and execution on time, safely and within budget, even at vulnerable or remote locations around the world. We strive for sustainable design and realization of our solutions.

Demand for our services is driven by structural growth and rising prosperity of the global population, which in turn drives growth in global trade and demand for raw materials and energy. Furthermore, the required energy transition and climate change adaptive measures increasingly create business opportunities for Boskalis. Collectively these macro trends drive demand for maritime infrastructure and as such constitute key drivers of sustainable growth for our activities. Boskalis operates worldwide but concentrates on those regions that have the highest growth expectations. This spread gives us both a solid foundation and the flexibility to be able to secure a wide range of projects, as well as providing good prospects for balanced and sustainable growth. Our main clients are governments, port and terminal operators, oil, gas and wind energy companies, mining companies and related EPC contractors and subcontractors, shipping companies, insurance companies and international project developers.

Royal Boskalis Westminster N.V. (Boskalis) has 9,604 employees, including associated companies. The safety of our employees and those of our subcontractors is paramount. Boskalis operates its progressive global safety program No Injuries No Accidents (NINA), which is held in high regard in the industry and by our clients. Our versatile fleet consists of more than 700 vessels and floating equipment, including associated companies. Our head office is based in the Dutch city of Papendrecht. Royal Boskalis Westminster N.V. shares have been listed on Euronext Amsterdam since 1971.

ACTIVITIES

Boskalis is renowned for its innovative approach and specialist knowledge of environmentally friendly techniques. With our great expertise, multidisciplinary approach, versatile state-of-the-art fleet and extensive experience in engineering and project management we have proven time and again that we are able to realize complex projects on time, safely and within budget, anywhere in the world.

DREDGING & INLAND INFRA

Traditionally the core activity of Boskalis is dredging. This involves all activities required to remove silt, sand, clay and other layers from the sea- or riverbed and reusing it elsewhere where possible, for example for coastal protection or land reclamation. The services we provide also include the construction and maintenance of ports and waterways, and coastal defense and riverbank protection. In addition, Boskalis is active in the extraction of raw materials using dredging techniques and dry earthmoving. In the Netherlands, Boskalis also operates as a contractor of dry infrastructure projects. This involves the design, preparation and execution of large-scale civil infra works, such as the construction of roads and railroads, bridges, aqueducts, viaducts and tunnels in addition to dike and riverbank related projects. In doing so, we also perform specialist works such as soil improvement and remediation.

OFFSHORE ENERGY

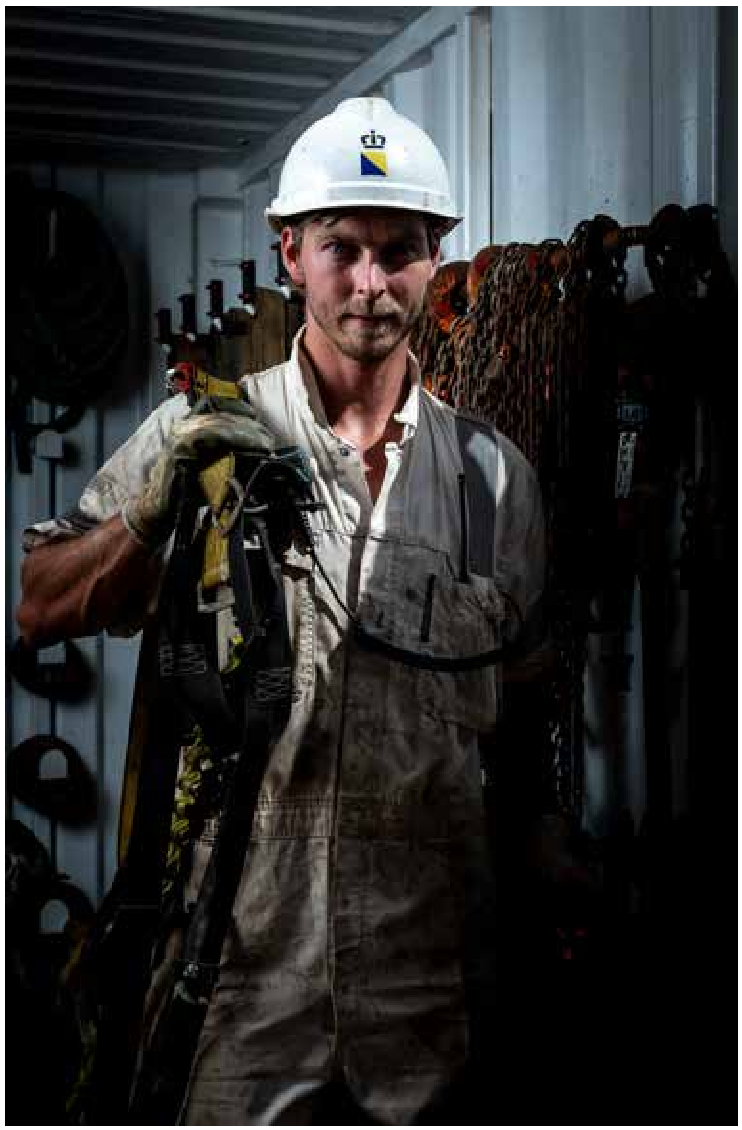
Through its offshore contracting capabilities and services Boskalis supports the activities of the international energy and renewables sectors, including oil and gas companies and providers of renewable energy such as wind power. We are involved in the engineering, construction, maintenance and decommissioning of oil and LNG import/export facilities, offshore platforms, pipelines and cables and offshore wind farms. In performing these activities Boskalis applies its expertise in the areas of heavy transport, lift and installation work, as well as diving and ROV services complemented with marine surveying, dredging, offshore pipeline, cable and rock installation.

TOWAGE

In ports and terminals around the world towage and terminal services are provided to oceangoing vessels through the joint ventures Keppel Smit Towage and Smit Lamnalco. Keppel Smit Towage offers assistance to incoming and outgoing vessels in various ports in the Asia-Pacific region. Smit Lamnalco offers a full range of services for the operation and management of onshore and offshore terminals. These services include assistance with the berthing and unberthing of tankers at oil and LNG terminals as well as additional support services such as pilotage, subsea inspection and maintenance, firefighting, and the coupling and uncoupling of terminal connections. With a combined fleet of over 200 vessels assistance is provided to, amongst others, oil and chemical tankers, container ships, reefers, ro-ro vessels and mixed cargo ships around the world.

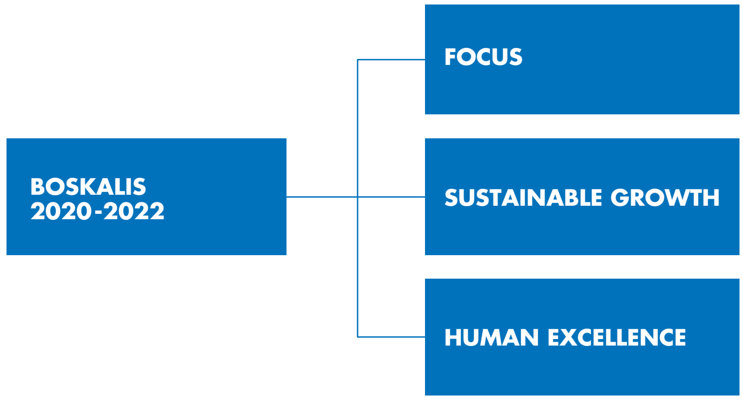
SALVAGE

Boskalis provides services relating to marine salvage and wreck removal. We assist vessels in distress and are able to spring into action at any time and anywhere in the world. We are able to do so by operating out of four locations which are strategically situated along the main international shipping routes: Houston, Cape Town, Rotterdam and Singapore. The removal of shipwrecks or damaged offshore platforms almost always takes place at locations where the wreck forms an obstruction to traffic or presents an environmental hazard. We have the advanced technology and expertise needed to remove hazardous substances such as heavy fuel oil from wrecks and boast a successful track record in salvaging vessels and platforms under challenging circumstances.



STRATEGY

We create and protect welfare and advance the energy transition.



Boskalis operates around the world and is a leading player in the fields of dredging, offshore energy and maritime services. The company is a frontrunner in many of its markets thanks to its ability to deliver innovative all-round solutions combined with a comprehensive portfolio of specialist activities. Its versatile vessels and maritime equipment with value-adding potential are the cornerstone of the Boskalis business model. Systematic execution of the strategy, which is reviewed regularly in light of relevant market developments, is a key factor in Boskalis' success.

Our strategy is elaborated in our three-year business plan. Following a thorough review of our markets and business lines, a new Corporate Business Plan was formulated early 2020 for the period 2020-2022. Based on three strategic pillars – Focus, Sustainable Growth and Human Excellence – this plan addresses current and anticipated developments in our global business environment.

IN RETROSPECT

Although the 2017-2019 business plan assumed business conditions to remain challenging, the decline in most of our market segments was deeper and longer than expected. Further to a fleet rationalization we completed a cost reduction program for our head-office organization and terminated our low-end heavy marine transport activities.

To foster the group-wide harmonization and efficiency of our operations, we developed and implemented a new quality management system which we refer to as the Boskalis Way of Working (WoW). To improve the commercial presentation of our integrated services to the Offshore Energy sector we merged them under the Boskalis brand name.

In 2019, in response to the competitive environment and the subsequent need for further consolidation in the harbor towage markets, we completed the sale of our equity stake in SAAM SMIT Towage to SAAM. Furthermore – together with our co-shareholder Kotug – we concluded the divestment of Kotug Smit Towage to Boluda that same year. With the proceeds we strengthened the balance sheet and returned equity to shareholders through a share buyback program.

With the acquisition of Gardline (UK) in 2017 and Horizon (United Arab Emirates) in 2019, Boskalis delivered on its strategic ambition to build a leading position in the marine survey market. This has strengthened our position considerably in the early part of the business cycle of the renewables and offshore energy markets. Through the acquisition of the offshore cable installation activities and assets of Bohlen & Doyen early 2019, we bolstered our position in the offshore cable market.

Over the past two years we significantly strengthened our position in the area of inspection, repair and maintenance of subsea installations, pipelines and cables through the addition of two large diving support vessels and the opening of a new office in Aberdeen.

BUSINESS DRIVERS

In monitoring and developing our corporate strategy we keep a clear eye on the long-term megatrends that underpin the Boskalis business model.

A key driver of our business model is the continued growth of the global population, projected to rise by more than 1 billion persons to approximately 9 billion by 2040. By then almost 70 percent of the people together with associated assets and infrastructure will live on 0.5 percent of the world's land area, much of it in close proximity to water and some of this land will be reclaimed. Furthermore, long-term economic projections show that emerging markets will outgrow the advanced economies and that the average global Gross Domestic Product (GDP) per capita is expected to have increased by 50 percent by 2040. This growing and more affluent population living in coastal regions underpins the other drivers of our business: world trade, energy consumption and climate change.

According to the World Bank, infrastructure services are the backbone of development – they support essential services required to meet economic and financial, social and environmental objectives. In particular, the building of trade-related infrastructure is recognized as a key element to help accelerate progress towards achieving the UN Sustainable Development Goals (SDGs).

Global trade is expected to roughly keep pace with economic growth. Particularly in Asia, interregional shipping is anticipated to further increase. Boskalis continues to benefit from the trend towards larger vessels with deeper drafts. In ports these vessels require deeper access channels and larger and deeper berths and turning basins, creating primarily opportunities in the area of dredging.

As a consequence of the above-mentioned demographic and economic developments, energy demand continues to increase. Part of this demand can be served from existing sources, however significant new investments are required to meet this rising demand. The energy infrastructure required to meet this need presents a challenge on multiple fronts. The International Energy Agency (IEA) estimates USD 44 trillion is required in new energy supply infrastructure in the period up to 2040. While an annual expenditure of USD 45 billion is required to address UN SDG 7 to deliver affordable, sustainable and reliable access to modern energy services.

Whilst the energy transition is driving growth in renewables, traditional fossil energy sources will continue to be indispensable for the foreseeable future. Oil, natural gas and even coal are expected to remain significant components of the global energy mix and absolute fossil fuel volumes are predicted to grow in the

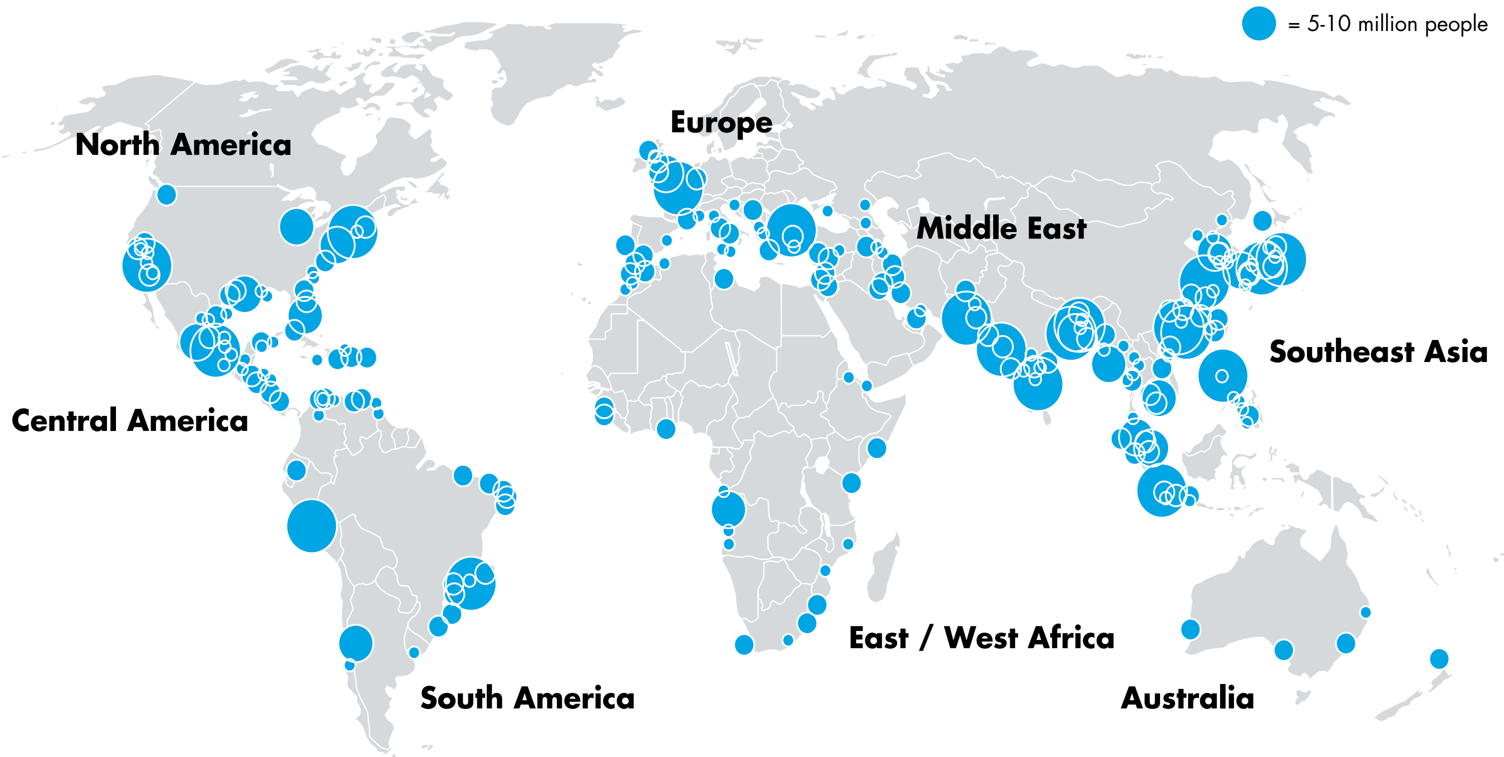


Figure 1: population concentrated in coastal, more wealthy areas

short and medium term. A more rapid energy transition – consistent with meeting the Paris climate goals – would also create substantial new opportunities for Boskalis. Within such a faster energy transition, the share of coal and oil in the energy mix would strongly decline and be offset by an even sharper growth in renewables and gas - the two most relevant energy markets for Boskalis. Through our projects and business activities we have an important role to play in advancing the energy transition. We are one of the leading players in the offshore wind market with a strong position in the installation of cables and turbine foundations. Through these projects we are helping to make renewable electricity available and attractive to clients and consumers.

Climate change continues to rise up the global agenda and Boskalis can play a valuable role in the necessary adaptation. The UN recognizes the rising gap between current progress and global goals to limit global warming. The opportunity for businesses to step up to the challenge is bigger than ever. The 2018 special report from the Intergovernmental Panel on Climate Change (IPCC) incontrovertibly states that the effects of climate change cannot be fully prevented. Approximately 3.5 billion people, half the global population, live within 60 kilometers of the coast and 75 percent of major cities worldwide are located on the coast, many of which are at risk from the effects of climate change. Furthermore, 1.1 billion people live in flood-prone areas at threat from both rivers and seas. Without additional investments annual coastal flood damages are projected to increase 100 to 1,000 times by the end of this century. It is estimated that annual investments of USD 77 billion are required to keep flood risks at their current levels. Raising the safety levels to Dutch standards would result in a tenfold increase of these annual investment needs.

In summary, the mid- to long-term development of macro trends relevant to Boskalis are all positive. The structural growth and rising prosperity of the global population that increasingly lives in coastal areas drives demand for raw materials and energy and stimulates global trade. Climate change necessitates massive investments in the energy transition away from fossil fuels towards renewable energy sources. Given the unavoidable changes that are already locked in as a result of current and near-term emissions, the damaging effects of climate change will nonetheless increase over the next decades. Adequately addressing these

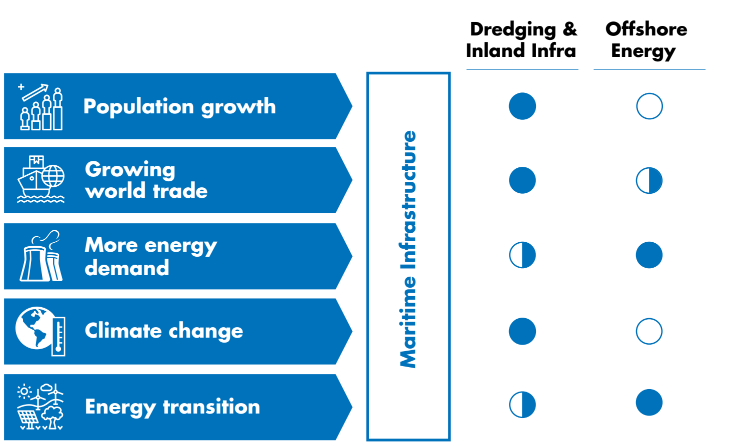


Figure 2: Boskalis business drivers and related activities

effects through adaptive measures also requires very substantial investments. Collectively these macro trends propel the demand for maritime infrastructure and as such constitute key drivers of sustainable growth for our activities. This is irrespective of unpredictable and potentially less favorable short-term developments in some of the regions and markets where Boskalis is active.

Since its inception in 1910, Boskalis' raison d'être has been to create and to protect infrastructure through innovative solutions to challenges in the maritime, coastal and delta regions of the world. The importance of our climate change adaptive solutions will only increase with time and through our renewables business, we strive to advance the energy transition. Looking to the future, our purpose seems more relevant than ever.

DIVISIONAL REVIEW

DREDGING & INLAND INFRA

Dredging & Inland Infra is focused on market segments with structural growth. In the short-term the rate at which the market continues to grow is modest, but the industry characteristics are compelling. Boskalis holds an important position in this consolidated market and has a very strong global presence, putting the company in a good position to take advantage of forthcoming prospects.

Based on recent market assessments, Boskalis estimates the global dredging market for hopper and cutter dredger projects to have a contract value in the order of EUR 56 billion, with the bulk of the identified projects expected in the next five years. This outlook is slightly better, relative to the market assessment conducted three years ago.

Climate change is one of the greatest threats facing humanity with potentially far-reaching and devastating impact on people, the environment, and the economy. The investments needed to adequately protect coastal regions are immense. Therefore, accelerating climate change adaptation is a human, environmental, and economic necessity. The dredging industry is uniquely positioned to offer adaptive solutions as sea levels continue to rise, extreme weather events surge and their damaging impact becomes more apparent.

To position ourselves for these opportunities we will make investments to maintain and, where appropriate, expand our market position. In terms of the fleet, investments are centered on the delivery of the Krios mega cutter in 2020 and the development of two new and distinctive shallow-draught, large/jumbo-sized trailing suction hopper dredgers. As ever, Boskalis will continue to keep an eye out for interesting consolidation opportunities involving acquisitions of regional dredging players.

To reduce our emissions, the Dredging division has successfully developed the 'Boskalis on Bio' program in partnership with GoodFuels and Wärtsilä. We see biofuels as one of the alternatives to accomplish substantial CO_2 reductions and continue to invest in technology and practical experience around other carbon-neutral fuels for our vessel engines in the coming years.

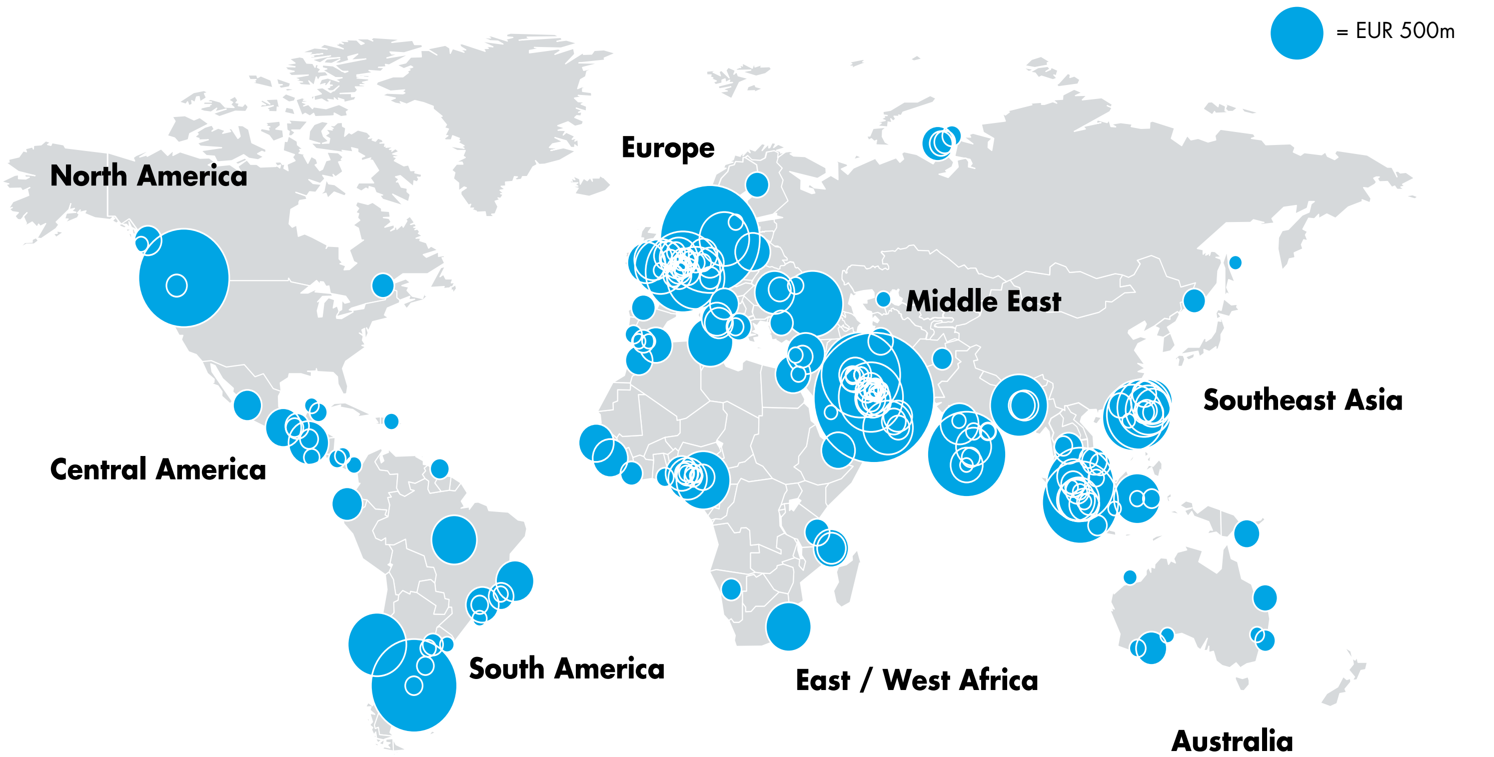


Figure 3: Identified dredging projects

TOWAGE & SALVAGE

As referred to earlier, the size of our towage business has decreased following two substantial divestments in 2019. Opportunities to divest the remaining smaller parts of the towage business will be assessed on a case by case basis.
The volume of work for Salvage is unpredictable by nature. Nevertheless, Boskalis will leverage its global footprint and permanent presence in ports around the world to grow its Emergency Response business. Furthermore, we will use our assets, engineering know-how, contract and risk management skills as well as our solid financial position to secure attractive wreck removal contracts. The importance of our salvage operations from an ESG perspective is gaining external recognition. Through our efforts we protect economic value and avert ecological damage. Over the last five years, Salvage has had on average one case every five days and prevented 1.9 million tons of (refined) oil products and 4.2 million tons of hazardous cargo from spilling in our oceans and seas.

OFFSHORE ENERGY

Boskalis offers a broad range of distinctive capabilities to the offshore energy sector, both in oil and gas as well as in offshore wind. Over the past six years, the revenue share of offshore wind has grown from practically nil to currently 45 percent.
Increasing energy consumption will create additional opportunities for our traditional offshore activities, whilst the renewables market has substantial further growth potential. For the period 2020-2022 overall capital expenditures in offshore oil & gas are expected to grow by an average of over 6 percent per year.

Key activity drivers for Boskalis include rig activity, the installation of floating and fixed structures, pipelines, SURF, subsea IRM and decommissioning.

The total expenditures in offshore wind are projected to increase by on average more than 22 percent per year over the business plan period. Within the offshore wind market, the main activity indicators for Boskalis include the transportation and installation of foundations and substations and the installation of export and array cables.

The various business clusters within the offshore energy division often serve both the oil & gas and offshore wind markets allowing us to allocate our assets and staff towards opportunities where they can add most value.

Marine Transport Services

Boskalis has a leading position in the global heavy marine transport market and is also active in long-distance ocean towage. Boskalis has deliberately positioned itself for the high end of the transport market with a focused fleet of semi-submersible heavy marine transport vessels. In this market it holds a substantial share and based on public information the supply side outlook is fairly stable. Demand for the coming years is set to increase with a pick-up of rig moves and a strong increase in the number and size of floating and fixed platforms. Furthermore, the growth in offshore wind is also creating dry transport opportunities as foundations and offshore substations are increasingly being fabricated in different parts of the world.

Survey
With the acquisition of Gardline in the UK and Horizon in the United Arab Emirates, Boskalis has established a leading position in the marine survey market and strengthened its position in the early-cyclical segments of the renewables and oil & gas markets. In the coming years, survey will benefit from both the improved market dynamics in oil & gas and growth in wind. It will also present us with opportunities to increase our presence in the Asian markets as well as on the east coast of the United States. Based on the four largest players in this market, Boskalis' share is approximately 30 percent. In order to further strengthen our competitive position, we plan to invest in four new survey vessels during the business plan period.

Subsea Services
Boskalis holds a relatively modest but successful position in the subsea services market, focusing on survey and UXO clearance, diving and Inspection, Repair and Maintenance (IRM) work in shallow water regions in Northwest Europe, Africa and the Middle East. The subsea services market is highly fragmented with the vast majority of players operating just one or two survey and diving support vessels in a specific region. The addition of two large existing diving support vessels to our fleet has significantly strengthened our market position.

Installation & Intervention
Installation & Intervention comprises the installation of floating and fixed offshore structures as well as seabed preparation, subsea rock installation and landfall construction. Similar to the other business units the positive outlook for oil & gas and wind is expected to create opportunities in the coming years. To strengthen its position in the subsea rock installation market Boskalis will convert a former heavy transport vessel into a fallpipe vessel.

Offshore wind
The offshore wind cluster is mostly active in the transportation and installation of turbine foundations and substations as well as the installation of export and array cables. Boskalis' share in the European offshore wind market ranges from around 10 percent (foundations) to around 35 percent (cables). The company is committed to maintaining a strong presence in the European market as well as to build a position in the Far East and east coast of the United States.

Similar to the successful Bokalift 1, Boskalis will convert an existing hull to create the Bokalift 2 crane vessel with 7,500 m² of free deck space and a 4,000 ton revolving crane capable of lifting structures more than 100 meters high. The Bokalift 2 will be a flexible value adding asset, well positioned for the installation of current and future generation offshore wind turbine foundations as well as oil & gas structures in addition to serving the decommissioning and salvage market.

STRATEGIC FRAMEWORK

The Boskalis strategy is a logical progression from our purpose and mission:

Purpose – We create and protect welfare and advance the energy transition.
Mission – We strive to be the leading dredging and marine contracting experts, creating new horizons for all our stakeholders.

The strategic course for the coming period will be based on three pillars: Focus, Sustainable Growth and Human Excellence.

FOCUS

Value Adding Assets
Boskalis' strength lies in deploying its own assets combined with additional interrelated core competencies to add value for our clients. Boskalis will sustain its success as long as we have the right assets and people to execute our specialized activities for our various client base.

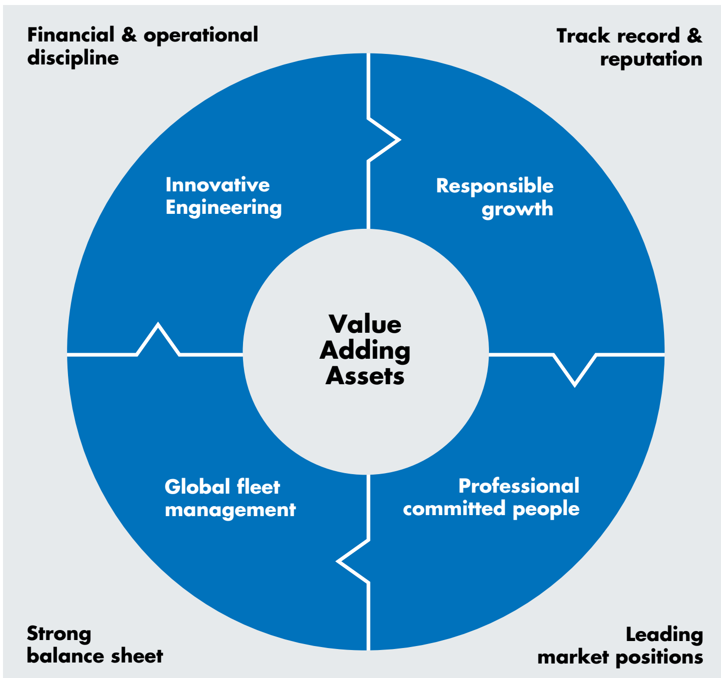


Figure 4: Interrelated core competencies

We seek to achieve the optimum balance between margin maximization and fleet utilization by operating our assets at various points on the S curve (see figure 5). We have clients who need us to deliver integrated, innovative services or turnkey solutions. In order to meet these client requirements, we need competencies that complement and reinforce one another, such as innovative engineering as well as financial and operational discipline. In addition, we need to be able to act as lead contractor with project management experience and a successful track record being of great importance. In this part of the market, with its higher margin potential, we expressly position ourselves towards the top of the S curve.

The more straightforward services assets are positioned at the lower end of the S curve. Certain of these services support contracting projects but the bulk of the business is third-party services revenue. Here the emphasis lies on sustaining fleet utilization levels whilst maintaining a responsible risk profile, with cost leadership being an important prerequisite.

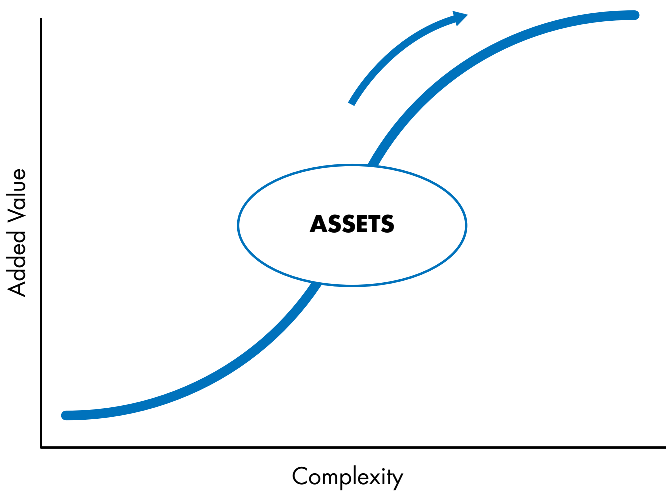


Figure 5: S curve – creating value with assets

The S curve concept is dynamic in time and therefore we need to be critical with regard to the scope for adding sufficient value to assets at the lower end of the S curve. A structural shift in supply and demand can for example cause a former value-adding asset to be structurally repositioned lower on the curve. If this results in an asset becoming a commodity that cannot be moved up the S curve, we will consider divesting it. Conversely, modifying an existing asset or deploying it in a new market segment – for example in conjunction with our high-value contracting assets and project management capabilities – can result in it being repositioned higher on the curve. Boskalis manages its portfolio of assets actively in order to timely respond to such market dynamics. The essence of our value-adding asset concept is that we aim to position assets high on the S curve.

Disciplined and selective tendering

The gradual overall market recovery will result in new opportunities for many of our business activities. Market conditions are expected to remain challenging as surplus capacity still persists and clients continue to ask more value for money. This requires us to be disciplined and selective in the (pre)tender phase, focusing on projects that sit well within our profile of core competencies allowing for an equitable risk/reward (cash) balance.

Our core activities are focused on geographic regions and market segments that offer the best opportunities whereby we provide our services on both a combined and a standalone basis. Our mix of activities gives us a broad geographical scope. Some of our activities, such as Dredging, Transport and Salvage, have a truly global reach, while others have a regional focus. For example, our Inland Infra activities are concentrated on the Dutch market and Offshore Wind foundations and cables is currently focused on Northwest Europe and Far East, while our Installation & Intervention activities cover a wider geographical scope. Marine Survey has a historic foothold in Europe and the Middle East with an increasing presence on the East coast of the United States and Asia through the growth in offshore wind.

Capital allocation and returns

Our capital allocation guideline aims to distribute and invest the company's financial resources in ways that optimize returns. In practice this typically results in captive vessels at the high end of the S curve being internally financed. Where possible we charter surplus commodity assets that are often available at rates below the full economic cost of ownership.

Safeguarding profitability margins also requires a continued focus on operational excellence whereby problem-solving capabilities, teamwork and leadership drive the ongoing improvement of our processes and practices.

SUSTAINABLE GROWTH

Invest in differentiating assets

There are various ways in which we can grow the business and we will consider our options as and when opportunities arise. Ways of expanding include building new assets, although this will only be considered for unique assets that cannot be purchased second-hand, or buying existing assets in the market. During the business plan period the following asset investments are anticipated:

Dredging
- the delivery of the cutter Krios in 2020;
- the development of two distinctive shallow-draught large-sized hoppers, the first being expected to be completed by 2022;

Offshore
- the conversion and development of a unique 4,000-ton crane vessel Bokalift 2 which will initially be deployed for wind turbine foundations;
- the conversion of a heavy marine transport vessel into a fallpipe vessel;
- four new survey vessels;
- bolt-on acquisitions of players that hold an interesting market position and preferably bring a combination of assets and know-how;
- strategic alliances and partnerships to supplement our own internal assets, capabilities and activities;
- consolidation, an area where we are keen to play an active role. Consolidation would be focused on markets where we already hold a strong position. This category tends to be difficult to steer and is largely opportunity driven.

Invigorate climate change adaptation

We continue to promote ecologically and socially responsible alternatives to our clients. To invigorate climate change adaptation, we will further invest in sustainable coastal protection technology such as 3D printed reefs, mangrove restoration, polders and sand engines.

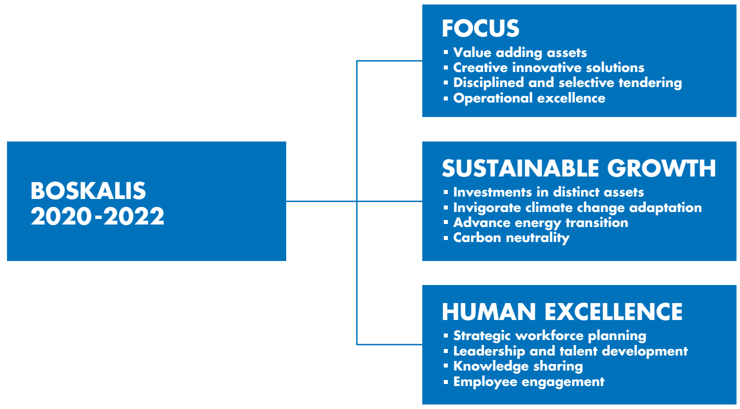


Figure 6: Strategic framework for 2020-2022 with key initiatives for each of the three strategic pillars

The huge climate change adaptation investments needed to protect and promote human prosperity will not materialize automatically overnight. It will require close(r) cooperation between governments, businesses and development finance institutions. By conducting focused dialogues with key stakeholders, we can assist in systematically identifying the main barriers to private and public climate change project financing and help develop solutions.

Climate neutrality

To support the sustainable growth of our business we commit to being climate neutral by 2050. Nearly all our carbon emission is caused by our global fleet that constitutes a large installed base of fossil-fueled engines. We continue to invest in technology and practical experience around carbon-neutral fuels for our vessel engines, including biofuels, methanol, ammonia and hydrogen. Additionally, we explore the possibilities of new energy conversion technologies such as (hydrogen) fuel cells. To help advance the timely industry-wide adaptation of these alternatives we aim to further develop these alternatives in close collaboration with the main European maritime industry players.

HUMAN EXCELLENCE

Our clients demand more integrated and innovative solutions and expect us to have a thorough understanding of their operating environments and stakeholders. Additionally, they expect us to provide ever more value for money often in combination with increased local content requirements. The fact that technology is commoditizing rapidly and capital is in abundance at low cost, makes human capital the main differentiator for a sustainable competitive advantage.

In view of the above, recruitment, retention and development of excellent staff is considered the main pillar of our strategic framework. For this purpose we will intensify the development and implementation of initiatives and tools to source the right talent from the international labor market as well as to monitor, develop and steer internal talent and improve internal mobility. We will also continue to refresh and optimize our HR-processes around performance management, leadership- and talent development, knowledge sharing and employee engagement.

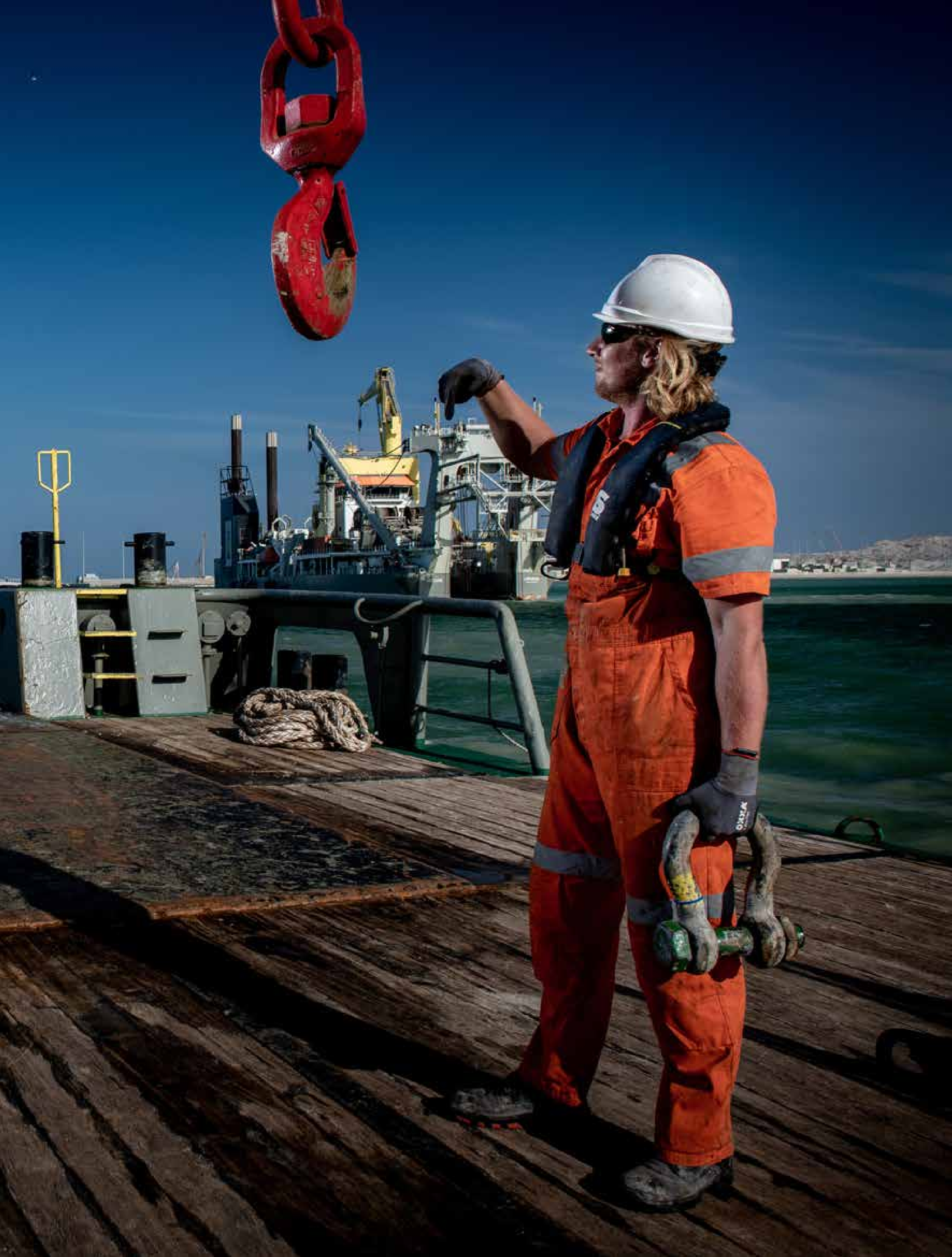
IN CONCLUSION

After a number of challenging years, Boskalis is entering the 2020-2022 business plan period on a very solid basis, both in terms of business fundamentals and financial resilience. In addition, we have a strong global client base, highly committed and passionate employees and a state-of-the-art, versatile fleet.

We will continue to selectively invest in the further sustainable growth of our business. Total capital expenditure over the three-year period is projected at around EUR 900 million, somewhat above depreciation. This amount excludes any asset acquisitions, bolt-on acquisitions or consolidation opportunities that may arise.

A healthy balance sheet is essential in our line of business. We believe a net debt/EBITDA ratio in a range of 1 to 1.5 through the cycle to be appropriate for our mix of activities. We expect to be at or below this range during the business plan period, both as a matter of prudence and in order to have the flexibility to expand if opportunities present themselves.

We remain committed to our shareholders and will maintain our current dividend policy, which is based on distributing 40-50 percent of the net profit from ordinary operations. Whilst depressed earnings are recovering, a stable all cash dividend with a higher payout ratio is expected to prevail. Furthermore, the current share buyback program is expected to be completed in the course of 2020. Subject to market conditions at that point in time a new share buyback program may be considered.



SHAREHOLDER INFORMATION

We strive to inform our stakeholders as completely as possible and to provide insight into the strategic direction and performance of the company. These efforts should allow for an accurate valuation of the Boskalis share over time.

INVESTOR RELATIONS POLICY

Providing clear, transparent, accurate and timely information to our stakeholders is something we value highly. We consider our financial stakeholders to include existing and potential shareholders, other investors, banks and brokers as well as the media. Relevant information is equally and simultaneously provided to all interested parties and is made available through annual, semi-annual and quarterly updates, press releases, presentations to investors and the Boskalis website. To build and maintain long-term relationships with our stakeholders we organize roadshows, attend conferences and accommodate meeting requests and conference calls where feasible, while adhering to all legal disclosure regulations and obligations.

Bilateral meetings and conference calls with analysts and existing or potential shareholders are not held during 'closed periods'. Our policy of holding bilateral meetings with shareholders is set out in the Investor Relations section distribute on our corporate website.

OPEN DIALOGUE

Following the publication of the annual and half-year results, we host comprehensive plenary analyst meetings which can also be followed through a webcast. Following important announcements, we also contact shareholders proactively and we maintain regular contact with major investors and analysts, for example by providing the opportunity, where feasible, to visit a project or a vessel.

In 2019 we again hosted a broad roadshow and investor conference program. We participated in conferences in the Netherlands, Norway, Switzerland and the UK. Roadshows for institutional investors were organized in Belgium, Canada, Finland, France, Germany, Ireland, the Netherlands, Spain, Switzerland, the UK and the US. In addition, a large number of investor meetings took place at our head office in the Netherlands. In 2019 approximately 275 meetings were held with investors.

In 2019 Boskalis also hosted a multi-day analyst trip in Singapore. During this trip the presence of Boskalis in the region was presented and the impressive Pulau Tekong polder development was visited. The purpose of such field trips is to enrich the understanding of our business with the brokers.

Boskalis is covered by all the major Benelux brokers. We are in frequent contact with their analysts, who play a key role in distributing information to their clients about the markets in which Boskalis operates. In 2019 Berenberg initiated research on Boskalis whilst NIBC terminated the coverage of a large number of large and mid-cap companies, including Boskalis.

On 8 May 2019 we held our Annual General Meeting of Shareholders (AGM). More information on the AGM can be found on our corporate website.

DIVIDEND

The main principle underlying the Boskalis dividend policy is to distribute 40% to 50% of the net profit from ordinary operations as dividend. At the same time Boskalis aims to achieve a stable development of the dividend in the longer term. The choice of dividend takes into account both the company's desired balance sheet structure and the interests of shareholders.

In setting the 2018 dividend the robust balance sheet was taken into consideration resulting in a decision to adjust the net result for extraordinary charges and to pay out nearly 80% of the net operating profit. On 8 May 2019 the AGM approved the proposal to distribute a dividend from the retained earnings, amounting to EUR 67.0 million, for a dividend payment to the shareholders of EUR 0.50 per ordinary share in cash.

REPURCHASE OF SHARES

Boskalis announced a share buyback program early February 2019 with the intention to repurchase the equivalent of EUR 100 million of its own shares. The program was launched mid-March and in the period up to 31 December 2.34 million shares were purchased representing a total value of EUR 46.8 million. As at 31 December 2019 the issued share capital consisted of 135,378,338 ordinary shares, of which 3,651,701 are treasury stock held by Boskalis.

SHARES AND LISTINGS

Ordinary shares in Royal Boskalis Westminster N.V are listed on the Euronext stock exchange in Amsterdam, the Netherlands (ticker BOKA.AS, ISIN code NL0000852580). Options on ordinary Boskalis shares are traded on the European Option Exchange in Amsterdam (Euronext.liffe). Boskalis shares are included in the AMX-index.

The authorized capital amounts to EUR 4.8 million with 240 million ordinary shares and 80 million cumulative protective shares, with a respective nominal value per share of EUR 0.01 and EUR 0.03.

MAJOR SHAREHOLDERS

Under the Dutch Financial Markets Supervision Act, shareholdings of 3% or more in any Dutch company must be disclosed to the Netherlands Authority for the Financial Markets (AFM). According to the register kept by the AFM the following shareholders disclosed that they have a direct or indirect (potential) interest in Boskalis as at 31 December 2019:

HAL Investments B.V.: 43.51%*
Sprucegrove Investment Management Limited: 5.16%
International Value Advisers, LLC: 5.06%
Marathon Asset Management: 3.57%
Black Creek Investment Management, Inc.: 3.03%
Bestinver Gestion, SGIIC S.A.:3.01%

** According to the Q3 2019 disclosure of HAL Holding N.V.*

Besides these large shareholders, an estimated 14% of the shares are held by shareholders in the US, 7% in the UK and the remainder in mainly Spain, Norway, France and the Benelux.

SHARE INFORMATION

In 2019 approximately 76 million Boskalis shares were traded on Euronext Amsterdam, half the amount traded in 2018 when Boskalis was still included in the AEX and MSCI Europe index . The average daily trading volume in 2019 was slightly more than 299,000 shares (2018: 598,000). In the course of the year, the share price increased by 5.9% from EUR 21.47 to EUR 22.73. The market capitalization increased by nearly 4% compared to the end of 2018 to EUR 2.99 billion.

	Note	**2019**	2018	2017	2016	2015
High share price (in EUR)	*(1)*	**25.42**	32.58	35.51	37.60	49.21
Low share price (in EUR)	*(1)*	**16.48**	20.10	27.08	27.89	35.70
Share price at year-end (in EUR)	*(1)*	**22.73**	21.47	31.43	32.99	37.63
Average daily trading volume	*(1)*	**299,217**	598,044	507,778	492,136	466,526
Number of issued ordinary shares at year-end (x 1,000)	*(2)*	**131,727**	134,068	130,677	130,077	125,627
Average number of outstanding shares (x 1,000)		**133,248**	132,492	131,097	128,205	124,182
Market capitalization at year-end (in EUR billion)	*(3)*	**2.99**	2.88	4.11	4.29	4.73
Enterprise value at year-end (in EUR billion)	*(4)*	**2.97**	3.01	4.23	4.09	4.90
Profit per share (in EUR)		**0.56**	0.63 (5)	1.15	2.16 (5)	3.54
Cash flow per share (in EUR)		**2.55**	2.41 (5)	3.07	3.62 (5)	6.16
Dividend per share (in EUR)		**0.50**	0.50	1.00	1.00	1.6
Payout ratio %	*(6)*	**88%**	79%	87%	46%	45%
Dividend yield %	*(7)*	**2.2%**	2.3%	3.2%	3.0%	4.3%

Figures taken from the respective financial statements unless otherwise stated
(1) Nasdaq IR Insights
(2) Number of outstanding ordinary shares minus the number of shares owned by the company as at 31 December
(3) Market capitalization: total number of outstanding ordinary shares minus the number of shares owned by the company as at 31 December x share price at year-end
(4) Enterprise value: market capitalization plus net debt excluding lease liabilities
(5) Excluding extraordinary charges/impairments
(6) Payout ratio: dividend per share divided by profit per share
(7) Dividend yield: dividend per share divided by share price at year-end

FINANCIAL AGENDA 2020

5 March 2020	Publication of 2019 annual results
13 May 2020	Trading update on first quarter of 2020
13 May 2020	Annual General Meeting of Shareholders
15 May 2020	Ex-dividend date
18 May 2020	Record date for dividend entitlement (after market close)
25 May 2020	Date of dividend payment
20 August 2020	Publication of 2020 half-year results
6 November 2020	Trading update on third quarter of 2020

FINGER PIER 3 SINGAPORE: MEGA-SCALE CONSTRUCTION WITH SOFT SOILS

In terms of scale, complexity and dredging volumes, the Tuas Terminal Phase 2 project, also known as Finger Pier 3, in Singapore is one of the largest projects ever executed by Boskalis. A total of 227 approximately 30-meter-tall caissons will mark the boundaries of the future container terminal. "We're building on a truly groundbreaking mega-scale with soft soils," design manager Jamie Lescinski said.

Boskalis is working for the Maritime and Port Authority in Singapore on the construction of one of the four phases in the creation of the world's largest container port, Tuas Mega Port. The new port area will cover 1,337 hectares and have a throughput capacity of 65 million TEU per year. Boskalis is executing this project in a joint venture with Penta Ocean from Japan and Hyundai from South Korea. The project will be completed in 2027. "It's a huge operation," Lescinski said. "We are using a wide variety of equipment, including mega trailing suction hopper dredgers, cutter suction dredgers, backhoes, grab dredgers, vertical drain rigs, vibro-compaction units and a battery of earthmoving equipment".

DEEPENING KNOWLEDGE

"The project team alone consists of more than one hundred colleagues from the three partners," Lescinski continued. "Around 1,500 people are at work on the operational side. Most of them are living on site so we have built a huge project office with extensive dining and sleeping facilities." Lescinski explained that the

"THE CAPABILITY TO BUILD WITH CHALLENGING SOIL BALANCES IS IMPORTANT FOR THE FUTURE OF OUR INDUSTRY"

scale of the project involves a particular benefit for her and many other staff colleagues: "As technical designers, we are expected to be multidisciplinary on most Boskalis projects. But given the duration and multiple facets of this project, we have the opportunity here to focus on our own specialism for a while. That allows us to make a significant contribution to the project and, at the same time, to deepen our professional knowledge."

GIGANTIC CAISSONS

The Design & Construct project is for a port area measuring 405 hectares that will be enclosed by 9.1 kilometers of quay walls consisting of gigantic building blocks known as caissons. Measuring 40 x 20 x 30 meters, these caissons – which are being produced in a massive casting facility on the project site – are some of the largest ever built. "After completion, they are hydraulically transferred to a floating dock and sailed to the unloading location. Eventually, tugs position them in the installation location and then sink them. Each individual cell is then filled with sandy material that is vibro-compacted."

SOLID FOUNDATION

"A major challenge in the construction of the port area is the soft subsoil here," Lescinski continued. "To establish a solid foundation below the caissons, we first construct deep sand keys, up to 40 meters deep. We use all the dredged material as fill for the terminal site. We have installed a large containment bund to stop the material spreading. With a height of thirty plus meters, the containment bund is the backbone of the land reclamation work and a robust environmental mitigation measure. We are using about 13 million cubic meters of the best quality of sand to construct the bund, which was about 3/4 complete end-2019. Once the sand key is backfilled with sand and vibro-compacted, we will then be depositing, and compacting, a layer of rock on top of the sand. The next step is to position the caissons, which surround the terminal and serve as a quay wall, on top of this rock base. Once the caissons are in place, of which 27 are thus far installed, we put in geotextile and scour protection."

FILLING THE PORT AREA

A total of about 130 million cubic meters of material will be needed on the project. "The amount of clay we dredge from the sand key is much less than what is needed for the construction of the entire terminal. The area will also be filled with clay and silt from various civil-engineering projects in Singapore," Lescinski said. "The composition of that material can vary. Due to the different settlement properties, each type of material must be applied in the right location. We are responsible for the registration and management of all these flows and that entails sophisticated data management: we expect to deposit some 40 million cubic meters of this type of material over the next few years alone. That will result in a 25 to 30 meter thick clay fill, with up to 18 meters of sand overlying during surcharging."

UNSUITABLES

"At one time, we would have classified the soft soils used for the construction of the terminal site as unsuitables," Lescinski continued. "The decision to use them is a direct consequence of the need to reduce reliance on sand and global beneficial re-use trends. Singapore is certainly playing a pioneering role in this respect," Lescinski said, who expects a similar approach to be used more often in the future. "Sand is becoming an ever-more valuable resource globally, after all, and there are more and more restrictions for disposing incompetent material offshore. The capability to build with challenging soil balances is important for the future of our industry. The more new land you build, the more often you will have to resort to groundbreaking solutions of this kind."

REPORT OF THE SUPERVISORY BOARD

The BOKA Vanguard loaded with a 91,000 ton weighing FPSO arriving in Rio de Janeiro, Brazil


oskalis

REPORT OF THE SUPERVISORY BOARD

The Supervisory Board wishes to thank the employees and the Board of Management of Boskalis for the great efforts they have shown in 2019, especially considering the current market conditions.

In accordance with Article 26 of the Articles of Association of Royal Boskalis Westminster N.V., the Supervisory Board presents the 2019 annual report to the Annual General Meeting of Shareholders. The annual report, including the report of the Board of Management, the statement of directors' responsibilities and the financial statements, was drawn up by the Board of Management. The financial statements are accompanied by the report of the company's external auditor Ernst & Young Accountants LLP, which is included on pages 142 to 147 of this report.

We recommend the following to the Annual General Meeting of Shareholders:

- the adoption of the financial statements, including the proposed profit appropriation;
- the discharge of the members of the Board of Management in respect of their management activities during 2019;
- the discharge of the members of the Supervisory Board for their supervision of management during 2019;
- the distribution to shareholders of a cash dividend of EUR 0.50 per ordinary share.

COMPOSITION OF THE BOARD OF MANAGEMENT

The Board of Management consisted of four members at the start of the 2019 reporting year. On 8 May 2019 Mr. Kamps resigned as Chief Financial Officer and member of the Board of Management. On that same date Mr. Van Noort was appointed as his successor for a period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. Mr. Berdowski and Mr. Baartmans were reappointed on 8 May 2019 as members of the Board of Management for a period commencing on 8 May 2019 until and including the Annual General Meeting in 2023. No further changes to the composition of the Board of Management occurred during the year under review. As from 8 May 2019 the Board of Management consists of four members.

COMPOSITION OF THE SUPERVISORY BOARD

At the start of 2019 the Supervisory Board consisted of six members. At the Annual General Meeting of Shareholders on 8 May 2019 Mr. Van Woudenberg stepped down as member of the Supervisory Board. Ms. Tammenoms Bakker and Mr. Sperling were appointed by the Annual General Meeting of Shareholders as member of the Supervisory Board commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. Mr. Van der Veer and Mr. Van Wiechen were reappointed as members of the Supervisory Board on 8 May 2019 for a period commencing on 8 May 2019 until and including the Annual General Meeting in 2023. No further changes to the composition of the Supervisory Board occurred during the year under review. As a result as from 8 May 2019 the Supervisory Board consists of seven members.

ACTIVITIES OF THE SUPERVISORY BOARD

The Supervisory Board held five regular meetings with the Board of Management and Group Management of the company. The attendance rate at the meetings of the Supervisory Board is for all Supervisory Board members 100%, apart from Ms. Haaijer, who missed one meeting in March 2019. The Supervisory Board also met several times without the Board of Management being present and there was regular telephone and one-on-one contact between the Chairman of the Supervisory Board and the Chairman of the Board of Management. Neither transactions with a (potential) conflict of interest, nor transactions with majority shareholders, have occurred in the year under review. The Supervisory Board has discussed the acceptance of supervisory board positions by members of the Board of Management and members of the Supervisory Board at other companies or institutions.

The Supervisory Board held its meetings to discuss the annual and half-year results in the presence of the external auditor, Ernst & Young Accountants LLP.

Permanent items on the agenda of the Supervisory Board are the strategy, the development of the results, the financials, the safety performance, and the industry and market developments.

In 2019 the Supervisory Board received an update from the Board of Management on the implementation, execution, risks and opportunities of the Corporate Business Plan 2017-2019. Furthermore the Supervisory Board discussed in January 2020 with the Board of Management the new Corporate Business Plan for the period 2020-2022.

Within the context of the market developments the order book and potential large projects as well as the status of important contracted projects were discussed. During the year under review subjects addressed included among others the impact of the continuing uncertain market conditions on the company, which affected mainly the Offshore Energy division and more in particular the business units Subsea Cables and Decommissioning.

The Supervisory Board discussed the contracting of large dredging projects such as the award of the land reclamation project in the bay of Manila in the Philippines. For the Netherlands the contracting of the RijnlandRoute infrastructure project was taken into consideration. For Offshore Energy the transport and dry docking of the cruise vessel Carnival Vista and the transport of the FPSO P70 from China to Brazil were discussed as well as the contract for the wind farm projects Changfang and Xidao in Taiwan and the contract for the export cable installation for the wind farm Hornsea 2. For Towage & Salvage the emergency response contracts for the container vessels Maersk Honam and Yantian Express were paid attention to as well as the rescue activities for the tankers attacked in Gulf of Oman.

The Supervisory Board also informed themselves on the execution of projects such as among others the Duqm Liquid Berths Project in Oman and LNG Canada dredging project. In discussing these projects the Supervisory Board devoted attention to the various operational, geopolitical, societal, environmental and financial risks, and, where applicable, judged provisions made by the Board of Management.

Other topics under scrutiny in 2019 included the corporate budget, the working capital, the liquidity, the share price development and relations with shareholders, acquisition and investment/divestment proposals, the organizational structure, personnel and the staffing policies.
The Supervisory Board discussed in relation hereto the investment proposal regarding the Bokalift 2 crane vessel, which will be well equipped to install offshore wind turbine foundations as well as oil and gas structures in addition to serving the decommissioning and salvage market.
Specific attention was paid to the company's policy on safety, health and the environment and the societal aspects of doing business. The Supervisory Board complimented the Board of Management on the steady downward trend in lost time injuries. In light of the safety of personnel, the Supervisory Board paid serious attention to the hijacking of the heavy transport vessel Blue Marlin off the coast of West Africa and the measures taken to ensure the safety and wellbeing of the crew.

The Supervisory Board received presentations by senior managers within the company to inform themselves on the developments regarding the HR department and its policies to enhance the attractiveness of the company as employer, the activities of the Subsea business unit as well as the outcomes of a company-wide employee survey held during the financial year.

Attention was also paid to corporate social responsibility, with a comprehensive discussion by the Supervisory Board of the Boskalis Corporate Social Responsibility report. The Supervisory Board paid among others attention to the initiative of Boskalis to reduce CO_2 emissions of its fleet by using sustainable biofuel where feasible. In 2019 the Whistleblower Policy with the introduction of the possibility to consult a female counsellor was discussed. The Supervisory Board also addressed the policy and relevant developments in relation to anti-corruption and integrity.

The Audit Committee assessed the structure and operation of the internal risk management and control systems associated with the strategy and discussed these with the Supervisory Board. No significant changes to the internal risk management and control systems were made during the year under review. Further information about the company's risk management can be found on pages 58 to 64 of this annual report.

In 2019 the Supervisory Board gave consideration to the acquisition of the assets of the offshore company Bohlen & Doyen GmbH in Germany and the acquisition in two stages of Horizon Survey Company (FZA) in the United Arab Emirates. Furthermore the Supervisory Board addressed the divestment of the interests of the company in the harbour towage joint ventures Saam Smit Towage and Kotug Smit Towage.

During the year under review the share buyback program, proposed by the Board of Management to acquire its shares in the company, was also discussed by the Supervisory Board.

The Supervisory Board paid a working visit to the regional office in Singapore during the year under review. During this visit the Supervisory Board familiarized itself with the activities of Boskalis in the field of Dredging & Inland Infra, Offshore Energy, Towage and Salvage in that area. In the course of doing so extensive attention was paid to the market trends, geopolitical aspects, tender procedures and possible new projects in the region. In addition, the Supervisory Board visited the Tuas Terminal Phase 2 project, where in a sustainable manner new land for a container terminal is being reclaimed, as well as the Pulau Tekong project, where Boskalis builds the first polder in the region.

A number of Supervisory Board members met with the Works Council to discuss the financial results, the corporate strategy, the conduct and culture of the company, the market developments and personnel matters.

The Supervisory Board has three core committees – the Audit Committee, the Remuneration Committee and the Selection and Appointment Committee. The committees performed their tasks as follows:

AUDIT COMMITTEE

Members of the Audit Committee

At the beginning of 2019 the Audit Committee consisted of three members: Mr. Hazewinkel (Chairman), Mr. Van Wiechen and Mr. De Kreij. On 8 May 2019 Mr. Sperling joined the Audit Committee as fourth member. Mr. Hazewinkel and Mr. De Kreij fulfill the role of financial experts in the Audit Committee. More than half of the members of the Audit Committee are independent in accordance with the Code.

Duties and responsibilities of the Audit Committee

The duties of the Audit Committee include:

- informing the Supervisory Board of the company of the outcome of the statutory audit and explaining how the statutory audit contributed to the integrity of the financial reporting and what the role of the Audit Committee has been in that process;
- monitoring the financial reporting process and submitting proposals to ensure its integrity;
- monitoring the effectiveness of the internal control system, the internal audit function and the risk management system regarding the financial reporting of the company;
- monitoring the statutory audit of the financial statements and the consolidated annual accounts, in particular the execution thereof taking into account the assessment of the AFM in accordance with article 26, sub clause 6 of EU Regulation 537/2014;
- assessing and monitoring the independence of the external auditor, specifically taking into account the provision of ancillary services to the company;
- determining the procedure for the selection of the external auditor and the nomination for the engagement to carry out the statutory audit in accordance with article 16 of EU Regulation 537/2014;
- advising the Supervisory Board on the approval of the appointment and the dismissal of the internal auditor;
- providing its opinion on the performance of the internal audit function;
- advising on the annual internal audit plan.

Activities during 2019

The Audit Committee met on three occasions during 2019. The attendance rate for the meetings of the Audit Committee was 100%.

Regular topics discussed during these meetings included: the financial statements, the (interim) financial reporting for the financial year, the results relating to large projects, the tender procedures and the project risk environment and the management thereof as well as the operating activities, the developments in IFRS standards, the developments in the order book, cost control, the share price developments, and the financing and liquidity of the company.

The Audit Committee discussed with the Board of Management the internal risk management and control systems and assessed the effectiveness of the design and the operation thereof by evaluating the systems with the Board of Management, the internal and external auditor and senior management. The Audit Committee reported hereon to the Supervisory Board.

Other topics of discussion included the impact of the situation on the financial markets, insurance matters, the company's tax policies, tax position and relevant tax developments, the administrative organization, the provision of adequate information within the company, the relevant legislation and legal proceedings.

In addition, the Audit Committee focused more specifically on the framework of the financial reporting, on the recognition in the accounts of the provisions made regarding a limited number of offshore projects with regard to the business units Subsea Cables and Decommissioning, which were due to the rapidly changed market conditions for these activities, as well as on the development of the working capital, cybersecurity, the privacy policies and the anti-corruption policies.

Within the context of the market developments the order book and potential large projects as well as the status of important contracted projects were discussed. Furthermore, the proposed divestment of the equity stakes in Saam Smit Towage and Kotug Smit Towage were assessed.

In the Audit Committee the activities performed by the internal auditor during 2019 as well as the internal Audit Plan for 2020 have been discussed with the internal auditor. Other topics of discussion included a review of the scope of the internal audit function.

In addition to the Chairman of the Board of Management and the Chief Financial Officer, the Group Controller and the external auditor were also present at the meetings of the Audit Committee. The internal auditor and other officers joined the meetings of the Audit Committee for the topics relevant to their function.

The Audit Committee discussed with the external auditor the audit plan as well as the audit fees. The scope and materiality of the audit plan and the principal risks of the annual reporting, as well as the findings and outcome of the control process of the financial statements and management letter, was given consideration by the Audit Committee, whereby the Audit Committee received information on the most important topics of discussion with the external auditor related to the drafts of the Management Letter and the audit report.

The workings of the external and internal audit functions were assessed by means of discussions with the Board of Management, the internal and external auditor as well as senior management.

The Audit Committee informed the external auditor of the main elements regarding its performance. The Audit Committee also established the independence of the external auditor. The Audit Committee reported its findings on the performance of and the relationship with the external auditor to the Supervisory Board. During the year under review meetings were also held with the external auditor without the company's Board of Management being present.

Reports and findings of the meetings of the Audit Committee were presented to and discussed with the entire Supervisory Board.

REMUNERATION COMMITTEE

Members of the Remuneration Committee

At the beginning of 2019 the Remuneration Committee consisted of three members, with Mr. Van Woudenberg as Chairman and Ms. Haaijer and Mr. Van der Veer as members. Mr. Van Woudenberg stepped down as Chairman on 8 May 2019. He was succeeded by Mr. Hazewinkel as per that date. Also on 8 May 2019, Ms. Haaijer stepped down as member of the Remuneration Committee. Ms. Tammenoms Bakker replaced her as from that same date. More than half of the members of the Remuneration Committee are independent in accordance with the Code.

Duties and responsibilities of the Remuneration Committee

It is the role of the Remuneration Committee to advise the Supervisory Board on:

- the submission of a clear and understandable proposal concerning the remuneration policy to be pursued for members of the Board of Management with focus on long-term value creation for the company and the business connected with it, which shall take into account the internal pay ratios within the company. The Remuneration Committee shall consider and include all matters required by law, and more in particular the Act Implementation EU Shareholders Directive, and the Corporate Governance Code 2016 (the "Code"). The Supervisory Board shall present the policy to the General Meeting of Shareholders for adoption.
- the submission of a proposal concerning the remuneration of individual members of the Board of Management. The proposal shall be drawn up in accordance with the remuneration policy that has been established and will, in any event, cover the

Dredging activities by the backhoe dredger Magnor in the port of Adelaide, Australia

remuneration structure, the amount of the fixed and variable remuneration components, the performance criteria used, the scenario analyses that are carried out and the pay ratios within the company and its affiliated enterprise. When formulating the proposal for remuneration of the Board of Management, the Remuneration Committee shall take note of the views of the individual members of the Board of Management with regard to the amount and structure of their remuneration.
- the preparation of the report on the remuneration policy implemented in the past financial year. The Remuneration Committee shall consider and include all matters required by law and the Code. The Supervisory Board's remuneration report shall be placed on the company's website.

Activities during 2019

The Remuneration Committee met three times during 2019. The attendance rate for the meetings of the Remuneration Committee was 100% for all members of the Remuneration Committee, apart from Ms. Haaijer, who missed one meeting in March 2019. The Committee also held regular consultations outside these meetings.

During the year under review the activities of the Remuneration Committee included:
- informing itself of developments surrounding the remuneration policy for senior management in the Dutch and international markets;
- staying abreast of the latest corporate governance developments in the Netherlands and internationally;
- performing scenario analyses;
- submitting a proposal concerning the remuneration of individual members of the Board of Management in accordance with the law and the Code, wherein among others note has been taken of the views of the individual members of the Board of Management with regard to the amount and structure of their own remuneration in the framework of the remuneration policy;
- discussing with the Board of Management the remuneration of the members of the Group Management, who are not members of the Board of Management;
- informing itself on the Act Implementation EU Shareholders Directive;
- evaluating the current remuneration policy.
- reviewing the market reference group and conducting a remuneration survey.
- formulating a proposal to adjust the current remuneration policy.
- bringing the current remuneration policy in line with the requirements of the Act Implementation EU Shareholders Directive.
- holding a consultation round with large institutional shareholders in 2020 to collect feedback on the remuneration policy.

In the year under review, the Remuneration Committee commissioned an external independent remuneration advisor to assist in the execution of its activities. The Remuneration Committee ascertained that this remuneration advisor does not provide advice to the members of the Board of Management.

The Remuneration Committee applies for the execution of its remuneration activities a market reference group, that is composed of fourteen Dutch (AEX and AMX-listed) companies that are comparable in terms of size and business activities. The market reference group was revised in 2019 based on relevant size criteria, which resulted in replacing RELX with VolkerWessels. At present the market reference group consists of BAM, DSM,

Beach replenishment activities along a stretch of the Dutch coast

Fugro, SBM Offshore, Sligro, VolkerWessels, PostNL, Wolters Kluwer, Arcadis, Vopak, Aalberts Industries, OCI, KPN and TKH Group.

In 2017, the Remuneration Committee evaluated the remuneration policy for the members of the Board of Management. The survey was carried out again in 2019.
The outcome of these remuneration surveys showed that the members of the Board of Management receive an appropriate basic salary, but that the overall direct compensation package for all members of the Board of Management are in comparison with the market reference group below or around the lowest quartile (P25). This as a result of a relatively low long-term variable component. In addition, more and more (AEX and AMX-listed) companies have a share-based long-term incentive scheme. The remuneration surveys also calibrated the level of remuneration of members of the Supervisory Board. The results showed that the remuneration of the Supervisory Board is below or around the lowest quartile (P25) of the market reference group.

Based on the above, the Supervisory Board has decided to schedule a proposal for the agenda of the Annual General Meeting of Shareholders on 13 May 2020 to adjust the current remuneration policy. In this proposal the remuneration for the Board of Management and the Supervisory Board will be brought more in line with the market. As part of that, a share-based long-term incentive scheme will be introduced for the Board of Management. In addition the proposal will incorporate the amendments necessary to bring the policies in accordance with the requirements of the Act Implementation EU Shareholders Directive.

The overview of the activities of the Remuneration Committee is also published in the Remuneration report 2019 on the website of the company (www.boskalis.com).

Remuneration policy for the Board of Management
The current remuneration policy for the Board of Management was adopted by the Extraordinary General Meeting of Shareholders on 21 January 2011. The remuneration policy is consistent with the strategy and core values of Boskalis. These are centered on a long-term value orientation, a balanced risk reward approach for contracting projects, and the continuity of the business and take into account the interests of Boskalis' shareholders, clients, employees as well as the 'wider environment'.
In 2019 the remuneration policy was applied in accordance with the remuneration policy as last adopted by the Extraordinary General Meeting of Shareholders on 21 January 2011. The full text of the remuneration policy can be found on the Boskalis website. In accordance with the Act Implementation EU Shareholders Directive the remuneration policy for the Board of Management shall be scheduled for adoption for the Annual General Meeting of Shareholders in 2020.

Remuneration policy for the Supervisory Board
The remuneration policy for the Supervisory Board was adopted by the General Meeting of Shareholders on 10 May 2012. In 2019 the remuneration was applied in accordance with the remuneration policy as adopted. In accordance with the Act Implementation EU Shareholders Directive the remuneration policy for the Supervisory Board shall be scheduled for adoption for the Annual General Meeting of Shareholders in 2020.

Reports and findings of the meetings of the Remuneration Committee were presented to and discussed with the entire Supervisory Board.

SELECTION AND APPOINTMENT COMMITTEE

Members of the Selection and Appointment Committee
At the beginning of 2019 the Selection and Appointment Committee consisted of three members, with Mr. Van der Veer acting as Chairman and Mr. Van Wiechen and Mr. Van Woudenberg as members. On 8 May 2019 Mr. Van Woudenberg stepped down as member of the Selection and Appointment Committee. As per the same date Ms. Haaijer joined the Selection and Appointment Committee as member.

Duties and responsibilities of the Selection and Appointment Committee
It is the role of the Selection and Appointment Committee to advise the Supervisory Board on:
- drawing up selection criteria and nomination procedures with respect to members of the Supervisory Board and members of the Board of Management of the company;
- the periodic assessment of the size and composition of the Supervisory Board and the Board of Management and submission for a profile of the Supervisory Board;
- the periodic assessment of the performance of individual members of the Supervisory Board and Board of Management and reporting thereon to the Supervisory Board;
- drawing up a plan for the succession with respect to members of the Supervisory Board and the members of the Board of Management;
- proposing appointments and re-appointments;
- supervising the policy of the Board of Management with respect to selection criteria and appointment procedures for the senior management of the company.

Activities during 2019
In 2019 the Selection and Appointment Committee held two meetings. The attendance rate for the meetings of the Selection and Appointment Committee was 100%. In addition, the members consulted by telephone on several occasions outside these meetings.

During the year under review, the Selection and Appointment Committee discussed the plan for the balanced composition of the Board of Management and the composition and size of the Supervisory Board, bearing in mind the profile, retirement rota, and the evaluation of the performance of the Board of Management collectively and its members individually. In that regard the Selection and Appointment Committee also discussed the succession of the Board of Management in accordance with the succession plan.

On 8 May 2019 the term of appointment of Mr. Kamps as member of the Board of Management ended. Mr. Kamps informed the Supervisory Board that he was not available for reappointment. The Selection and Appointment Committee, after a careful selection process, found Mr. Van Noort willing to fill this vacancy so arisen. Mr. Van Noort was selected due to his excellent track record within Boskalis with a broad background and in-depth knowledge of the organization and the business. The Selection and Appointment Committee proposed to the Supervisory Board to make a binding nomination to the Annual General Meeting of Shareholders to appoint Mr. Van Noort as member of the Board of Management and Chief Financial Officer of the company for a period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023, which recommendation was adopted by the Supervisory Board. The Supervisory Board made a binding nomination to the Annual General Meeting of Shareholders to appoint Mr. Van Noort. On 8 May 2019 the Annual General Meeting of Shareholders appointed Mr. Van Noort as member of the Board of Management.

On 8 May 2019 the term of appointment of Mr. Baartmans as member of the Board of Management ended. The Selection and Appointment Committee proposed to the Supervisory Board to make a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Baartmans as member of the Board of Management. Mr. Baartmans informed the Selection and Appointment Committee to be available for reappointment. The Supervisory Board adopted the recommendation by the Selection and Appointment Committee due to the fact that Mr. Baartmans has delivered as member of the Board of Management a significant contribution to the company and has fulfilled his position in an excellent manner. As announced on 9 November 2018, the Supervisory Board made a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Baartmans as member of the Board of Management for a period commencing on 8 May 2019 until and including the Annual Meeting of Shareholders in 2023. The Annual General Meeting of Shareholders reappointed Mr. Baartmans as member of the Board of Management on 8 May 2019.

On 13 December 2019 the term of appointment of Mr. Berdowski as member of the Board of Management and Chief Executive Officer ended. The Selection and Appointment Committee proposed to the Supervisory Board to make a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Berdowski as member of the Board of Management and Chief Executive Officer. Mr. Berdowski informed the Selection and Appointment Committee to be available for reappointment. The Supervisory Board adopted the recommendation by the Selection and Appointment Committee due to the continuity of management of the company and the fact that Mr. Berdowski has delivered as member of the Board of Management and Chief Executive Officer a significant contribution to the company and has fulfilled his position in an excellent manner. As announced on 9 November 2018, the Supervisory Board therefore made a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Berdowski as member of the Board of Management for a period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. The Annual General Meeting of Shareholders reappointed Mr. Berdowski as member of the Board of Management and Chief Executive Officer on 8 May 2019.

Furthermore, the Selection and Appointment Committee also paid attention to the succession of the Supervisory Board in accordance with the succession plan.

On 8 May 2019 the third term of appointment of Mr. Van Woudenberg as member of the Supervisory Board ended. The Selection and Appointment Committee, after a careful selection process, found Ms. Tammenoms Bakker willing to fill this vacancy. Ms. Tammenoms Bakker fulfilled in the past the function of advisor of the Dutch Council for the Environment and Infrastructure and the position of Director-General of the Dutch Ministry of Infrastructure and Water Management. Furthermore, she has been working for Quest International Limited, McKinsey & Co and several parts of Royal Dutch Shell plc.
Ms. Tammenoms Bakker was selected in accordance with the Profile of the Supervisory Board given her broad management experience at international (stock listed) companies and her knowledge and experience in the field of transport and infrastructure. The Supervisory Board adopted this recommendation of the Selection and Appointment Committee and made a binding nomination to the Annual General Meeting of Shareholders to appoint Ms. Tammenoms Bakker as member of the Supervisory Board for the period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. The Annual General Meeting of Shareholders appointed Ms. Tammenoms Bakker as member of the Supervisory Board on 8 May 2019.

The Selection and Appointment Committee also reviewed in the financial year whether the composition and size of the Supervisory Board matched the Profile of the Supervisory Board and the strategy of the Company. In that context, the Selection and Appointment Committee recommended to the Supervisory Board to further the expertise in relation to the contracting and execution of large infrastructural projects. In light hereof the Supervisory Board decided to increase the composition of the Supervisory Board temporarily from six to seven members. The Selection and Appointment Committee, after a careful selection process, found Mr. Sperling willing to fulfill this vacancy. Mr. Sperling fulfilled in the past the position as chairman of the board of management of TBI Holdings B.V. Before this, he held different management positions at different parts of Hollandse Beton Groep and other construction companies. Mr. Sperling started his career at the Ministry of Housing, Spatial Planning and the Environment. Mr. Sperling was selected in accordance with the Profile of the Supervisory Board given his extensive management experience and his knowledge and experience in the area of contracting and the execution of large infrastructural projects. The Supervisory Board adopted this recommendation of the Selection and Appointment Committee and made a binding nomination to the Annual General Meeting of Shareholders to appoint Mr. Sperling as member of the Supervisory Board for the period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. The Annual General Meeting of Shareholders appointed Mr. Sperling as member of the Supervisory Board on 8 May 2019.

On 8 May 2019 the term of appointment of Mr. Van der Veer as member of the Supervisory Board ended. The Selection and Appointment Committee proposed to the Supervisory Board in accordance with the Profile to make a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Van der Veer as member of the Supervisory Board, due to his extensive experience as Chairman and member of the Supervisory Board and the professional manner in which he fulfills that Chairman- and membership the Supervisory Board adopted this recommendation and made a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Van der Veer for a period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. The Annual General Meeting of Shareholders reappointed Mr. Van der Veer as member of the Supervisory Board on 8 May 2019.

On 8 May 2019 the term of appointment of Mr. Van Wiechen as member of the Supervisory Board ended. The Selection and Appointment Committee proposed to the Supervisory Board in accordance with the Profile to make a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Van Wiechen as member of the Supervisory Board. This nomination deviates of best practice 2.2.2 of the Code, but is due to Mr. Van Wiechen's position of director at HAL Investments B.V., his extensive experience as member of the Supervisory Board and the professional manner in which he fulfills that membership. The Supervisory Board adopted this recommendation and made a binding nomination to the Annual General Meeting of Shareholders to reappoint Mr. Van Wiechen for a period commencing on 8 May 2019 until and including the Annual General Meeting of Shareholders in 2023. The Annual General Meeting of Shareholders reappointed Mr. Van Wiechen as member of the Supervisory Board on 8 May 2019.

The company arranged an induction program for Ms. Tammenoms Bakker and Mr. Sperling in the autumn of 2019 to familiarize them with the general affairs of the company regarding financial, social and legal matters, the workings of the Supervisory Board, the markets Boskalis is operating in, its culture and the works council. No further training needs have been identified for the Supervisory Board or the Board of Management in the year under review.

Reports and findings of the meetings of the Selection and Appointment Committee were presented to and discussed with the entire Supervisory Board.

DUTCH CORPORATE GOVERNANCE CODE

Since the introduction of the Dutch Corporate Governance Code (the "Code") in 2004 and the revision in 2016, the principles of proper corporate governance and best practice provisions set out in the Code have regularly been discussed at Supervisory Board meetings. The principal points of the Boskalis Corporate Governance policy can be found on pages 68 and 69 of this annual report.

In the opinion of the Supervisory Board, the provisions of the Code regarding the independence of the members of the Supervisory Board have been complied with. The Supervisory Board considers Mr. Van Wiechen the only Supervisory Board member not to be independent in light of the Code, due to the fact that he fulfills the position of director at HAL Investments B.V., which company holds as at 30 September 2019 a major interest of 43.51% in the share capital of Boskalis.

Outside the presence of the Board of Management the Supervisory Board discussed the performance of the Board of Management. It also discussed the performance of the Supervisory Board, the Chairman of the Supervisory Board, the three committees and the individual members of the Supervisory Board. This evaluation was conducted by means of a questionnaire as well as through collective and bilateral discussions between the members of the Supervisory Board, the Chairman of the Supervisory Board and the Chairman of the Board of Management. In its opinion the Supervisory Board is functioning well.

The Supervisory Board wishes to thank the employees and the Board of Management of Boskalis for the great efforts they have shown in 2019, especially considering the current market conditions.

Papendrecht / Sliedrecht, 4 March 2020

Supervisory Board

Mr. J. van der Veer, Chairman
Mr. H.J. Hazewinkel, deputy Chairman
Ms. I. Haaijer
Mr. J.P. de Kreij
Mr. D.A. Sperling
Ms. J.A. Tammenoms Bakker
Mr. J.N. van Wiechen

BOSKALIS SHOWS VERSATILITY ON BORSSELE PROJECT

Boskalis is currently completing the installation of the last of the four 220 kV export cables that connect the Borssele offshore wind farms in the North Sea to the high-voltage grid in the Netherlands. "The project is a showcase of versatility and teamwork between various disciplines of our company," project director Hans Veth said.

The Borssele wind farms are being developed in the North Sea, 55 kilometers off the Dutch coast. They are designed to generate more than 1,400MW of energy. Four export cables connect the offshore high-voltage platforms Alpha and Beta to the Dutch electricity grid in Borssele via the Western Scheldt estuary. The four cables have a combined length of 250 kilometers. Boskalis also installed the interlink cable between the platforms. The work was executed for client TenneT in a consortium with cable manufacturer NKT Cables. The project consisted of offshore and nearshore sections, each with their own specific challenges. Nearshore, dredging work had to be carried out at extremely varied depths. The navigation

channel De Honte is the deepest waterway in the Netherlands with a depth of sixty meters. “To cope with the hard soil here, the jumbo hopper dredger Prins der Nederlanden was fitted out with an extended suction pipe and the heaviest possible draghead,” Veth explained. “Right next to De Honte is a sandbank that falls dry at low water. Here, dredging could only be done with a small cutter suction dredger.”

EQUIPMENT

Prior to the dredging work, extensive surveys were conducted to determine the status of the seabed. Subsequently dredging work was carried out by the trailing suction hopper dredgers Causeway and Prins der Nederlanden, the cutter suction dredger Rhone and the backhoe dredger Manu Pekka. A wide strip of mud was removed in the so-called mud flat near Borssele and replaced with a sand package, so that the cables can dissipate their heat better. To avoid the risk of unstable soil, Boskalis subsidiary Cofra compacted the soil using vibro-compaction. The fallpipe vessel Rockpiper was mobilized to protect the cables with rock in the fairway. To this end almost 150,000 tons of rock will be brought in, of which a part is scheduled to be installed in the second quarter of 2020. Equipment of Boskalis Nederland covered the cables with rock in the shallow sections.

NEARSHORE SECTION

A critical part was the nearshore installation of the cable through the sandbank in the Western Scheldt. “This area in particular required a seamless coordination of different execution methods. A new tool was developed in-house specifically for the simultaneous laying and burying of cables,” Veth said. This BSS3 (Burial Sledge System) tool is equipped with a jet pipe and a cutter tool, with which it buried the cables at depths ranging from 3 to 8 meters. The barge Giant 7 was converted into a cable-laying vessel specifically for this project. The vessel installed the 19-kilometer cables, each weighing 1,600 tons, in the nearshore section. The BSS3 and the Giant 7 installed the cables in single runs.

OFFSHORE SECTION

The first two cables were installed by the cable-laying vessel Ndurance and the multi-purpose trenching vehicle Trenchformer. The third and fourth are being installed by the Ndeavor and the new burial tool CBT2400. The cables are installed over distances of about 30 kilometers (Alpha cables) and 35 kilometers (Beta cables). The work in the offshore section also included installing a 7-kilometer-long interlink cable between the Alpha and Beta platforms. After laying the cables, the Giant 7 was converted in the port of Flushing to make the subsea cable connections. The total distance covered by the cables was more than the length of cable that could be carried on the ship at once. “As a result, the separate cable sections on the seabed had to be connected at eight different locations. Each connection took about ten days to make,” Veth said.

LANDFALLS

Boskalis is completing a total of four landfalls to connect the cables to the high-voltage grid. “This required the temporary lowering of the Borssele dike. In case of an unexpected storm, the sea defenses had to be completely intact. In all cases, our team had to be able to restore the dike within twenty-four hours,” Veth explained. The cables were pulled more than a kilometer and a half over the mud flat. After the completion of a landfall, the Giant 7 crossed the waterway to lay the cables at a range of depths, for which the shipping route to and from the port of Antwerp had to be completely closed. The team managed to stick to the time limit of ten hours on the first two occasions. The final installation activities for cables three and four will take place early March 2020.

REPORT OF THE BOARD OF MANAGEMENT

Mega trailing suction hopper dredger Fairway

FINANCIAL PERFORMANCE

Royal Boskalis Westminster N.V. (Boskalis) ended 2019 well after a difficult first half of the year with EBITDA of EUR 376 million, slightly above its own expectations. Net profit came in at EUR 75 million (2018: EUR 436 million loss).

Revenue increased by 2.9% compared to a year earlier to EUR 2.64 billion (2018: EUR 2.57 billion).
EBITDA totaled EUR 376 million and EBIT amounted to EUR 111 million, including extraordinary book profits. The 2018 EBITDA was EUR 354 million and EBIT EUR 119 million, both adjusted for extraordinary charges.

The decline in the result was mainly due to a poor first half of the year for the Offshore Energy division, with operational and contractual issues at a limited number of offshore wind cable and decommissioning projects. Following a thorough analysis of the project portfolio, provisions of more than EUR 100 million were taken in the first half of the year with respect to a limited number of contracts.

The result in both 2019 and 2018 was impacted by various extraordinary items. In 2019 these related to a book profit on the sale of two harbor towage joint ventures as well as the sale of equipment. In 2018 these items related to considerable non-cash impairment charges.

Dredging & Inland Infra realized a healthy revenue growth of more than 6% that was fully generated outside of Europe, due in part to large projects in Oman, Singapore and Canada. The utilization of the hopper fleet was slightly less strong compared to 2018 but was still well above the average utilization rate in the industry, whereas the utilization rate of the cutter fleet was considerably higher than the previous year. EBITDA was virtually stable with a lower operational margin. Various high-profile projects were awarded in the course of 2019 that contributed to a growth in the order book.

At Offshore Energy revenue declined by 2%. Despite a good second half of the year the annual result of the division was considerably lower as a result of the loss provisions taken in the first half of the year relating to offshore wind cable and decommissioning projects. The seabed intervention and survey activities made a sharp contribution to the result this past year. The transport activities continued to depend on the spot market, although in the course of 2019 concrete signs of recovery became visible for 2021 onwards. In the second half of the year Boskalis was awarded an important sizable offshore wind project in Taiwan, leading to the decision to invest in a second crane vessel.

The combined result of Towage & Salvage increased despite the sale of Boskalis' share in the Saam Smit Towage and Kotug Smit Towage joint ventures. Salvage had a busy year with the completion of two ongoing operations and the successful salvage of two tankers in the Strait of Hormuz. Combined with a large number of medium-sized and small contracts, this resulted in a higher result and stable revenue. The contribution of the remaining Towage joint ventures was higher than in 2018 but declined on balance as a result of the sale of Boskalis' share in the Saam Smit Towage and Kotug Smit Towage joint ventures.

Boskalis' financial position remains strong and improved considerably in the second half of the year. At the end of the year Boskalis was net debt-free with a net cash position of EUR 26 million, compared to a net debt of EUR 420 million six months earlier and of EUR 131 million at the end of 2018. The solvency ratio remains high at 54%.

The order book excluding our share in the order book of associates, grew by 10% to a record high of EUR 4.72 billion (year-end 2018: EUR 4.29 billion).

Dredging activities in Port la Nouvelle, France by the backhoe dredger Manu Pekka and hopper barge Wadden 4

OPERATIONAL AND FINANCIAL DEVELOPMENTS

REVENUE

In 2019 revenue increased by 2.9% to EUR 2.645 billion (2018: EUR 2.570 billion). Adjusted for consolidation, deconsolidation and currency effects, revenue increased by 1.4%.

Within the Dredging & Inland Infra division, revenue increased by 6.2%. This increase was the net effect of a lower utilization of the hopper fleet, a considerably higher utilization of the cutter fleet and a number of large less asset intense projects under execution. The largest contribution came from activities outside of Europe including projects in Oman, Singapore, Canada, Australia and the Indian subcontinent.

The revenue of the Offshore Energy division decreased by 2.0%. Relative to last year there was a modest revenue increase at Marine Survey, Subsea Services and Installation & Intervention offset by a revenue decline in Offshore Wind and the Marine Transport & Services clusters, the latter in part caused by the decision taken in 2018 to exit the low-end transport market.

Within the Towage & Salvage division, Salvage had another busy year. In addition to numerous smaller emergency response contracts, a hand full of mid- to large-sized projects contributed to the strong and stable revenue.

RESULT

The result of both 2019 and 2018 was impacted by extraordinary items. The 2019 result includes a book profit of EUR 82.3 million pre-tax (EUR 75.8 million after tax) related to the sale of the Kotug Smit Towage and Saam Smit Towage joint ventures and the sale of a vessel resulting in an impairment reversal. The book profit was more than offset by onerous contract provisions related to operational and contractual issues on a limited number of offshore projects. The onerous contract provisions are largely related to offshore wind cable and decommissioning projects and already impacted the result in the first half year. The 2018 result included a charge of EUR 519.5 million pre-tax (EUR 518.7 post tax) that was largely related to non-cash impairments.

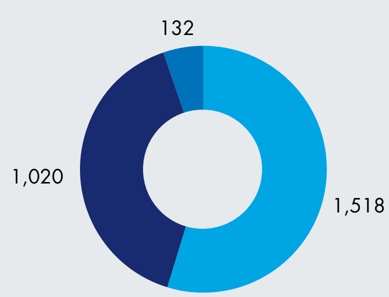
The 2019 operating result before interest, taxes, depreciation, amortization and impairment charges (EBITDA) totaled EUR 375.8 million (2018: EUR 353.6 million, adjusted for extraordinary charges).

EBIT amounted to EUR 110.7 million (2018: minus EUR 400.5 million). The operating result, defined as EBIT before extraordinary items, amounted to EUR 28.5 million (2018: EUR 119.0 million). The strong decline is due to abovementioned onerous contract provisions.

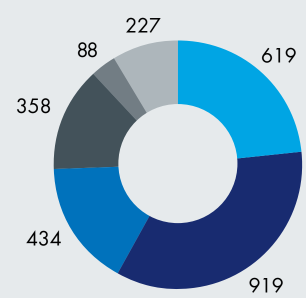
The divisional operating result of Dredging & Inland Infra amounted to EUR 107.5 million (2018: EUR 123.4 million). Despite a slightly weaker second half year, the results from projects in progress or in the process of being completed were reasonably good. Similar to previous periods, the result was complemented by close-out results on projects technically completed in previous years.

Within Offshore Energy the operating result amounted to minus EUR 70.9 million (2018: EUR 5.0 million). A good second half year with a substantially improved result could however not prevent a strong decline in the full year result. The decline was caused by substantial provisions reported in the first half year

REVENUE BY SEGMENT	2019	2018
(in EUR million)		
Dredging & Inland Infra	**1,517.7**	1,428.7
Offshore Energy	**1,020.4**	1,041.3
Towage & Salvage	**132.1**	131.7
Eliminations	**-25.6**	-32.2
Total	**2,644.6**	2,569.5



REVENUE BY GEOGRAPHICAL AREA	2019	2018
(in EUR million)		
The Netherlands	**619.3**	605.6
Rest of Europe	**919.4**	952.0
Australia / Asia	**433.5**	336.1
Middle East	**357.5**	355.2
Africa	**88.3**	106.1
North and South America	**226.6**	214.5
Total	**2,644.6**	2,569.5



related to operational and contractual issues on a limited number of offshore wind cables and decommissioning projects. In the offshore wind market circumstances have changed as a consequence of the move to zero subsidies and increased competition. Clients are keenly seeking for ways to further reduce cost. This resulted in an unexpected change in the attitude of clients which was reflected in a sharp increase in the number of disputes and protracted claim negotiations. Following a thorough review of the projects in hand, provisions in excess of EUR 100 million were made on a limited number of onerous contracts. Boskalis continues to be confident that in time a substantial part of these provisions will be recovered.

The combined result of Towage & Salvage increased to EUR 37.9 million (2018: EUR 33.1 million). A strong performance at Salvage with a number of mid- to large-sized contracts more than offset the decline within Towage caused by the sale of two towage joint ventures.

The group result includes our share in the net result of joint ventures and associates, which on balance amounted to EUR 25.6 million (2018: EUR 28.4 million). This result is mostly attributable to the towage joint ventures. The Kotug Smit Towage and Saam Smit Towage joint ventures were held as an Asset Held For Sale in 2019 and consequently did not contribute to earnings thereby explaining the decline of the result.

Non-allocated group income and expenses amounted to minus EUR 46.1 million and relate primarily to the usual non-allocated head-office costs (2018: EUR 42.5 million).

OPERATING RESULT BY SEGMENT (EBIT)	2019	2018
(in EUR million)		
Dredging & Inland Infra	**107.5**	123.4
Offshore Energy	**-70.9**	5.0
Towage & Salvage	**37.9**	33.1
Non-allocated group (costs) result	**-46.1**	-42.5
Extraordinary items	**82.3**	-519.5
EBIT	**110.7**	-400.5

NET PROFIT

Net of financing expenses of EUR 15.7 million on balance, the pre-tax profit was EUR 95.0 million resulting in a net profit attributable to shareholders of EUR 74.9 million. In 2018 the net financing expenses amounted to EUR 13.3 million with a pre- and post-tax loss of EUR 413.8 million and EUR 435.9 million respectively. Adjusted for the extraordinary charges, the 2018 net profit amounted to EUR 82.8 million.

ORDER BOOK

In 2019 Boskalis acquired, on balance, EUR 3,041 million worth of new contracts. At the end of the year the order book, excluding our share in the order books of joint ventures and associates, stood at a record high level of EUR 4,722 million (end-2018: EUR 4,292 million).

ORDER BOOK	2019	2018
(in EUR million)		
Dredging & Inland Infra	**3,192.4**	3,002.4
Offshore Energy	**1,524.2**	1,281.9
Towage & Salvage	**5.4**	7.9
Total	**4,722.0**	4,292.2

DREDGING & INLAND INFRA

Construction, maintenance and deepening of ports and waterways, land reclamation, coastal defense and riverbank protection, underwater rock fragmentation and the extraction of minerals using dredging techniques. Construction of roads and railroads, bridges, aqueducts, viaducts and tunnels including earthmoving, soil improvement and remediation – mainly in the Netherlands.

DREDGING & INLAND INFRA	2019	2018
(in EUR million)		
Revenue	**1,517.7**	1,428.7
EBITDA	**241.6**	243.8
Net result from JVs and associates	**3.3**	4.4
Operating result	**107.5**	123.4
Order book at year-end	**3,192.4**	3,002.4

EBITDA and operating result include our share in the net result of joint ventures and associates.

REVENUE

Revenue from the Dredging & Inland Infra segment amounted to EUR 1,517.7 million (2018: EUR 1,428.7 million).

REVENUE BY REGION	2019	2018
(in EUR million)		
The Netherlands	**485.2**	502.6
Rest of Europe	**231.1**	257.5
Rest of the world	**801.4**	668.6
Total	**1,517.7**	1,428.7

The Netherlands

Revenue in the Netherlands totaled EUR 485.2 million with the largest revenue contribution coming from the project IJburg II, the construction of an artificial island in the IJmeer lake for the city of Amsterdam, the road project N3-A16 and miscellaneous dike reinforcement projects. These included the Houtrib dike, Markermeerdijken, the Waddensea dike between Eemshaven and Delfzijl and the dike on the island of Texel.

Rest of Europe

Revenue in the rest of Europe amounted to EUR 231.1 million consisting of numerous mainly port-related capital and maintenance projects throughout the home markets (United Kingdom, Germany, Sweden and Finland).

Rest of the world

The divisional revenue growth was achieved outside of Europe, with an increase to EUR 801.4 million. The largest contribution came from the Duqm port development project (Oman). Other important projects include a number of developments in Singapore including Pulau Tekong and Tuas Terminal Phase 2, the deepening of the access channel to the Jawaharlal Nehru Port in Mumbai (India), the expansion of the port of Adelaide (Australia), LNG Canada and numerous other land reclamation projects as well as port and channel related projects around the world.

FLEET DEVELOPMENTS

The hopper fleet had an effective annual utilization rate of 32 weeks, stable relative to the first half year, albeit lower than 2018 (36 weeks). This decline was in part explained by planned maintenance of a mega hopper. The cutter fleet had an effective annual utilization rate of 26 weeks, lower than the first half year however still substantially higher than 2018 (16 weeks). In 2019 the mega cutter suction dredger Helios was well utilized on projects in the Middle East including the Duqm project in Oman.

The construction of the Krios, the sister vessel to the Helios, is progressing according to plan. The vessel is expected to complete her sea trails this summer and will enter service shortly thereafter.

SEGMENT RESULT

Dredging & Inland Infra achieved an EBITDA of EUR 241.6 million, with an operating result of EUR 107.5 million (2018: EUR 243.8 million and EUR 123.4 million, respectively).

In view of the ongoing challenging market conditions, the reported margin is considered to be reasonably good. The slight margin decline is partly related to large projects with substantial civil components such as Duqm and Singapore with a low capital intensity thus inherently carrying a lower margin. The Dutch Inland Infra activities made a positive contribution to the result. Similar to previous years, financial settlements from projects that were technically completed at an earlier stage had a positive impact on the result.

The segment result includes our share in the net result of joint ventures and associates. The contribution from these activities was EUR 3.3 million (2018: EUR 4.4 million).

Soil compaction activities by Boskalis subsidiary Cofra in Dubai

ORDER BOOK

The year-end order book stood at EUR 3,192 million, higher compared to both the mid-year and end-2018 position (EUR 3,029 million and EUR 3,002 million respectively). On balance projects with a total value of EUR 1,708 million were acquired in the course of 2019.

The order book in the Netherlands declined in the course of the year, in part due to the general market uncertainty related to national PFAS and nitrogen deposition issues. Despite this situation the order book in hand in the Netherlands is adequate for 2020.

The overall order book increase was driven by new projects throughout Europe and the rest of the world. Noteworthy projects in Europe include capital dredging works in northern Germany, the development of Port La Nouvelle in France and contracts aimed at strengthening and protecting a stretch of seafront coastline in the United Kingdom (Southsea near Portsmouth) and Romania. Outside of Europe, Boskalis was awarded a large contract for the Pasay land reclamation development in Manila Bay, Philippines. Furthermore, Boskalis acquired two projects in Indonesia, a channel widening project for Adelaide port in Australia and reclamation projects in the Maldives (development of Gulhifalhu) and Bahrain (North Manama Causeway).

ORDER BOOK BY MARKET	2019	2018
(in EUR million)		
The Netherlands	**577.2**	670.2
Rest of Europe	**658.4**	513.0
Rest of the world	**1,956.8**	1,819.2
Total	**3,192.4**	3,002.4

OFFSHORE ENERGY

Offshore wind farms, cables, offshore dredging and rock installation projects for pipelines, heavy transport, lift and installation work, surveying, diving and ROV services in support of the development, construction, maintenance and dismantling of oil and LNG import/export facilities.

OFFSHORE ENERGY	2019	2018
(in EUR million)		
Revenue	**1,020.4**	1,041.3
EBITDA	**47.4**	111.3
Net result from JVs and associates	**6.0**	3.8
Operating result	**-70.9**	5.0
Order book at year-end	**1,524.2**	1,281.9

EBITDA and operating result include our share in the net result of joint ventures and associates. The 2018 EBITDA is adjusted for extraordinary charges.

REVENUE

Revenue from the Offshore Energy segment amounted to EUR 1,020.4 million (2018: EUR 1,041.3 million) of which approximately 40% was related to offshore wind. A revenue decline within the services activities, in part as a consequence of the decision in 2018 to exit the low end of the transport market, was offset by a revenue increase from the contracting activities. Contracting accounted for approximately 60% of divisional revenue.

Offshore Services includes Marine Transport & Services, Subsea Services and Marine Survey. At Marine Transport & Services there was a decline in revenue in part due to the decision taken last year to exit the low-end market. The remaining type I and IIa high-end vessels were active on a large number of smaller projects. The BOKA Vanguard (type 0) had a relatively quiet 2019 but ended the year with a busy fourth quarter with a 91,000 ton record-breaking FPSO transport for Petrobras from China to Brazil. At Subsea Services the main focus area continues to be Europe, the Middle East and Western Africa. Compared to 2018 a modest increase in revenue was accompanied by a higher vessel utilization. Subsea markets, in particular the North Sea, continue to be competitive as reflected in rates.
Marine Survey, comprising the activities of Gardline and Horizon, had a good year. At Gardline revenue levels and pricing improved relative to 2018. Early 2019, Boskalis acquired a 62.5% stake in Horizon. Based on voting rights, under IFRS, the investment was classified and reported as a joint venture in 2019. Late November 2019 an agreement was reached to acquire the remaining shares in Horizon. Financial close took place on 27 January 2020 and Horizon will be consolidated as per 1 January 2020.

Offshore Contracting includes the installation of floating and fixed structures, seabed intervention, offshore wind and cable-laying related activities. Revenue for Installation & Intervention increased with the largest intervention projects under execution including a number of pipeline related projects, work under a framework agreement for Equinor and support on numerous offshore cable projects. Within Installation, the Vulcan Viking decomissioning project which was carried out with the Bokalift 1 made a good revenue contribution and preparations commenced for the Tapti decomissioning project in India.
Offshore wind farm developments contributing to revenue included East Anglia, Hohe See, Horns Rev 3, Borssele and Ostwind 2. These projects included a mixture of export cables, array cables, cable repairs and foundation installation campaigns. The Bokalift 1 crane vessel, which entered service early 2018, was well utilized in 2019 on an offshore wind farm foundation installation and decomissioning project. Boskalis further strengthened its position in the offshore cable market early 2019 through the acquisition of the offshore cable installation assets of Bohlen & Doyen.

FLEET DEVELOPMENTS

For the year the (weighted) utilization rate of the heavy marine transport fleet was 66% (2018: 70%). The captive assets (cable-laying vessels, fallpipe vessels and crane vessel) had a reasonable year with a utilization rate of 74% (2018: 78%).

Early in the fourth quarter Boskalis was awarded the foundation scope for the Taiwanese Changfang and Xidao offshore wind farm project. Tied to this contract award was the positive investment decision for the new Bokalift 2 crane vessel. Similar to the successful Bokalift 1, Boskalis will convert an existing hull to create the Bokalift 2 crane vessel with accommodation for 150 persons, 7,500 m^2 of free deck space and a 4,000 ton revolving crane capable of lifting structures more than 100 meters high. The Bokalift 2 is expected to enter service mid-2021.

In 2019 Boskalis added two large anchor handling tugs to the fleet through multi-year bare boat charters. The Boka Pegasus and Boka Perseus, both with 250 ton bollard pull, are being utilized for both internal projects such as boulder clearance and external standalone assignments.

The retrofitting of a new platform supply vessel into an ultra modern suvery vessel for Gardline is on track. The vessel is expected to be commissioned in the coming weeks on schedule for the 2020 season.

SEGMENT RESULT

EBITDA from the Offshore Energy segment amounted to EUR 47.4 million, with an operating result of minus EUR 70.9 million (2018: EUR 111.3 million and EUR 5.0 million, respectively). A strong second half year result, making it the best half year since 2017, could not prevent a sharp year-on-year decline. The full year result was impacted by a poor first half year with operational and contractual issues on a limited number of offshore wind cables and decommissioning projects. Following a thorough review of the projects in hand, provisions of more than EUR 100 million were made on a limited number of onerous contracts in the first half year. There was no material change to this total amount in the second half of the year. Boskalis continues to be confident that in time a substantial part of these provisions will be recovered.

The result from the services cluster, consisting of Marine Transport & Services, Subsea Services and Marine Survey, improved relative to 2018. Survey made a very strong positive contribution whilst the other services business continued to be impacted by weak demand and spot market dependence.

The result within the contracting cluster was mixed as a consequence of the onerous contract provisions. The offshore wind and marine installation activities were lossmaking, which was partly offset by a very strong performance from seabed intervention.

The segment result includes our share in the net result of joint ventures and associates of EUR 6.0 million. The contribution of Horizon as of 1 April 2019 was EUR 5.1 million.

ORDER BOOK

At the end of 2019 the order book, excluding our share in the order books of joint ventures and associates, stood at EUR 1,524.2 million (end-2018: EUR 1,281.9 million) of which approximately half is related to offshore wind.

Within Offshore Energy a number of noteworthy offshore wind contracts were acquired. These included the scour protection for the Yunlin offshore wind farm in Taiwan, the replacement and repair of inter-array cables at an existing offshore wind farm in the UK and the offshore export cable installation contract for the Hornsea 2 offshore wind farm. The Hornsea 2 project scope includes the preparation of the offshore export cable route (geophysical survey, boulder clearance and seabed leveling through dredging) and the installation and protection of the cables. The most significant offshore wind contract win was the foundation scope for the Changfang and Xidao offshore wind farm project in Taiwan. The project scope includes the transportation and installation of sixty two three-legged jacket foundations and the accompanying 186 pin piles, making this the launching project for the Bokalift 2 crane vessel.

Decommissioning of an oil rig by the crane vessel Bokalift 1 supported by the diving support vessel Boka Da Vinci

A number of gas pipeline related projects were also awarded to Boskalis in 2019 including the seabed preparation and shore crossing for the proposed Scarborough export gas pipeline in North West Australia, a contract from the Danish Energinet to lay a gas pipeline from Jutland to Funen in the Lillebaelt of Denmark and a contract in El Salvador to connect an offshore Floating Storage and Regasification Unit to an onshore power plant. In the course of 2019 the award rate for heavy marine transport services contracts increased and numerous projects scheduled to take place in 2021 and 2022 were secured. These include the transportation of LNG modules and the transportation of an FPSO and two Floating Production Systems.

On balance, EUR 1,230 million of new work was acquired during the year.

TOWAGE & SALVAGE

Towage: towage services and berthing and unberthing of oceangoing vessels in ports and at offshore terminals, management and maintenance both above and below the surface of onshore and offshore oil and gas terminals and associated maritime and management services.
Salvage: providing assistance to vessels in distress, wreck removal, environmental care services and consultancy.

TOWAGE & SALVAGE	2019	2018
(in EUR million)		
Revenue	**132.1**	131.7
EBITDA	**41.6**	36.4
Net result from JVs and associates	**16.5**	20.0
Operating result	**37.9**	33.1
Order book at year-end	**5.4**	7.9

EBITDA and operating result include our share in the net result of joint ventures and associates.
The 2018 net result from the joint ventures and associates is presented excluding impairment charges

In 2019, Boskalis successfully divested its share in the Saam Smit Towage and Kotug Smit Towage harbour towage joint ventures. These joint ventures did not contribute to earnings as per 1 January and 1 April respectively, the moment from which they were classified as an Asset Held For Sale.

REVENUE

Revenue from the Towage & Salvage segment amounted to EUR 132.1 million (2018: EUR 131.7 million).

Salvage had a busy year with numerous smaller contracts and a number of larger striking projects. There was continued work related to the salvage and caretaking of the Yantian Express containership and the removal of debris from the Maersk Honam


Cable-laying vessel Spirit

containership. Two salvage projects in the Gulf of Oman, the ongoing salvage of a vessel in the Arctic waters near Spitsbergen and emergency response services for the Golden Ray car carrier off the US coast of Georgia also contributed to another busy year.

All harbor towage activities are conducted through joint ventures. Our share in the net results of these joint ventures is recognized as net result from joint ventures and associates.

SEGMENT RESULT

EBITDA generated by the Towage & Salvage segment totaled EUR 41.6 million, with an operating result of EUR 37.9 million (2018: EUR 36.4 million and EUR 33.1 million, respectively).

The strong Salvage result includes the contribution from current projects as well as financial settlements from projects that were executed in previous years. Such post completion settlements are common for the salvage business, however the actual size and timing of this income is unpredictable.

The segment result includes our share in the net result of joint ventures and associates, the remaining ones being terminal services (Smit Lamnalco) and harbor towage (Keppel Smit Towage and Kotug Smit Towage in the first quarter only). The contribution from these joint ventures was EUR 16.5 million (2018: EUR 20 million). The decline is fully attributable to the deconsolidation of Saam Smit Towage and Kotug Smit Towage. Compared to 2018 there was a slight increase of the underlying contribution from Smit Lamnalco and Keppel Smit Towage.

ORDER BOOK

At end-2019 the order book, excluding our share in the order books of joint ventures and associates, stood at EUR 5.4 million (end-2018: EUR 7.9 million). The order book relates solely to the Salvage business unit.

The value of the order book of the joint ventures is not included in the consolidated financials. As per end-2019 the 100% value of the order book of the joint ventures amounted to EUR 1,425 million, which is fully attributable to terminal services contracts (Smit Lamnalco). Included in this amount is a 10-year contract Smit Lamnalco acquired to provide integrated marine services to the first Mozambique Floating Liquefied Natural Gas (FLNG) terminal.

HOLDING AND ELIMINATIONS

Non-allocated head office activities.

HOLDING AND ELIMINATIONS	2019	2018
(in EUR million)		
Revenue	**-25.6**	-32.2
EBITDA	**45.3**	-38.0
Net result from JVs and associates	**-0.1**	0.2
Operating result	**-46.1**	-42.5

EBITDA and operating result include our share in the net result of joint ventures and associates.

SEGMENT RESULT

The operating result for the reporting period mainly includes the usual non-allocated head-office costs, as well as various non-allocated (in many cases non-recurring) income and expenses.

The 2019 EBITDA includes a book profit of EUR 82.3 million as a result of sale transactions. Part of this was related to an impairment reversal on the sale of a vessel and the remaining EUR 55.3 million is related to the finalization of the sale of Kotug Smit Towage to the Boluda Group and the sale of Boskalis' interest in the partnership Saam Smit Towage to Sudamericana Agencias Aereas y Maritimas S.A. (SAAM). The EUR 42.1 million pre-tax book profit (EUR 35.6 post tax) on the transaction with SAAM is related to the recycling of positive currency translation difference.

OTHER FINANCIAL INFORMATION

IFRS 16 LEASES

As of 1 January 2019, Boskalis applies IFRS 16 which requires lessees to recognize a liability in their Consolidated Statement of Financial Position and to capitalize the right-of-use of a leased asset if it is leased for a period exceeding one year. The first time application of IFRS 16 resulted in an increase in the non-current assets by EUR 103.9 million, an increase of EUR 27.3 million in depreciation charges and EUR 1.8 million additional interest charges. As a consequence, EBITDA increased by EUR 23.8 million and the net profit decreased by EUR 1.2 million. The comparative figures 2018 have not been restated.

DEPRECIATION, AMORTIZATION AND IMPAIRMENT CHARGES

Depreciation and amortization expenses amounted to EUR 265.1 million (2018: EUR 234.6 million) excluding impairments and reversal of impairments. This increase is due to the first time application of IFRS 16 Leases.

In 2019 there was an impairment reversal of EUR 40.1 million as a result of sale transactions. Part of this was related to the sale of an impaired vessel and the remaining EUR 13.1 million was related to the finalization of the sale of Kotug Smit Towage to the Boluda Group. There were no impairment charges incurred during 2019.

In 2018 there were substantial non-cash impairment charges of EUR 481.7 million before taxation (EUR 480.9 million after taxation). A large part of the charges related to the Offshore Energy division, of which EUR 136.9 million related to an impairment charge for vessels and EUR 154.9 million to an impairment of goodwill. The remaining amount of EUR 189.9 million was nearly fully related to goodwill embedded in the book value of the towage joint ventures, most of it as a result of the allocation of a part of the goodwill from the acquisition of SMIT to the towage joint ventures.

INCOME FROM JOINT VENTURES AND ASSOCIATES

Our share in the net result from joint ventures and associates was EUR 25.6 million (2018: EUR 28.4 million). This result relates mainly to our share in the net results of Smit Lamnalco, the

Singapore partnerships with Keppel (Keppel Smit Towage, Asian Lift) and Horizon.

Following the classification of Saam Smit Towage and Kotug Smit Towage as Asset Held For Sale as per 31 December 2018 and 31 March 2019 respectively and the subsequent sale, no share in the result of these two joint ventures is accounted for. The decline in the income from joint ventures and associates is fully attributable to this.

TAX

The tax charge increased slighty to EUR 20.1 million (2018: EUR 19.9 million) with an effective tax rate of 21.2% (2018: minus 4.8%).

The increase in the effective tax rate is, in addition to a different mix of the pre-tax results in countries with different tax rates, due to losses in countries where future compensation with taxable income is uncertain.

CAPITAL EXPENDITURE AND BALANCE SHEET

In 2019, a total amount of EUR 247.6 million was invested in property, plant and equipment (2018: EUR 194.8 million), of which EUR 41.5 million was related to dry dockings. Disposals were made totaling EUR 19.9 million. In addition to these investments in property, plant and equipment EUR 44.5 million was invested in right-of-use assets in 2019.

Within Dredging the largest investment was related to construction installment payments for the cutter suction dredger Krios. The largest investment within the Offshore Energy division was for a trencher for Subsea Cables and the start of the Bokalift 2.

In addition to these investments in property, plant and equipment Boskalis acquired the offshore activities of Bohlen & Doyen for EUR 23.3 million and acquired a 62.5% majority stake in Horizon Geoscience for a consideration of EUR 67.5 million. The remaining 37.5% stake in Horizon was acquired for a consideration of EUR 45 million on 27 January 2020.

Capital expenditure and acquisition commitments at the end of the year amounted to EUR 162 million (end-2018: EUR 162 million), which includes the consideration for the remaining shares in Horizon, the Bokalift 2 and the completion of the Krios.

In 2019, Boskalis used EUR 67.0 million cash for payments of the (full) dividend related to the 2018 financial year (2018: EUR 36.3 million). Furthermore, in 2019 as part of the share buyback program EUR 46.8 million was used to repurchase shares.

The cash flow amounted to EUR 340.0 million (2018: EUR 319.5 million).

The working capital position at year-end was EUR 418 million negative (year-end 2018: EUR 358 million negative). Including the effects of IFRS 16, the working capital position at year end amounted to EUR 442 million negative. The seasonal outflow of working capital in the first half of the year was more than reversed in the second half.

The interest-bearing debt totaled EUR 373.8 million at year-end. The cash position at the end of the year was EUR 399.6 million resulting in a positive net financial postion with a net cash amount of EUR 25.7 million. The proceeds from the sale of our stake in Kotug Smit Towage and Saam Smit Towage, together EUR 261.7 million, were used to redeem debt. The increase in lease liabilities by EUR 103.9 million as a result of IFRS 16 lease accounting is not included in the net financial position. At the end of 2018 the debt position was EUR 467.1 million with a cash position of EUR 336.2 million resulting in a debt position of EUR 130.9 million. The solvency ratio as per year-end was 54.3% (year-end 2018: 56.1%).

The interest-bearing debt relates largely to a long-term US Private Placement (USPP) of USD 325 million (EUR 289.5 million as at 31 December 2019). This USPP matures in 2023. Furthermore, Boskalis has a EUR 600 million syndicated bank facility at its disposal (matures in 2021), of which EUR 50 million was drawn as at 31 December 2019.

Boskalis must comply with a number of covenants as agreed with the syndicate of banks and the USPP investors. These covenants were comfortably met as at end-2019. The main covenants relate to the net debt : EBITDA ratio, with a limit of 3, and the EBITDA : net interest ratio, with a minimum of 4. At 31 December 2019 the net debt : EBITDA ratio stood at 0.2 and the EBITDA : net interest ratio at 19.

OTHER DEVELOPMENTS

SHARE BUYBACK PROGRAM

Boskalis announced a share buyback program early February 2019 with the intention to repurchase the equivalent of EUR 100 million of its own shares. The program was launched mid-March and in the period up to 31 December 2019 a total of 2.34 million shares were purchased representing a total value of EUR 46.8 million. As at 31 December 2019 the issued share capital consisted of 135,378,338 ordinary shares, of which 3,651,701 are treasury stock held by Boskalis.

Heavy transport vessel BOKA Vanguard lifting
the cruise vessel Carnival Vista out of the water

SPECTACULAR DRY DOCKING OPERATION MAKES GLOBAL HEADLINES

The Boskalis heavy transport vessel BOKA Vanguard made global headlines in the summer of 2019 by serving as a floating dry dock for the Carnival Vista, a gigantic cruise vessel. "We had never loaded an Imax theatre, restaurants, shops, swimming pools, slides, a golf course and a crew of 250 people in one single movement," Jilles van de Peppel said. Van de Peppel was a project engineer on the team that completed the preparations for the operation in just three weeks. The unique operation generated a flood of public publicity across the world.

With 1,968 cabins and room for about 4,000 passengers, the Carnival Vista is one of the world's largest cruise vessels. It is 324 meters long and it weighs 67,000 tons. The ship experienced problems in the propulsion system in early June so that it could only sail at half power. The company was forced to cancel a number of cruises to execute repair works but the only suitable dry dock in the Caribbean was not available. "Boskalis had already announced a few years before, that it could transport another cruise vessel, the Costa Concordia" Van de Peppel said. "That was one of the reasons Carnival approached us in mid-June to ask if the BOKA Vanguard could serve as a floating dry dock."

Heavy transport vessel BOKA Vanguard lifting the cruise vessel Carnival Vista out of the water

"WE HAD NEVER LOADED AN IMAX THEATRE, RESTAURANTS, SHOPS, SWIMMING POOLS, SLIDES, A GOLF COURSE AND A CREW OF 250 PEOPLE IN ONE SINGLE MOVEMENT"

WITHIN A WEEK

The contract was signed five days after the initial contact and was followed by the two-week mobilization voyage from England to the Bahamas during which Van de Peppel and his colleagues prepared the outfitting of the BOKA Vanguard. This included moving a buoyancy casing and installing the cribbing and the connections for cooling water. "The work started immediately upon arrival and the loading operation could start within a week," Van de Peppel said. "To safeguard stability, a trim of seven meters between the bow and the stern of the Vanguard was maintained during the loading and unloading operation."

PRECISION

The loading operation was a genuine precision job. Once the BOKA Vanguard had been submerged to the right depth, the Carnival Vista was positioned above the deck of the BOKA Vanguard under its own power with assistance from four tugs, including the Boskalis anchor handling tug Sovereign. "The cruise vessel is almost 50 meters longer than the Vanguard so it stuck out slightly on either side. That simplified the work which was done at the Vista's stern from a working vessel. Before the repairs started, we connected our cooling water supply and conducted an evacuation exercise for the crew of the Carnival Vista who stayed on board. Carnival was kind enough to invite us on board the Vista for a lunch and a guided tour of this very special cargo," a smiling Van de Peppel said.

EXCELLENT OPPORTUNITY

"One of the challenges was that the project took place during the hurricane season. As a result, we had to be prepared for a possible interruption but, fortunately, the weather conditions remained excellent. The repair works were completed in six days. An efficient float-off operation brought a smooth project to an end: it took a week less than the client had anticipated. Carnival was even able to plan an additional last-minute cruise," Van de Peppel said. "This was an excellent opportunity for Boskalis to show that we can also handle this special kind of work."

ORGANIZATIONAL DEVELOPMENTS

HEALTH AND SAFETY

Safety continues to be a top priority in everything we do. We want our people and the people we work with to return safely from work every day. Our No Injuries No Accidents (NINA) safety behavior program helps us achieve this goal by embedding a safety culture throughout our organization. More than 13,000 people have undertaken NINA training in its first 10 years.

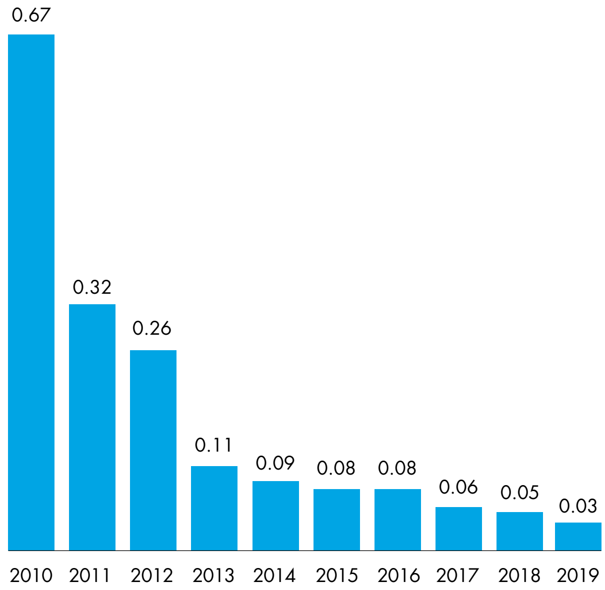
The adaptability of the NINA program to a diverse range of situations, including offshore and dredging, as well as across Boskalis staff, sub-contractors and new partners, has proven to be a powerful tool for improving effectiveness and collaboration. For example, we have successfully rolled out NINA within Gardline, our specialist survey company that was acquired in 2017. NINA has proven to be an important tool for embedding a shared understanding of key elements, such as standards and ways of working.

In 2019 we continued the rollout of the NINA Workbox for Lifting and Hoisting, which was introduced in 2018. It is designed to make people aware of their subconscious, routine behavior. The implementation of this workbox across nearly all of the major vessels in the fleet has highlighted the importance of the values and rules structure of NINA.

A core part of NINA is SafeMind that focuses on human behaviors such as working on autopilot or making assumptions. SafeMind is directly connected to the YES scan, a practical tool that helps people reflect on possible safety issues for 'Yourself, Equipment and Surroundings' each time they start work. Since 2018 there has been a focus on raising levels of implementation to ensure that everyone knows what it is and why it is important. In addition, this campaign is also designed to raise awareness about how to undertake the YES scan.

Since the launch of NINA in 2010 our safety performance has improved significantly. This year the frequency of incidents resulting in absence from work (Lost Time Injury Frequency) further decreased from 0.05 in 2018 to 0.03 in 2019. The Total Recordable Injury Rate (TRIR) dropped from 0.40 in 2018 to 0.37 this year. The increase in the number of submitted Safety Hazard Observation Cards (SHOCs) (up from 27,710 in 2018 to 151,236 this year) indicates that people are committed to contributing to further improvement and building on lessons learned, which is one of the NINA values.

LOST TIME INJURY FREQUENCY (per 200,000 exp. hours)



Ten years NINA: LTIF since the introduction

QUALITY MANAGEMENT

The Boskalis integrated quality management system Way of Working (WoW) launched in August 2017 aims to achieve operational excellence based on a consistent client approach, with a clear focus on providing safe and sustainable solutions. WoW is crucial for optimizing our tender and project processes. In addition to providing a constant approach towards the initiation, planning, execution and completion of our projects, it integrates health and safety, environmental and social responsibility, including consideration of stakeholder interests, into our work.

In 2019 a specialist WoW workgroup finalized the harmonization of documents for the WoW system across eighteen business units and developed various complementing resources including a so-called Stakeholder Toolkit.

HUMAN CAPITAL

Our clients demand more integrated and innovative solutions and expect us to have a thorough understanding of their operating environments and stakeholders. Additionally, they expect us to provide ever more value for money often in combination with increased local content requirements. The fact that technology is commoditizing rapidly and capital is in abundance at low cost, makes human capital the main differentiator for a sustainable competitive advantage. In view of this, recruitment, retention and development of excellent staff is considered one of the three main pillars of our 2020-2022 Corporate Business Plan strategic framework.

In 2019 the race to attract and retain the best talent in the industry was particularly intense. Part of the new horizon for Boskalis includes growth in areas including offshore energy. This dynamic recruitment environment required a strategic and thoughtful approach to ensure Boskalis caught the attention of the specialists it needs.

ATTRACTING TALENT

In 2019 we carried out an extensive review of the company's recruitment needs now and in the next three years to produce a strategic workforce plan. We used this to develop skills and expertise profiles for the kind of people we need to attract. We have evolved our recruitment process to attract the next generation of engineers and specialists, recognizing that innovation and sustainability resonate with the talented individuals we want to join our team.

Employer branding campaign

In 2019 we expanded on existing initiatives by launching our international employer branding campaign. This focused on those early on in their careers and professionals with profiles matching those described in the strategic workforce plan. The campaign focused on four macroeconomic trends: climate change, growth of worldwide trade, growing world population and the demand for alternative sources of energy. We showed how employees have opportunities to contribute to these in our campaign, *'Rise to the challenge. Make your mark at Boskalis.'* Alongside the digital campaign we attended universities and invited students to meet Boskalis at our Papendrecht Campus. These in-house days give potential employees the chance to find out more about working for Boskalis. Furthermore, Boskalis employees are encouraged to act as an advocate of Boskalis by sharing stories in their own networks. They can refer people for specific jobs via the Employee Referral Program.

Traineeship

In April 2019 we organized our annual trainee selection day. We invited over 100 candidates for the 'Experience Boskalis Selection Day'. The day is an opportunity for us to assess the applicants against our required traineeship competencies and Boskalis values. It also provides a chance for those starting out to learn more about how much a career at Boskalis has to offer. The event resulted in hiring a total of 40 new trainees.

International recruitment on our projects

As the proportion of our international employees grows, we have strengthened our familiarization program. This is designed to ensure that those moving to the Netherlands from abroad receive the support they need, including finding suitable housing, handling work visas, and help settling into a new community. In addition, we are increasingly trying to retain good local employees with a project contract tenure beyond the duration of that specific project. These colleagues are often keen to continue to work for Boskalis on subsequent projects in that part of the world. Our employees and agency staff can mobilize from their home and deploy to a project anywhere in the world.

ENGAGING OUR EMPLOYEES

Retaining talented individuals within Boskalis is equally as important as attracting them. In 2019 we undertook a number of initiatives designed to engage our staff, ranging from enhancing our crew training to running successful programs such as the Boskalis Leadership Development Program and the Financial Professional Program.

Employee Survey

In 2019 we conducted a company-wide employee survey that included both employees and agency staff. The results of the survey showed that employees feel a great deal of pride in the company and passion for their work. It also identified several areas where Boskalis can improve, including providing more clarity on career paths and opportunities inside the company and sharing more information about Boskalis' strategy and projects with employees across the business. Steps have already been taken to respond to the survey outcomes including launching a new internal communications platform for improved information sharing and the introduction of several new and improved tools and approaches for career development.

The great sense of passion and pride in our company is reflected in an e-NPS (employee Net Promotor Score) of 18.5 which is ahead of peers in the industry. Following on from the survey, in January 2020, Boskalis was recognized by Effectory, a leading provider of employee engagement solutions, as a World-class Workplace. This award is made to companies based on their employee survey score. With a score of 7.4 Boskalis scored higher than the global benchmark average of 7.1.

Onboarding

As an extension of our professionalized recruitment process we renewed the group onboarding process. Interactive guides were developed to give new hires and managers more guidance during the critical first months. The traditional introduction day was also redesigned with more focus on interaction and establishing a strong sense of pride.

DEVELOPMENT OPPORTUNITIES

A key theme that emerged from our employee survey and strategic human resources plan was a shortage of clear career development opportunities within Boskalis. We have taken a number of steps this year to address this. We expanded the resources available on the internal Career Center platform and initiated an activation campaign of motivational career events with inspirational speakers and more internally focused career markets. Based on an anticipated scarcity of senior project managers, we started the Boskalis Project Professionals program to accelerate the development of high potential individuals.

FLEET DEVELOPMENTS

Boskalis makes targeted investments in new-build and existing vessels to retain or expand our market position. At the same time, old or non-strategic vessels are taken out of service. In 2019 the following major developments took place:

Dredging

The construction of the new mega cutter suction dredger Krios is progressing as planned. With an installed power of almost 24,000 kW, a total pumping power of 15,600 kW and a maximum cutter power of 7,000 kW this dredger is expected to be taken into service in the second half of 2020.

As part of the new 2020-2022 corporate business plan Boskalis will start the development of two distinctive shallow-draught large trailing suction hopper dredgers.

2019 saw the environmentally responsible dismantling of the trailing suction hopper dredgers Sandway, Shahaf and cutter suction dredger Capricorn.

Offshore energy

In 2019 the decision was taken to convert an existing hull to create the Bokalift 2. The crane vessel will be equipped with a 4,000 ton revolving crane and 7,500 m² of free deck space and perfectly suited to transport and install current and future generation wind turbine foundations.

In the course of 2019 we strengthened the Offshore Energy fleet with the addition of the anchor handling tug and supply vessels Boka Pegasus and Boka Perseus through long-term charters. With a bollard pull of more than 250 tons, both vessels can be used to execute complex offshore projects in deep waters and in severe weather.

Gardline is currently converting an offshore vessel into one of the most advanced geophysical survey vessels in the industry. With

this vessel, which will be named Ocean Resolution, Gardline introduces a new way of mapping the seabed in a very high resolution. The Ocean Resolution will be commissioned in the course of 2020. Furthermore, as part of the new business plan, Boskalis will invest in four new survey vessels in the coming years.

RESEARCH AND DEVELOPMENT

Our research and development activities are helping us deliver added value to our clients and stakeholders and support our business growth.

2019 HIGHLIGHTS

Hopper dredger recirculation system
An important highlight from our internal R&D program includes the development of a new system that enables us to use our hopper dredgers without using the so-called overflow while maintaining efficiency levels. The recirculation system limits the release of fine sediment into the water, which in turn reduces turbidity in the water column around the hopper dredger.

Mudbot
Our building with soft materials program made progress this year in pursuit of an approach that will facilitate the use of the fine sediment produced as a by-product of dredging. The program is aimed at transforming previously unusable material such as fine sand and silt into usable building material. For this purpose the Mudbot was developed, a robot that traverses the fine sediment once it has been deposited at the reclamation site, accelerating drying. The machine creates ditches and gullies so that the material dries faster as the water evaporates. The sediment, which would once have been waste, is now being put to valuable use.

Seagrass Transplanter
This year we also launched a specialized Seagrass Transplanter. Seagrass can be affected by pipeline installation. If it is moved, it is unlikely to recover unless its root-base is intact. Boskalis developed a grab, which can be mounted on an excavator, capable of transporting seagrass in complete blocks. As a result, they can be moved away from the site, and returned if appropriate afterwards. Seagrass is protected in many parts of the world because of its important properties - it dampens waves and is one of the most important natural marine systems for capturing and storing carbon dioxide. Our Seagrass Transplanter is a unique means of protecting this important aspect of our oceans' biodiversity.

WaveJump Innovation Challenge
2019 saw the conclusion of our latest Wavejump Innovation Challenge. More than 100 employees put forward ideas and seven were selected through two events to participate in an in-house accelerator program. One project was selected for an award, a Microbial soil improvement system, which is now being piloted on the innovative Finger Pier 3 land reclamation project in Singapore. Several of the six other proposals are now progressing through trials ahead of deployment in commercial operations.

Port XL
Boskalis is a partner of Port XL, the world's first port and maritime accelerator program. It is designed to provide the support innovative ideas need to succeed commercially. Our participation is focused on bringing our know-how and network to start-ups and support them in bringing their ideas to market. The structure of the program changed in 2019 so that teams presenting strong ideas can apply and embark on the accelerator program at any time. This makes it a dynamic program that responds more immediately to industry needs.

Joint industry initiatives
As a member of the Green Maritime Methanol consortium we are participating in a project exploring methanol as an alternative marine fuel. This is part of our drive to reduce our carbon footprint. Together the 22 partners are modelling the relative cost and environmental implications of methanol compared to current fuel options.

We also continued our involvement as part of the GROW group (Growth through Research, development & demonstration in Offshore Wind) investigating gentle monopile driving using a smart combination of actual and rotational vibrations. This approach is expected to have a direct environmental benefit by reducing the disturbance of marine mammals. It will also reduce equipment fatigue. This should bring down costs, which will in turn make construction of offshore wind farms more affordable. A scale test was successfully undertaken in 2019 and work continues to further improve and test this approach.

ICT

Following the restructuring of IT operations in 2018, much of 2019 was focused on stabilizing the new outsourcing arrangements. This involved optimizing collaboration between our different service suppliers, which also provided an opportunity to rationalize some of our systems.

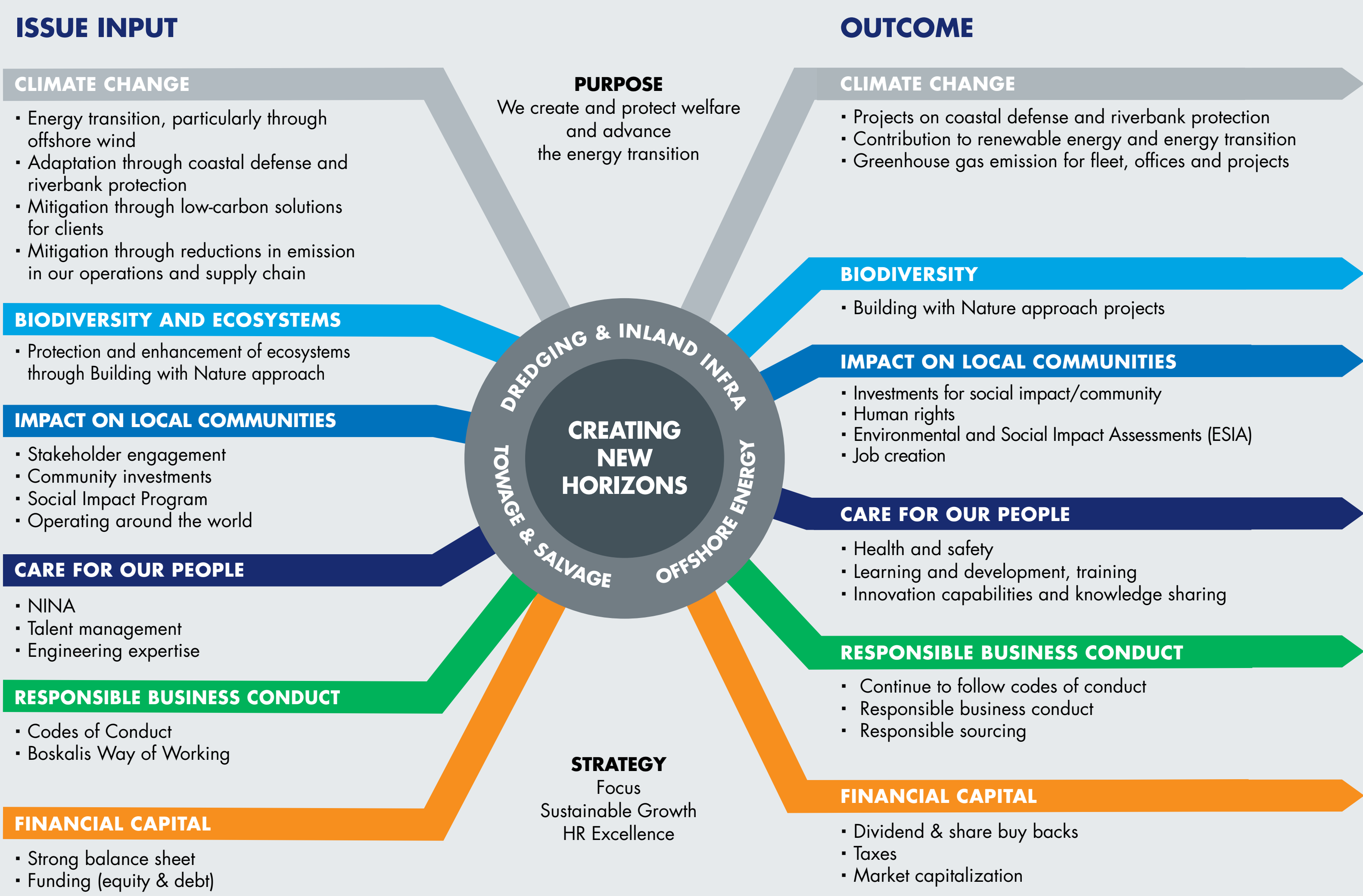
In 2019 we continued the implementation of the new Enterprise Resource Planning system (ERP) within the Dredging division and are aiming to complete this in 2020. The new ERP system has significantly improved the efficiency of numerous processes and enhanced the transparency of our business operations and governance.

Work began this year with the development of the new company-wide software tool to optimize Fleet Management processes such as plant maintenance, crewing and SHE-Q-processes. We worked with our crew to analyze the processes that happen onboard to ensure the tool that is ultimately built is fit for purpose. Often this provided an opportunity to streamline processes that had become complex over time. This work will inform the development of the tool itself, which will commence in 2020.

Our work to integrate Building Information Modeling (BIM) standards and developing supporting IT solutions continued this year. Motivated by the expectations of some of our key Dutch clients including Rijkswaterstaat, the executive agency of the Dutch Ministry of Infrastructure and Water Management, this system provides guidance on operational processes, such as document review procedures, including approval processes and proper archiving. This sets high quality standards to which we can operate, and which may ultimately prove to be a successful model for our global operations.

SUSTAINABILITY

The principal strategic objective of Boskalis is the creation of long-term sustainable profitability. The systematic execution of the corporate strategy, that is reviewed regularly in light of relevant market developments, is key to our success. Our sustainability strategy is derived from the corporate business strategy, and ongoing interaction and dialogue with our stakeholders. We aim to create new horizons for our clients and stakeholders based on sustainable profitability.



Sustainability at Boskalis goes beyond managing our business and projects in a responsible manner. We seek to leverage our ability to influence and innovate, to create added social, environmental and economic value where we can. Our approach is framed in our General Code of Business Conduct, which is based on international guidelines and the Universal Declaration of Human Rights. We endorse the principles of the International Labor Organization and the OECD Guidelines for Multinational Enterprises.

In our separate sustainability report we account in detail for material and relevant non-financial aspects of our performance arising from our strategy and core activities. The report is based on the guidance of the Global Reporting Initiative (GRI) and focuses on communicating the key sustainability challenges and opportunities we at Boskalis face and the many ways we are responding to these. We report on topics based on the 2019 materiality analysis, which defines the sustainability focus areas that are most relevant to Boskalis and our stakeholders. These areas are climate change (energy transition, adaptation, mitigation), biodiversity and ecosystems, local community and development, employee and talent development, and safety. Whilst we have a wide range of stakeholders, we see our key stakeholder groups as being: employees; clients and their respective project communities; suppliers and subcontractors; NGOs and civil society organizations; and investors and shareholders.

IMPACTS

CLIMATE CHANGE

- Limiting the consequences of climate change through our coastal defense and riverbank protection projects
- Contributing to clean energy through our renewable energy projects
- Reduce our own negative impact through operational emissions management

BIODIVERSITY

- Projects that reduce negative and enhance positive biodiversity impacts

IMPACT ON LOCAL COMMUNITIES

- Services that contribute to a safer, healthier and more prosperous local community
- A positive contribution to economic growth and job creation

CARE FOR OUR PEOPLE

- A safe and inspiring work environment with skilled and engaged employees

RESPONSIBLE BUSINESS CONDUCT

- Satisfied clients
- Improved supply chain sustainability practices

FINANCIAL CAPITAL

- Long-term sustainable profit

THE BOSKALIS VALUE CREATION MODEL

We have illustrated our value creation model, showing inputs, outcomes and impacts across six themes. The development of the model was informed by the International Integrated Reporting Council framework. Our most material issues are incorporated into the model. In each of the steps we touch upon our contribution to the different SDGs. We are a project-based organization. Therefore, we have set out the key elements that are relevant for each project, and how we create value along the way.

Input
We use the input in the execution of our strategy. The five material themes are the backbone of our sustainability report. The sixth (financial capital) is presented in our Annual Report.

Boskalis business
Our market-facing divisions – Dredging & Inland Infra, Offshore Energy and Towage & Salvage – execute our business strategy based on our company culture and its core values: safe (NINA), professional, entrepreneurial, team player and responsible.

Outcome & Impact
The outcome and impact of our business model in terms of sustainability correspond to the focus areas as described in our sustainability strategy.

More information about our approach to managing social and environmental impacts is available in the respective chapters of our sustainability report 2019.

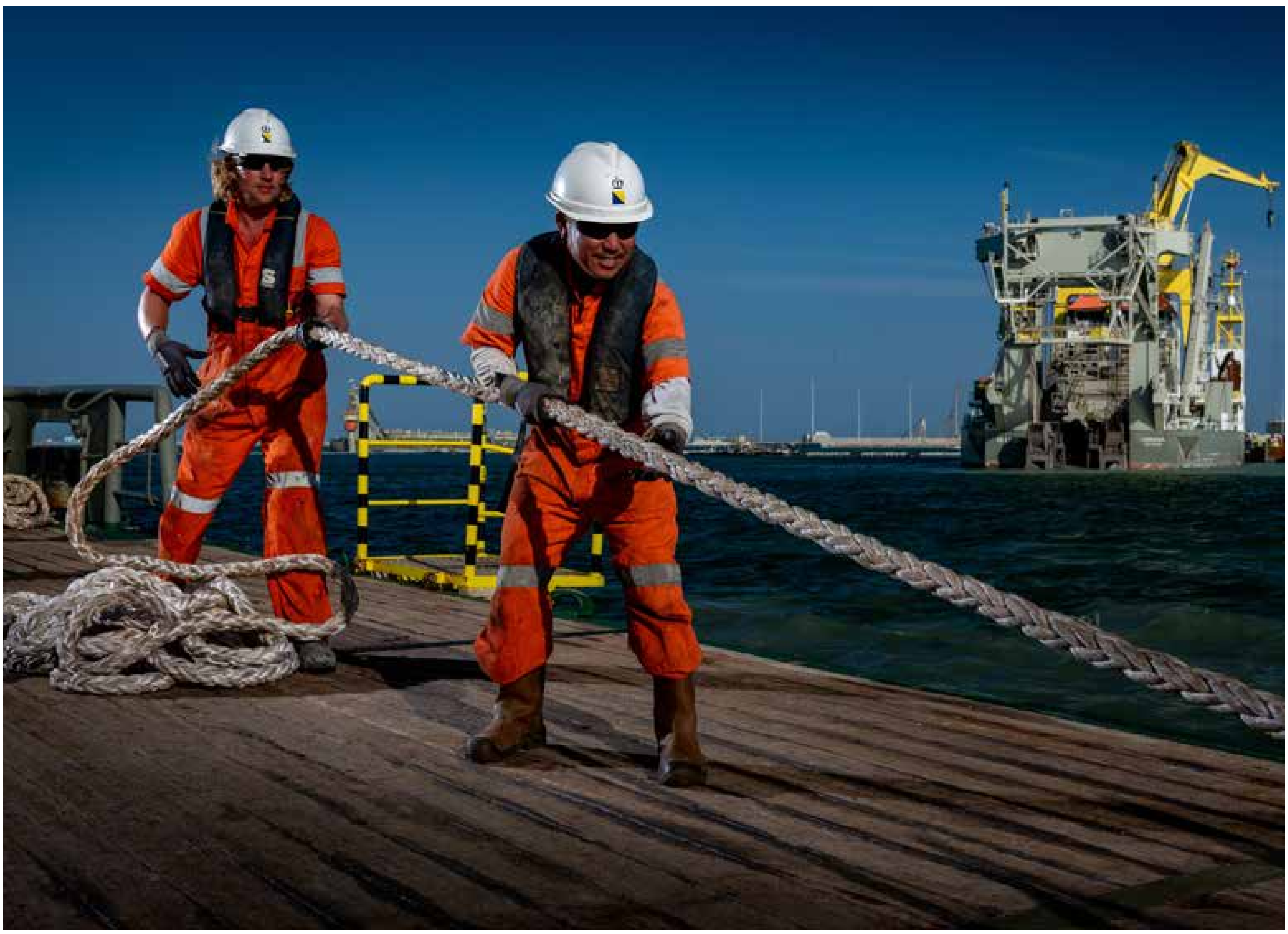
BUSINESS PRINCIPLES

GENERAL CODE OF BUSINESS CONDUCT

Integrity, reliability and responsibility are key elements for building trust between Boskalis and its stakeholders. These intrinsic values are reinforced by establishing guidelines and principles for responsible business conduct, and ensuring these are maintained.

Boskalis has a General Code of Business Conduct, which is based on international guidelines, including the Universal Declaration of Human Rights. We endorse the principles of the International Labour Organization (including safety on the work floor through our safety program, No Injuries, No Accidents, and the conventions of the International Labour Organization, among others related to child labour) and the OECD Guidelines for Multinational Enterprises. Boskalis accepts responsibility for matters which lie within its sphere of influence. In the countries where Boskalis operates, we are subject to national legislation and regulations. Boskalis refrains from cultural judgments and conducts itself as a good citizen or guest. We adhere to relevant international and national sanctions. Boskalis reviews its General Code of Business Conduct at least once every two years, most recently in 2018.

The full text of our General Code of Business Conduct is available on our corporate website.



WHISTLEBLOWER POLICY

Boskalis has a Whistleblower Policy in place that offers employees the possibility to report suspected misconduct within the company. This includes any subject of a general, financial or operational nature which is not in line with the General Code of Business Conduct. A confidential independent counselor has been appointed for the purposes of the Whistleblower Policy. The counselor shall take the reported suspected misconduct immediately into consideration and gain information in relation thereto. Based on this information the counselor shall decide which actions are appropriate and necessary, including a possible investigation on the reported misconduct. The employee who has in good faith reported the suspected misconduct to the counselor, in accordance with the Whistleblower Policy, shall not suffer any detriment as a consequence of this notification. The Whistleblower Policy also provides for the possibility to consult a female counselor. The Whistleblower Policy was revised in early 2019 and can be found on the corporate website.

SUPPLIER CODE OF CONDUCT

Boskalis has a Supplier Code of Conduct, which mirrors our own internal General Code of Business Conduct. Besides considering quality, delivery reliability and price, we also select our suppliers based on sustainability criteria. The Supplier Code of Conduct is an integral part of all procurement contracts. By entering into a contract, suppliers commit themselves to the Boskalis Supplier Code of Conduct. This commitment is also applicable to their own suppliers. In 2019, 81% of our strategic suppliers endorsed the Supplier Code of Conduct, compared to 70% in 2018.

Each year, we conduct an implementation scan at a cross section at approximately 10% of our strategic suppliers. Suppliers that do not meet our standards are given the chance to improve under our supervision. In the absence of sufficient progress, we will eventually terminate our relationship with these suppliers. More details of this risk matrix assessment and the results over the past years is described in detail on pages 26 to 33 in our sustainability report, which also includes the related non-performance indicators on amongst others human rights.

ANTI-BRIBERY AND ANTI-CORRUPTION POLICY

The Boskalis anti-bribery and anti-corruption policy is enshrined in the General Code of Business Conduct. The General Code of Business Conduct states that Boskalis shall not offer, pay, request or accept bribes or other favors for the purpose of acquiring or bestowing any improper business, financial or personal advantage. The General Code of Business Conduct forms part of the employment contracts of Boskalis staff, having been incorporated in the accompanying employee manual, as well as contracts with directors. Boskalis employees are provided with targeted training on the anti-bribery and anti- corruption policy and are monitored with regard to regulations and legislation concerning bribery and corruption.

Furthermore the principles that no bribes or other favors shall be offered, paid, requested or accepted for the purpose of acquiring or bestowing any improper business, financial or personal advantage has also been incorporated in the Supplier Code of Conduct, which is part of the contractual relationship between Boskalis and its suppliers. Suppliers are obliged to select their own suppliers in accordance with the Boskalis Supplier Code of Conduct. In many countries where Boskalis operates it is impossible to conduct activities without a local partner or sponsor. The guidelines for collaborating with such a partner are set out in a contract, which also specifically includes the principles from the General Code of Business Conduct as described above. Local contacts may be maintained by an agent, who also assists in the efficient setting up and execution of projects. Control of integrity risks and compliance with the procedures for concluding agent contracts are part of the internal audits.

TAX PRINCIPLES

Boskalis has adopted the following tax principles. We believe these principles illustrate good corporate practice in the area of tax management and tax transparency, balancing the interests of our various stakeholders, including clients, investors and the governments and communities in the countries in which we operate.

COMPLIANCE

We act at all times in accordance with applicable laws and are guided by relevant international standards, for example OECD Guidelines. Disclosures are made in accordance with the relevant domestic regulations, as well as applicable reporting requirements and standards such as IFRS.

BUSINESS RATIONALE

Tax follows the business, meaning that transactions must have a business rationale. Boskalis does not seek to avoid taxes through ‘artificial’ structures in tax haven jurisdictions.

RELATIONSHIP WITH TAX AUTHORITIES

Boskalis seeks to develop strong, mutually respectful relationships with tax authorities.

RISK MANAGEMENT

The proper identification, assessment and management of risks and opportunities – notably with respect to tendering, preparation and execution of projects – is an integral part of our management approach.

We operate a group-wide quality management system which we refer to as the Boskalis Way of Working (WoW). In designing this system, we observed the principles and guidelines of the ISO 31000 standard for risk management. The overriding objective of our WoW-system is to give our staff the best possible support in achieving operational excellence throughout the project lifecycle, with a clear focus on safe and sustainable solutions as well as a consistent client approach. Operational excellence in this context means achieving compliance with the internal and external control requirements imposed on our primary project process whilst minimizing failure costs.

We monitor compliance and identify opportunities to further improve our performance by conducting regular internal audits, inspections, emergency drills, and management reviews. For all business units, external certification bodies have asserted that the implementation of WoW complies with the most recent applicable international (ISO) quality, safety and environmental standards. During the year under review we have continued our efforts to further improve and harmonize (the documentation of) this system.

Our tolerance or appetite for risks is documented in the Group's guidelines, policies, procedures and instructions. Examples include the General Code of Business Conduct and the Supplier Code of Conduct, safety and quality policies and procedures, vendor selection criteria, project risk classification system, contracting guidelines, authorization limits, treasury policies, management planning and control systems, financial control framework, crisis management plans, information security and access management policies.

Below sets out an overview of what we currently consider to be the most important strategic, operational, compliance, financial (reporting) and other risks we face in pursuing our business objectives. This overview is not exhaustive and risks have not been ranked in order of importance. There may be other risks which we currently do not consider to be significant but which at a later stage may manifest themselves as such. Where possible, we have indicated the specific measures in place to help mitigate these risks.

STRATEGIC AND MARKET RISKS

The Boskalis markets are heterogeneous and often develop disparately. Our main (end) customer groups are national, regional and local governments, or associated institutions such as port authorities, private port operators and major international oil and gas companies and wind energy companies (operators as well as contractors). Other customer types are (container) shipping companies, ship and offshore construction yards, insurance companies, mining companies and (infrastructure and real estate) project developers.

Notwithstanding the positive long-term growth prospects for our markets they can be – certainly in the short and medium term – negatively impacted by factors outside our control. Such factors include for example general or regional geopolitical developments, such as energy policies, political unrest, piracy, government-imposed trade barriers and volatility in the energy and commodities markets.

Boskalis aims to respond as effectively as possible to both positive and negative developments in individual markets, through a global spread of its activities, an extensive and versatile fleet operating out of various international locations, and strong positions in its core markets.

Moreover, our activities are largely focused on the development, construction, installation and maintenance of infrastructure, which means that longer-term developments will generally outweigh short-term economic fluctuations.

Contracts are not included in our order book until agreement has been reached with the client. Although experience shows that once agreement has been reached, cancellations, postponements or substantial reductions in the scope or size of contracts are quite rare, they do occur, certainly in markets that are under severe pressure. Consequently, if such a cancellation or substantial reduction occurs, losses may arise from the unwinding or settlement of financial derivatives which were taken out to hedge related currency risks and/or fuel price risks, but for which the underlying transaction or cash flows will no longer be realized.

Boskalis deals with a variety of competitors in the various markets and submarkets in which it operates. Such competitors vary from large, internationally operating companies to more regional and local companies. A considerable part of our revenue is derived from contracts awarded through public or private tender procedures, with competition often being predominately price-based. However, other factors – such as the assurance of adequate safety, social and environmental practices as well as the financial resilience of the contractor – are more often taken into consideration when awarding contracts. Proper decision-making processes have been put in place for the submission of tenders to ensure that the risks associated with the execution of a specific project are systematically identified and assessed.

A substantial part of Boskalis' activities are capital-intensive which means that prices in these markets are largely influenced by the utilization rate of the relevant equipment at a given time. This implies that a broad international presence along with a leadership position in terms of type and quality of our equipment and cost competitiveness are key success factors. Boskalis places a great deal of emphasis on these, both as a critical point of attention in operational management and in its capital allocation decisions. Consequently, individual investment proposals are subjected to a thorough evaluation and approval process.

In the course of executing its strategy, Boskalis regularly acquires companies. To achieve the anticipated results, Boskalis assigns great importance to integrating such acquisitions with care. Creating value for our stakeholders and retaining key personnel are important elements in this process.

OPERATIONAL RISKS

CONTRACTING AND EXECUTION RISKS

The main operational risks for Boskalis are related to the contracting and execution of projects. For a substantial part of our contracting activities the common type of contract is fixed price/lump sum. Under this type of contract, the contractor's price must reflect virtually all the operational risks as well as the risks associated with the procurement of materials and subcontractor services. Typically, it is not possible to charge clients for any unforeseen costs. Furthermore, many contracts include milestones and associated penalty clauses

Construction of residential island to accommodate the growth of Amsterdam, the Netherlands for if the milestones are not achieved on time. That is why great emphasis is placed on identifying, analyzing and quantifying such delay risks and the associated operating costs during the tendering process and the preparation and execution phase of a project.

Operational risks mainly relate to variable weather or working conditions, technical suitability and availability of the equipment, unexpected soil and settlement conditions, wear and tear of equipment (especially dredging equipment), damage to third-party equipment and property, the performance of subcontractors and suppliers, and the timely availability of cargo or services provided by the client in case of heavy marine transport and/or installation activities.

The following measures are taken systematically to manage the aforementioned risks in the tender, preparation and/or execution phase of a contract:

- During the tendering procedure and the contracting phase of projects much emphasis is placed on identifying, analyzing and quantifying execution, cost and delay risks. Contracts are classified based on their size and risk profile. This classification determines the subsequent course of the tender process and the requirements for authorization of the tender price and conditions. Above a certain level of risk, tender commitments require authorization from the Board of Management.
- In the preparation phase of a project tender and depending on the nature and risk classification of the project, we gain insight by conducting surveys and soil investigations; by consulting (proprietary) databases containing historical data and by applying extensive risk analysis techniques. The results of the risk analyses are then used in the process of costing the project and in setting the commercial and contractual terms and conditions for the offer to be issued to the client.
- Risks related to price developments on the procurement elements of a project, such as costs of materials and services, subcontracting costs and fuel prices, as well as the cost of labor, are all considered when calculating cost prices. Wherever possible, and especially on projects with a long execution time, cost indexation clauses are included in the contract terms and conditions, particularly regarding labor and fuel costs.
- When a contract is awarded, an updated risk analysis is part of the project preparation phase, based upon which measures are taken to mitigate the risks identified.
- In addition, much attention is devoted to the continuous education and training of staff, appropriate project planning and project management, the execution and implementation of certified quality, safety and environmental systems, and the optimal maintenance of equipment.

Our terminal services, which have been incorporated in the Smit Lamnalco strategic joint venture, are to a substantial extent performed under long-term contracts corresponding to the client's requirements and specifications. Most of these contracts include some form of price indexation.

Salvage activities relating to vessels in distress – Emergency Response – are often carried out under great time pressure and without an extensive tendering procedure and associated preparation activities. Such contracts are regularly concluded based on the standard Lloyd's Open Form (LOF). This means that compensation is based on a valuation mechanism related to various factors, including the salvage value of the vessel and its cargo, the technical complexity of the salvage operation, environmental risks and the use of own equipment and subcontractors. This valuation results in a lump sum, which is finalized through negotiations with the client or through an arbitration process. Experience shows that

The semi-submersible Mighty Servant 3 transporting a jack-up vessel the company is usually able to make a reasonably accurate estimate of this income. Should it transpire during a salvage operation that the final salvage fee may not be sufficient to cover the costs incurred, then the choice can be made to convert the LOF into a contract based on a daily hire fee, thus limiting the financial risks. Contracts for salvaging sunken vessels (wrecks) are usually carried out on a lump sum basis. The contracting and execution of such projects, which in many cases do involve a tendering procedure, are subject to the customary procedures for contracting and execution activities applicable within Boskalis.

Some of the equipment within the Offshore Energy division, as well as in some of the strategic joint ventures, is chartered out for relatively short periods (spot markets), mainly subject to standard conditions. The challenging market conditions in the oil and gas sectors have reduced the volume of work under long-term contracts and resulted in an increased share of the spot market activities. Although the operational risks involved in such activities are generally relatively limited, they do result in increased utilization and pricing risk, which we aim to mitigate through adequate capacity and strict cost control management.

ENVIRONMENTAL AND SOCIAL RISKS

To gain insight into the relevance and importance of environmental and social topics, Boskalis engages with its stakeholders and regularly conducts a materiality analysis. The outcome of this engagement is reflected in our sustainability report in a materiality matrix. The nature of most of our activities implies that we have an impact on society and the environment. In most cases this impact will be positive, for example when we are involved in creating infrastructure, making land safer or facilitating the transition to renewable energy sources such as offshore wind. However, a potential negative impact during the execution of projects cannot be ruled out. Environmental risks include the impact on biodiversity in vulnerable ecosystems and the emissions produced by our vessels. Boskalis has developed the innovative Building with Nature program and has an in-house engineering department to address ecological aspects from the early tender stage through to monitoring during execution. CO_2 emissions are measured and reported and Boskalis is seeking means by which it can reduce its emissions footprint.

Social risks include the impact of projects on local communities. The extent to which our activities have a social impact is highly dependent on the type and/or location of a project. Where relevant, we implement a social impact program and work with our clients to mitigate the impact and where possible make a positive contribution to communities affected by our activities.

CLIMATE CHANGE RISKS

As mentioned, climate change adaptation and the energy transition will require major investments in infrastructure with significant additional opportunities for Boskalis. There are nonetheless several associated risks that could negatively impact our operations. For instance, further restrictions on emissions or increased carbon pricing could result in higher production costs. The increase in frequency and severity of extreme weather events may result in disruptions in project execution. Temperature increase and extreme weather events could also reduce economic activity and GDP growth. Rising climate change concerns may lead to additional regulatory measures which can result in project delays or cancellations. Such concerns also have the potential for a deteriorating relationship with the public and governments in countries where we operate.

ICT RISKS

Like most companies, Boskalis is faced with an increase in cybersecurity risks and increasingly sophisticated levels of computer crime. Successful cyberattacks can result in significant costs as well as other negative consequences including reputational damage, remediation costs and other liabilities to stakeholders. Furthermore, enhanced protection measures place additional financial and operational burdens on the business. To help mitigate these risks Boskalis has developed information security policies and practices based on the international Code of Practice for Information Security Management. During the year under review we continued the monitoring of suspicious activity on our ICT infrastructure as well as our (training) efforts to increase the awareness of cybercrime risks amongst our staff. We requested a third party to conduct a cyber security assessment. Additionally, we continued developing initiatives to comply with the guidelines on maritime cyber risk management as issued by the International Maritime Organization which will take effect in 2021.

LOCAL WORKING CONDITIONS RISKS

Local management on projects and operations must have a proper understanding of the local (working) conditions. The scale of local operations is often too small to warrant a full-fledged organization, including extensive support services and staff departments. This is addressed through regular visits by responsible managers and employees from the relevant business units and support from central staff departments at head office as well as by involving (local) external advisors.

FINANCIAL RISKS

POLITICAL AND CREDIT RISKS

These include risks related to unrest or disruption due to political developments and violence, and the risk of non-payment by clients. Boskalis operates strict acceptance, credit and hedging policies with respect to political and payment risks. Other than in the case of very strong, creditworthy clients with an undisputed credit history, all substantial credit risks are normally covered by means of credit insurance, standby letters of credit, bank guarantees and/or advance payments. Revenues and earnings are only recognized in the accounts where there is sufficient certainty that they will be realized.

LIQUIDITY AND FUNDING RISKS

As is customary for a contractor, Boskalis also has significant obligations outstanding in the form of guarantees from banks and insurance companies, mainly in favor of clients. Given that the availability of sufficient credit and bank guarantee facilities is essential to the continuity of the business, Boskalis' funding policy is aimed at maintaining a strong financial position. Solid balance sheet ratios and the use of diversified sources of funding provide for ample capacity to absorb liquidity risks and the constant creation of adequate borrowing capacity and guarantee facilities. The company has ample credit and bank guarantee facilities at its disposal and operates well within the agreed covenants under its financing agreements.

CURRENCY RISKS

The reporting currency of Boskalis is the euro. Most of the business units have the euro as their functional currency while some use other functional currencies as well. The most important of these is the US dollar, followed by the Singapore dollar. The revenues and expenses of these entities are largely or entirely based on these non-euro currencies. Our holdings in these entities are viewed from a long-term perspective. Exchange rate risks related to these entities are not hedged as it is assumed that currency fluctuations and developments in interest rates and inflation will offset each other in the long term.

A large proportion of the activities of the group companies that have the euro as their functional currency are not contracted in euros. This particularly applies to the group companies that are involved in dredging and related projects. The costs of these entities, however, are largely incurred in euros. Generally, the net cash flows in non-euro currencies within these entities are fully hedged, usually by means of forward exchange contracts. The US dollar exchange rate in relation to the euro is particularly relevant in this context. A large proportion of the projects is contracted in US dollars or in currencies that are to a greater or lesser extent linked to the US dollar.

Most of our major international competitors in the dredging industry also have cost structures largely based on the euro. This implies that exchange rate fluctuations do not have a material impact on our relative competitive position. In several market segments, particularly in Offshore Energy, there is competition from parties whose cost structures are not based on the euro, meaning that the competitive impact of currency fluctuations in these market segments is greater. However, on balance, exchange rate fluctuations only have limited impact on the company's competitive position in these activities.

TAX RISKS

Because of the (constantly changing) mix of projects and operational results in a large number of countries and entities, various kinds of taxes, such as income tax, wage tax, VAT and import duties, are assessed and then paid in various countries. Profits are attributed to countries where value is created in accordance with national and international rules and standards, which can be extremely complex. Knowledge in this domain, along with related compliance and application, are embedded in procedures within the Tax Management function. In cases where insufficient knowledge is available in-house, external advisors are used.

INTEREST RATE RISKS

Our long-term financial liabilities are predominantly based on fixed long-term interest rates, meaning that our exposure to interest rate fluctuations on these is limited.

FUEL PRICE RISKS

In a substantial part of its activities, Boskalis is exposed to risks arising from changes in fuel prices. Fuel costs are hedged in a number of different ways. Where possible, contracts include fuel price variation clauses. Also, contracts are sometimes based on fuel being supplied by the client. In other cases, where the fuel price presents a substantial risk, exposure can be hedged by means of

financial instruments, such as forward contracts or fixed fuel supply contracts.

DERIVATIVES

Financial derivatives are only used to hedge underlying currency risks, fuel cost risks or other risks where there is a physical underlying transaction. There is, however, a risk of losses arising from the unwinding or settlement of such financial derivatives due to cancellation of a contract or a substantial reduction in the scope of a contract.

OTHER RISKS

COMPLIANCE WITH LEGISLATION AND REGULATIONS

As an international dredging and marine contracting and services expert, Boskalis is active in numerous countries, and therefore must deal with a wide range of diverse legislation and regulations. Some of the activities are managed by Boskalis local management, but in many countries intermediaries and/or local representatives are used in securing and executing projects. This combination of factors results in a heightened risk that relevant (local) legislation and regulations may not be fully complied with. Events of non-compliance can result in regulatory investigations, litigations and/or sanctions. These risks are as much as possible mitigated by the company's internal risk management and control systems that include a General Code of Business Conduct as well as a Supplier Code of Conduct, which are reviewed and evaluated regularly. Intermediaries and/or local representatives are also contractually bound to comply with our codes of conduct. Entering into contracts with local intermediaries and/or representatives is subject to clearly defined procedures, including background checks. Furthermore, Boskalis has a Whistleblower Policy in place and a confidential independent counselor to whom employees can report any suspected misconduct.

PROPERTY DAMAGE AND THIRD-PARTY LIABILITIES

Boskalis has taken out a broad package of insurances to cover against risks with respect to damage to its properties as well as third-party properties and potential other third-party liabilities.

INTERNAL RISK MANAGEMENT AND CONTROL SYSTEMS

The internal risk management and control systems of Boskalis are based on the principles of effective management control at various levels in the organization and are tailored to the day-to-day working environment in which the company operates worldwide. One of the main foundations for risk management is the internal culture of the company, which is characterized by a high degree of transparency regarding the timely identification, evaluation and reporting of risks and a remuneration system that is geared to avoiding potentially perverse incentives. In addition to the specific risk mitigation measures mentioned above, our internal risk management and control systems include the following main
components:

- In the daily operations, the operational risk management and control is largely supported by a comprehensive system of quality assurance rules, procedures and systems, particularly regarding the acquisition and execution of projects (the aforementioned Boskalis Way of Working).
- In addition to audits by external certification bodies, Boskalis also performs regular internal audits under the auspices of the SHE-Q department to review the design and operational effectiveness of this system. SHE-Q is discussed at the quarterly meetings between the Board of Management and the management of the business units, with the management of the SHE-Q department also being present.
- The daily management of the organization is based on short lines of communication and command. Speed, know-how and decisiveness are of the essence, both in the tendering phase and in project execution. Daily management is hands-on.
- The progress and development of the operating results and the financial position of individual projects and business units and the Company as a whole, as well as the operational and financial risks, are monitored by means of structured periodical reporting, analysis of the financial results and performance reviews at Board of Management and senior management levels.

RISKS REGARDING FINANCIAL REPORTING

FINANCIAL REPORTING STRUCTURE

Financial reporting at Boskalis is structured within a tight framework of budgeting, reporting and forecasting. A distinction is made between reports for internal and external use. External reporting at group level consists of an annual report, including financial statements audited by the external auditor, as well as a half-year report, containing summarized financial information, both consolidated and segmented. The external reports are based on the internal financial reporting, in accordance with EU-IFRS.

Internal financial reporting consists of extensive consolidated quarterly reports in which current developments are compared to the quarterly (cumulative) budgets and previous forecasts. In addition, each quarter we reiterate or update our forecast for the annual results, including the cash flow and balance sheet positions at the end of the financial year. The quarterly budgets are part of the annual group budget, which is prepared every year by the Board of Management and approved by the Supervisory Board. Internal financial reporting has a layered structure – in accordance with the internal allocation of management responsibilities – with consolidation taking place at successive levels, starting with the projects, through the business units and divisions, and resulting in consolidated group reports. The financial and operating results are analyzed and clarified at each of these levels. Project and contract managers are responsible for budgets, income statements and balance sheets for their projects or contracts, and these are drawn up in accordance with the applicable guidelines and instructions. In turn, business unit managers are responsible for the financial reporting of their respective business units.

Boskalis holds substantial investments in joint ventures and associated companies and these holdings are intensively monitored. Shareholder and/or board meetings are held regularly, with Boskalis being represented in line with the size of its interest. Clear shareholder agreements have been concluded with the co-shareholders in such joint ventures regarding topics such as board and management representation, filling of management positions, strategy and policy, budget, financial reporting, the appointment of auditors, investments and financing. The policy is that such joint ventures are in principle financed without guarantees from the shareholders.

The Board of Management discusses the quarterly reports with the relevant business unit managers in formal quarterly meetings. These meetings are minuted. The consolidated group reports are discussed with the Supervisory Board on a quarterly basis.

The most important aspects of our financial reporting systems are set out in manuals, guidelines and procedures, all of which are available electronically. Staff are trained in how to apply accounting standards, guidelines and procedures. Internal audits to monitor and improve quality and discipline are conducted based on an annual audit plan and ad hoc examinations. Moreover, the quality of the financial control systems is evaluated regularly in the context of the activities of the external auditor. Findings concerning the quality of the financial control systems identified during the audit of the financial statements are reported by the external auditor in the Management Letter.

We apply a Financial Control Framework (FCF) that stipulates and documents the control requirements to help mitigate financial (reporting) risks. The updated COSO internal control framework has been used as a standard of reference for our FCF. The set-up of the electronic communication platform containing the FCF-documentation matches that of our WoW-system with the aim of optimizing its user-friendliness for our staff.

INTERNAL AUDIT FUNCTION

In addition to the internal audits performed under the auspices of the SHE-Q department, Boskalis has an internal audit function that mainly focusses on the company's management and financial reporting processes. It is guided by the International Standards for the Professional Practice of Internal Auditing and the Code of Ethics as published by The Institute of Internal Auditors.

The internal audit manager is accountable to the Board of Management, represented by the Chief Executive Officer for day to day operations and to the Audit Committee as part of its oversight role. Appointment and dismissal of the internal audit manager will be submitted to the Supervisory Board for approval, along with a recommendation by the Audit Committee.

On an annual basis the internal audit manager submits to the Board of Management and the Audit Committee a report on the activities performed in the year past, including the main findings, as well as a risk based internal audit plan for the next year for their review and approval.

Based on the internal audit plan, the internal audit manager agrees with the Board of Management the specific audit subjects, the detailed scope of work and the allocation of resources. The internal audit function's performance relative to its plan are regularly communicated and discussed between the Internal Audit Manager and the Board of Management, represented by the Chief Financial Officer.

The internal audit function also periodically interacts with the company's external financial auditor to share information on audit planning and progress as well as key findings and observations. The internal audit function's final reports are made available to the external auditor and management letters of the external auditor will be shared with the internal audit manager.

EVALUATION OF INTERNAL RISK MANAGEMENT AND CONTROL SYSTEMS

Similar to previous years, the Board of Management has initiated a so-called Corporate Risk Assessment to systematically evaluate the risks inherent to the Group's strategic business objectives as well as the related risk management and control activities. For this purpose, a comprehensive risk classification system was used that contains pertinent information for each of the risk categories identified. This includes examples of – and contributing factors to – possible risk manifestations as well as current risk management and control activities to help mitigate these risks.

The risk categories identified were evaluated for their significance, defined as the degree to which risks within the respective risk category could adversely impact our ability to achieve our strategic objectives, as well as for the potential for improving their related risk management and control activities. This evaluation did not identify significant shifts in the Company's overall risk profile and its main results have been included in the preceding overview of the main risks we face in pursuing our business objectives.

The structure and functioning of our risk management and internal control systems are discussed annually with the Supervisory Board.

No matter how much care is taken in setting up risk management and internal control systems, they are unable to provide absolute certainty with regard to realizing the company's objectives, nor can they preclude material mistakes, losses, fraud, or infringements of legislation and regulations.

STATEMENTS REGARDING INTERNAL RISK MANAGEMENT AND CONTROL SYSTEMS

With due consideration of the aforementioned inherent limitations and scope for improvement, the Board of Management is of the opinion that:
- the report provides sufficient insights into any failings in the effectiveness of the internal risk management and control systems;
- the aforementioned systems provide reasonable assurance that the financial reporting does not contain any material inaccuracies;
- based on the current state of affairs, it is justified that the financial reporting is prepared on a going concern basis;
- the report states those material risks and uncertainties that are relevant to the expectation of the company's continuity for the period of twelve months after the preparation of the report.

LNG CANADA: IT'S ALL ABOUT PROTECTING THE ENVIRONMENT

Boskalis has been working on the second season of the LNG Canada project on the Canadian west coast since September 2019. Preparations for this phase began in May 2019 with the mobilization and partial modification of the equipment. Strict regulations and exceptional measures for the protection of the environment play a prominent role in this project.

LNG Canada (LNGC) will be the first large-scale LNG export terminal in Canada. It will be built in a fjord in the port of Kitimat for a Shell-led consortium. The future LNG berth will be constructed at the east side of the fjord, on the location that is currently in use by aluminum company Rio Tinto. The aluminum company itself will have its quay wall at the west side of the fjord extended. Boskalis is deepening the western and eastern sections of the port basin.

SHORT SEASON

"We can't dredge for more than five and a half months a year here," project director Jaap Dekker said. "The dredging season runs from early September to mid-February and we only have from early December to mid-February for disposing of dredged material offshore. Obviously, winter isn't the ideal time of year for this type of work. The season is so short because of strict environmental regulations, which focus primarily on maintaining fish stocks. In addition, we also have Marine Mammal Observers on board during dredging: they look out for whales, dolphins or seals. Dredging is shut down if whales or dolphins come to within three hundred meters of the dredging units."

COMPLEXITY

LNGC is being built at a location where industrial activities in the past have polluted the bed of the port. “A large part of our work consists of removing and cleaning up all kinds of soil,” Dekker explained. “In both sections of the port different environmental requirements apply. An extensive environmental monitoring program has been set up with measuring buoys and water- and soil sampling. We can’t process all the polluted material in the same way and that makes this work very complex. Our colleagues from Hydronamic and Boskalis Environmental have developed a specific approach for each type of contaminated soil. There are two types of contaminated soil in each area: Industrial Landfill plus (IL+) and Industrial Landfill minus (IL-).”

PROCESSING

“The cleaning processes for contaminated soil are extremely labor-intensive,” Dekker said. “Barges are unloaded at the quay wall and any water released is pumped through the water treatment plant. Dump trucks take the material to the landfill. The IL+ material from the area where the aluminum company was based is stored on shore in a pre-prepared landfill, where colleagues from Cofra came in to help us apply a watertight liner. Once the landfill is full, the top is also covered with a liner after which the whole disposal site is being covered with a capping layer of soil. The dredged IL+ material from the LNGC area is unloaded at the quay wall, dewatered and temporarily stored in twelve pre-prepared bunkers with a capacity of 300 cubic meters each. After the material has been tested for its dry solids content, it is moved to one of the three warehouses. As required by the client, the material is then mixed with cement to stabilize it before it is transported in barges to another port for onward land transport and disposal. The barges with IL- material from the site of the ore and aluminum company are unloaded at the quay wall. The material is then dewatered and taken by dump trucks to a pre-prepared landfill. The barges with LNGC IL- material are maneuvered alongside the specially prepared mobile barge unloading dredger. That dredger has been fitted out with four excavators, two with a grab to remove debris and two with a pump and water jet to pump the material from the barges through a pipeline to the pre-prepared LNGC IL- landfill. Both IL- landfills will also have to be covered by a soil capping layer after they have been filled.”

PREVENTING SPILLAGE

Dekker described all the measures, procedures and inspections relating to safe working and preventing environmental damage during the work. “The trucks that take contaminated soil to the landfills are carefully monitored,” is one example he gave. “We do everything we can to prevent spillages. Every possible infringement is recorded. So the trucks are not fully loaded and we have had steel plates welded at the location of the tailgate of the dump trucks to prevent leakages of water or material. We have installed plastic screens and containment barriers on the route to the landfills to stop contaminated soil entering the open water. Should there be a spillage, a report is made and our environmental monitoring crews clear it up immediately. They check the route of the trucks by car. And, in turn, they are monitored by inspectors appointed by the client. In this way, almost every aspect of our work is carefully inspected on a daily basis, both by ourselves and by the client, and this is done in good mutual consultation.”

DEPOSITING CLEAN DREDGED MATERIAL

In addition, the cutter suction dredger Edax dredged more than a million cubic meters of clean soil. “That material was taken to an offshore site and deposited using an indirect approach,” Dekker said. “To prevent turbidity, the Edax first pumped the dredged material through a floating pipeline to the trailing suction hopper dredgers Beachway and Shoreway. They then took it to the designated disposal location about three kilometers from the project site where they lowered the suction pipe to twenty meters below the surface and deposited the material from the hopper by pumping it back through the suction pipe. This method was also developed to meet the strict environmental permit requirements.”

ROAD TO COMPLETION

One more season remains for Boskalis to complete the works which will be undertaken in the period from September 2020 until February 2021. Although the majority of the dredging is done a quantity remains to be removed which could not be dredged in the second season as a buffer was required to be maintained in place in front of the future quay walls to ensure their stability during construction. Following completion of these quay walls Boskalis can resume the dredging and remove this outstanding volume.

CORPORATE GOVERNANCE

APPLICATION AT BOSKALIS

Boskalis operates a two-tier board model, which means that management and supervision are segregated.

The Board of Management is responsible for the day-to-day management of the business, the continuity of the company and for setting out and realizing the company's strategy for the long-term value creation as well as for the culture, opportunities and risks and the results of the company. The Board of Management is responsible for establishing the company's objectives, implementing its business policies and for the resulting performance. The Board of Management is accountable to the Supervisory Board and the General Meeting of Shareholders. In performing its tasks, the Board of Management is guided by the interests of the company and its activities, the markets the company is operating in, and takes into account any relevant interests of parties involved with the company.

The Supervisory Board is responsible for supervising the Board of Management on the formulation and implementation of the strategy for the realization of the long-term value creation. Furthermore, the Supervisory Board is responsible for supervising management performance regarding the general affairs of the company and advising the Board of Management. In doing so the Supervisory Board also focuses on the effectiveness of the company's internal risk management and control systems and the integrity and quality of the financial reporting. The Supervisory Board is supported in its work by three so-called core committees: the Audit Committee, the Remuneration Committee and the Selection and Appointment Committee. For a summary of the activities of the Supervisory Board and its committees in 2019, please refer to pages 26 to 33 of this annual report.

At Boskalis there is close collaboration between the Supervisory Board and its committees, the Board of Management and the stakeholders. The Board of Management and the Supervisory Board are jointly responsible for looking after the interests of our stakeholders, which includes creating long-term value.

The company has a Group Management, consisting of the members of the Board of Management and the Group Directors. The Group Management meets on a regular basis in order for the Board of Management to obtain a full overview of the activities in the divisions of the company, to align the day-to-day management across the company and to ensure optimal exchange of information between the divisions.

Our stakeholders are those groups and individuals that directly or indirectly influence the company's activities, or are influenced by them. They include the employees, shareholders and financial institutions, suppliers, clients, government bodies, educational and knowledge institutes, industry and society associations (including NGOs) and the communities in which Boskalis operates. At least one General Meeting of Shareholders takes place every year. Its tasks include the adoption of financial statements and it holds authority with regard to the appointment and dismissal of Supervisory Board members and the members of the Board of Management.

The interests of employees are promoted by the Works Council, which provides ongoing employee representation as required under the Dutch Works Councils Act.

The general standards and values relating to our business activities are set out in the General Code of Business Conduct and the Supplier Code of Conduct. In these codes the main principles are laid down on how employees and suppliers of Boskalis should conduct themselves with regard to, for example, legislation and regulations, human rights, anti-corruption, competition, the environment, health and safety, staff and quality. Both codes can be found on the company's website. Boskalis reviews its General Code of Business Conduct at least once every two years, most recently in 2018.
In addition, the core values and rules for safety at work are set out in our safety program NINA. The Board of Management regularly stresses the importance of complying with the General Code of Business Conduct and the NINA principles. The Board of Management also provides employees with the opportunity to report any suspected misconduct within Boskalis of a general, financial, operational and employment nature which is not in line with the General Code of Business Conduct to a confidential independent counselor, without jeopardizing their legal position. This Whistleblower Policy can also be found on the company's website.

ARTICLES OF ASSOCIATION

The Articles of Association of Boskalis set forth aspects of the governing principles regarding the company related to among others, the seat, the objects, the capital and shares of the company as well as its governing bodies, the financial year, the annual accounts and loss and profit. The text of the Articles of Association is available at www.boskalis.com

COMPLIANCE

The 2016 Dutch Corporate Governance Code (the "Code") applies to all Dutch companies listed on the stock exchange and comprises a code of conduct for governance best practice. This Code includes both specific principles and best practice provisions, as well as guidelines for their proper supervision. Boskalis subscribes to the notion that a sound and transparent system of checks and balances is key to maintaining confidence in companies operating on the capital market. Boskalis believes clarity and openness in accountability and supervision are the cornerstones of good management and entrepreneurship. The regulations of the Supervisory Board and its committees as well as the profile of the Supervisory Board are aligned with the principles and best practices of the Code. These regulations and the profile of the Supervisory Board are published on the company's website (www.boskalis.com).

Boskalis has also formulated a Diversity Policy explaining the company's broad view on diversity. Boskalis operates a strict equal opportunities policy for all employees, the Board of Management and the Supervisory Board, regardless of race, nationality, ethnic background, age, religion, gender, sexual orientation or disability, whereby the principle of the best person for the job is leading. The Diversity Policy is also available on www.boskalis.com.

As described in the Diversity Policy, the composition and size of the Board of Management are based on the profile and strategy of the company. The expertise, experience and various competencies of the members of the Board of Management should contribute to this profile and strategy. The goal for the composition of the Board of Management is to aim as much as possible for a diverse composition, where possible, in age and gender, taking into account the statutory requirements and the requirements related to education and experience as contained in the Diversity Policy and the Code. In the year under review the combination of these elements resulted in the four members of the current Board of Management being male, meaning that the Board of Management, partly due to the nature of the company, is a reflection of the majority of the company's employee population.

At the General Meeting of Shareholders held on 8 May 2019, Mr. C. van Noort was appointed to the Board of Management as Chief Financial Officer for a term until the Annual General Meeting of Shareholders in 2023. Given his financial experience and expertise, which he has gained at international companies, as well as his excellent service record at Boskalis with his broad background and thorough knowledge of the organization and business of Boskalis, Mr. Van Noort was found the most suitable candidate to fulfil the task of Chief Financial Officer and member of the Board of Management of the Company. No equivalent female candidate was found.

The composition and size of the Supervisory Board are also based on the company's profile and strategy. As stated in the profile of the Supervisory Board and the Diversity Policy, the expertise, experience and various competencies of members of the Supervisory Board should contribute to proper supervision of the company's management and general performance.

The goal for the composition of the Supervisory Board is to aim as much as possible for a diverse composition, where possible, in age and gender, taking into account the statutory requirements and the requirements related to education and experience contained in the Diversity Policy and the Code. Per ultimo 2019 this resulted in five members of the Supervisory Board being male and two members being female. When drafting the profile for new members of the Supervisory Board emphasis is placed on diversity in view of the objective of achieving a balanced representation on the Supervisory Board.

At the Annual General Meeting of Shareholders held on 8 May 2019, Mr. C. van Woudenberg resigned as a member of the Supervisory Board and Ms. J.A. Tammenoms Bakker was appointed as a new member of the Supervisory Board for a term until the Annual General Meeting of Shareholders in 2023. Based on Profile of the Supervisory Board, Ms. Tammenoms Bakker was found the most suitable candidate, considering her extensive management experience, which she has gained in internationally (listed) companies, as well as her knowledge and experience in the area of transportation and infrastructure.

In addition, the Supervisory Board has reviewed its composition and size in the light of the Profile of the Supervisory Board and the strategy of the Company. In that context the Supervisory Board wished to further the expertise in relation to the contracting and execution of large infrastructural projects. In light thereof, the Supervisory Board decided to increase the composition of the Supervisory Board temporarily from six to seven members.
The Annual General Meeting of Shareholders held on 8 May 2019, appointed Mr. D. Sperling to fill this vacancy in the Supervisory Board for a term until the Annual General Meeting of Shareholders in 2023. Based on Profile of the Supervisory Board, Mr. Sperling was found the most suitable candidate, considering his extensive management experience as well as his knowledge and experience in the area of contracting and the execution of large infrastructural projects. No equivalent female candidate was found.

In accordance with the Code, Boskalis publishes an 'Apply or Explain' report that sets out how the principles and best practice provisions are applied at Boskalis. This report is available on the website and copies can also be requested from the company.

Boskalis subscribes to and applies all the principles and best practice provisions contained in the Corporate Governance Code, with the exception of best practice 4.3.3. In deviation of this best practice, according to the Articles of Association, the General Meeting of Shareholders may pass a resolution to deprive the binding nature of a nomination for the appointment or a resolution for dismissal of a member of the Board of Management or a member of the Supervisory Board by a majority of at least two/third of the votes cast representing more than one-half of the company's issued share capital. The deviation of this best practice provision is justified in view of the long-term value creation. Maintaining continuity at both the Board of Management and the Supervisory Board is essential for delivering such long-term value. The company is protecting its stakeholders against a sudden change in management and supervision by maintaining the qualified majority and voting quorum requirement, which is in accordance with Dutch law.

The Corporate Governance Declaration can be found on the website www.boskalis.com/corporategovernance.

OUTLOOK

The market outlook for 2020 is more favorable compared to the start of 2019.

At Dredging & Inland Infra we are seeing a stable volume of work in the market in the short term, with the projects in the order book providing a solid basis for revenue and fleet utilization in 2020. However, the market continues to be competitive and the emphasis for Boskalis is on maintaining utilization at a responsible level of project risk.

The picture for the Offshore Energy market is gradually becoming more positive. The contribution of wind energy projects is expected to be positive and seabed intervention is expected to have a reasonable year. Survey is expected to have another good year and will grow due to the consolidation of Horizon. 2020 will be a year of transition for Transport as it emerges from several quiet years to an improving market in 2021 and 2022.

At Towage & Salvage the remaining joint ventures (Smit Lamnalco and Keppel Smit Towage) are expected to have a stable year. The annual result of Salvage will largely depend on the inherently unpredictable supply of work and the completion of projects from the past.

In view of the project-based nature of a significant part of our activities along with the uncertain conditions, it is difficult at this early stage of the year to make a specific quantitative statement about the projected annual result for 2020.

As a result of two coinciding large investments, relating to the mega cutter Krios and the Bokalift 2, capital expenditure is expected to be around EUR 400 million in 2020, excluding the purchase of the remaining stake in Horizon and any possible acquisitions. The financial position is extremely solid and Boskalis comfortably meets its financial covenants.

A rainbowing Queen of the Netherlands - with a hopper capacity of 35,500 cubic meters the largest trailing suction hopper dredger in the Boskalis fleet

STATEMENT OF DIRECTORS' RESPONSIBILITIES

The Board of Management of Royal Boskalis Westminster N.V. hereby declares, in accordance with article 5:25c of the Dutch Financial Supervision Act, that to the best of its knowledge:

1) the financial statements, which have been prepared in accordance with the applicable standards for preparing financial statements and as included on pages 73 to 141 of the Annual Report, provide a true and fair view of the assets, liabilities and financial position as at 31 December 2019 as well as the profit or loss of Royal Boskalis Westminster N.V. and all the business undertakings included in the consolidation;
2) the Report of the Board of Management provides a true and fair view of the condition, the business performance during the financial year 2019 of Royal Boskalis Westminster N.V. and the companies associated with it whose details are included in the financial statements, as at the balance sheet date of 31 December 2019;
3) the Report of the Board of Management provides a description of the material risks faced by the company.

Papendrecht / Sliedrecht, 4 March 2020

Board of Management

dr. P.A.M. Berdowski, chairman
T.L. Baartmans
B.H. Heijermans
C. van Noort, CFO

BOSKALIS
FINANCIAL STATEMENTS 2019

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CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(Consolidated Income Statement)

(in thousands of EUR)	*Note*	**2019**	2018*)
OPERATING INCOME			
Revenue	*[6]*	**2,644,600**	2,569,549
Reversal of impairments evidenced by a sale transaction	*[10]*	**40,146**	-
Other income	*[5/7]*	**55,239**	7,095
		2,739,985	2,576,644
OPERATING EXPENSES			
Raw materials, consumables, services and subcontracted work	*[8]*	**- 1,927,999**	- 1,832,199
Personnel expenses	*[9]*	**- 461,270**	- 433,966
Depreciation and amortization	*[15/16/27.1]*	**- 265,115**	- 234,603
Impairment charges	*[10]*	**-**	- 481,682
Other expenses	*[7]*	**- 470**	- 2,535
		- 2,654,854	- 2,984,985
Share in result of joint ventures and associates	*[17]*	**25,590**	7,830
RESULTS FROM OPERATING ACTIVITIES (EBIT)		**110,721**	- 400,511
FINANCE INCOME AND EXPENSES			
Finance income	*[11]*	**995**	372
Interest and other finance expenses	*[11/27.2]*	**- 16,676**	- 13,653
		- 15,681	- 13,281
PROFIT/LOSS (-) BEFORE TAXATION		**95,040**	- 413,792
Income tax expenses	*[12]*	**- 20,141**	- 19,944
NET GROUP PROFIT/LOSS (-)		**74,899**	- 433,736
NET GROUP PROFIT/LOSS (-) ATTRIBUTABLE TO:			
Shareholders		**74,887**	- 435,850
Non-controlling interests		**12**	2,114
		74,899	- 433,736
Weighted average number of shares	*[23.5]*	**133,248,096**	132,492,433
Earnings per share (basic and diluted)	*[23.5]*	**EUR 0.56**	EUR -3.29

*) Excluding the application of IFRS 16 and IFRIC 23. Reference is made to note 2 under ´Compliance with International Financial Reporting Standards'.

The notes on pages 83 to 135 are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME

(Consolidated Statement of Recognized and Unrecognized Income and Expenses)

(in thousands of EUR)	Note	2019	2018*)
Net Group profit/loss (-)		**74,899**	- 433,736
ITEMS THAT WILL NOT BE SUBSEQUENTLY RECLASSIFIED TO THE STATEMENT OF PROFIT OR LOSS			
Actuarial gains and losses and asset limitation on defined benefit pension plans	[25.1]	**- 7,822**	- 3,867
Income tax on unrecognized income and expenses not to be reclassified to statement of profit or loss (-)	[14]	**1,852**	- 39
Total unrecognized income and expenses for the period that will not be reclassified to statement of profit or loss (-), net of income tax		**- 5,970**	- 3,906
ITEMS THAT ARE OR MAY BE SUBSEQUENTLY RECLASSIFIED TO THE STATEMENT OF PROFIT OR LOSS			
Currency translation differences from joint ventures and associates, after tax		**1,326**	- 4,217
Currency translation differences on foreign operations		**21,102**	36,336
Reclassification of foreign currency differences to statement of profit or loss	[5.3]	**- 42,252**	-
Reclassification of hedge reserve to statement of profit or loss	[17]	**18,955**	-
Movement in fair value of cash flow hedges	[29.2]	**3,748**	- 20,416
Income tax on unrecognized income and expenses that are or may be reclassified subsequently to statement of profit or loss	[14]	**604**	3,931
Change in fair value of cash flow hedges from joint ventures and associates, after tax	[29.2]	**- 11,501**	- 173
Total unrecognized income and expenses for the period which are or may be reclassified to statement of profit or loss (-)		**- 8,018**	15,461
UNRECOGNIZED INCOME AND EXPENSES FOR THE REPORTING PERIOD, AFTER INCOME TAX		**- 13,988**	11,555
TOTAL RECOGNIZED AND UNRECOGNIZED INCOME AND EXPENSES FOR THE REPORTING PERIOD		**60,911**	- 422,181
ATTRIBUTABLE TO:			
Shareholders		**60,845**	- 424,282
Non-controlling interests		**66**	2,101
TOTAL RECOGNIZED AND UNRECOGNIZED INCOME AND EXPENSES FOR THE REPORTING PERIOD		**60,911**	- 422,181

*) Excluding the application of IFRS 16 and IFRIC 23. Reference is made to note 2 under ´Compliance with International Financial Reporting Standards'.

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Consolidated Balance Sheet)

ASSETS

		31 DECEMBER	
(in thousands of EUR)	*Note*	**2019**	2018*)
NON-CURRENT ASSETS			
Intangible assets	*[15]*	**116,383**	119,640
Property, plant and equipment	*[16]*	**2,406,101**	2,373,787
Right-of-use assets	*[27]*	**103,877**	-
Joint ventures and associates	*[17]*	**428,055**	429,633
Non-current financial assets	*[18]*	**9,214**	1,377
Derivatives	*[29]*	**6,015**	683
Deferred income tax assets	*[14]*	**15,340**	9,005
		3,084,985	2,934,125
CURRENT ASSETS			
Inventories	*[19]*	**103,238**	99,070
Unbilled revenue	*[20]*	**279,981**	304,856
Trade and other receivables	*[21]*	**702,212**	664,607
Derivatives	*[29]*	**3,275**	5,684
Income tax receivable	*[13]*	**23,502**	19,457
Cash and cash equivalents	*[22]*	**399,574**	336,207
Assets of disposal groups	*[5]*	**-**	175,809
		1,511,782	1,605,690
TOTAL ASSETS		**4,596,767**	4,539,815

*) Excluding the application of IFRS 16 and IFRIC 23. Reference is made to note 2 under ´Compliance with International Financial Reporting Standards’.

The notes on pages 83 to 135 are an integral part of these Consolidated Financial Statements.

EQUITY AND LIABILITIES

(in thousands of EUR)	Note	31 DECEMBER 2019	2018*)
GROUP EQUITY			
Issued capital	[23]	**1,354**	1,354
Share premium reserve	[23]	**636,968**	636,968
Other reserves	[23]	**404,117**	429,732
Retained earnings	[23]	**1,448,913**	1,476,272
SHAREHOLDERS' EQUITY		**2,491,352**	2,544,326
NON-CONTROLLING INTERESTS		**3,350**	3,284
TOTAL GROUP EQUITY	[23]	**2,494,702**	2,547,610
LIABILITIES			
NON-CURRENT LIABILITIES			
Interest-bearing borrowings	[24]	**293,803**	438,469
Employee benefits	[25]	**46,575**	38,302
Deferred income tax liabilities	[14]	**1,450**	5,770
Provisions	[26]	**35,293**	27,859
Lease liabilities	[27]	**84,028**	-
Derivatives	[29]	**6,986**	1,701
		468,135	512,101
CURRENT LIABILITIES			
Deferred revenue	[20]	**315,756**	221,920
Interest-bearing borrowings	[24]	**50,255**	282
Bank overdrafts	[22]	**29,775**	28,330
Income tax payable	[13]	**146,094**	150,719
Trade and other payables	[28]	**1,001,869**	1,039,014
Provisions	[26]	**60,312**	28,404
Lease liabilities	[27]	**24,285**	-
Derivatives	[29]	**5,584**	11,435
		1,633,930	1,480,104
TOTAL LIABILITIES		**2,102,065**	1,992,205
TOTAL GROUP EQUITY AND LIABILITIES		**4,596,767**	4,539,815

*) Excluding the application of IFRS 16 and IFRIC 23. Reference is made to note 2 under ´Compliance with International Financial Reporting Standards’.

The notes on pages 83 to 135 are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

(in thousands of EUR)	Note	**2019**	2018*)
CASH FLOWS FROM OPERATING ACTIVITIES			
Net Group profit / loss (-)		**74,899**	- 433,736
Depreciation, amortization and impairment charges	[10/15/16/ 27.1]	**265,115**	716,285
Cash flow		**340,014**	282,549
Adjustments for:			
Finance income and expenses	[11]	**15,681**	13,281
Income tax expenses	[12]	**20,141**	19,944
Results from disposals	[7]	**- 6,756**	- 4,560
Reversal of impairments evidenced by a sale transaction	[10]	**- 40,146**	-
Results from divestments and acquisitions		**- 48,013**	-
Movement in provisions and employee benefits		**33,683**	16,542
Movement in inventories		**- 3,477**	- 10,596
Movement in trade and other receivables		**- 31,368**	68,470
Movement in trade and other payables		**- 31,667**	61,791
Movement unbilled and deferred revenue		**144,336**	- 187,438
Share in result of joint ventures and associates, including share in impairment charges	[17]	**- 25,590**	- 7,830
Cash generated from operating activities		**366,838**	252,153
Dividends received	[17]	**10,191**	15,124
Interest received	[11]	**995**	372
Interest paid		**- 12,625**	- 11,384
Income tax paid		**- 37,293**	- 19,774
Net cash from operating activities		**328,106**	236,491
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchases of property, plant and equipment, excluding capitalized borrowing costs	[16]	**- 247,590**	- 194,753
Proceeds from disposals of property, plant and equipment		**26,704**	21,536
Investment in business combinations, net of cash acquired	[5]	**- 23,250**	-
Investment in and issued loans to joint ventures and / or associates	[17 / 18]	**- 75,409**	- 3,228
Disposal of (a part of) group companies, net of cash disposed, and joint ventures	[5]	**291,464**	-
Repayment of loans or share premium by joint ventures and / or associates	[17]	**280**	1,211
Net cash used from / (in) investing activities		**- 27,801**	- 175,234
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from interest-bearing borrowings	[24]	**-**	154,000
Repayment of interest-bearing borrowings	[24]	**- 100,245**	- 287
Purchase of own shares	[23]	**- 46,820**	- 16,633
Payment of lease liabilities	[27.2]	**- 23,818**	-
Dividend paid to shareholders	[23]	**- 66,999**	- 36,289
Dividend paid to non-controlling interests		**-**	- 1,851
Net cash used from / (in) financing activities		**- 237,882**	98,940
NET INCREASE / (DECREASE) IN CASH AND CASH EQUIVALENTS		**62,423**	160,197
Net cash and cash equivalents as at 1 January	[22]	**307,877**	151,154
Net increase / (decrease) in cash and cash equivalents		**62,423**	160,197
Currency translation differences		**- 501**	- 3,474
MOVEMENT IN NET CASH AND CASH EQUIVALENTS		**61,922**	156,723
NET CASH AND CASH EQUIVALENTS AS AT 31 DECEMBER	[22]	**369,799**	307,877

*) Excluding the application of IFRS 16 and IFRIC 23. Reference is made to note 2 under ´Compliance with International Financial Reporting Standards'.

The notes on pages 83 to 135 are an integral part of these Consolidated Financial Statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(in thousands of EUR)	ISSUED CAPITAL	SHARE PREMIUM	OTHER RESERVES	RETAINED EARNINGS	TOTAL	NON-CONTROLLING INTERESTS	TOTAL GROUP EQUITY
Note	*[23.1]*	*[23.2]*	*[23.6]*	*[23.3]*			
Balance as at 1 January 2019*)	**1,354**	**636,968**	**429,732**	**1,476,272**	**2,544,326**	**3,284**	**2,547,610**
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD							
Net Group profit/loss (-)				**74,887**	**74,887**	**12**	**74,899**
Other comprehensive income for the period							
Defined benefit plan actuarial gains/losses (-) and asset limitation, after income tax			**- 5,970**	**-**	**- 5,970**	**-**	**- 5,970**
Foreign currency translation differences for foreign operations, after income tax			**22,183**	**-**	**22,183**	**54**	**22,237**
Effective cash flow hedges, after income tax			**3,217**	**-**	**3,217**	**-**	**3,217**
Change in fair value of cash flow hedges from joint ventures and associates, after tax			**- 11,501**	**-**	**- 11,501**	**-**	**- 11,501**
Reclassification of foreign currency differences to statement of profit or loss			**- 42,252**	**-**	**- 42,252**	**-**	**- 42,252**
Reclassification of hedge reserve to statement of profit or loss			**18,955**	**-**	**18,955**	**-**	**18,955**
Currency translation differences from joint ventures and associates, after tax			**1,326**	**-**	**1,326**	**-**	**1,326**
Total other comprehensive income for the period			**- 14,042**	**-**	**- 14,042**	**54**	**- 13,988**
Total comprehensive income for the period			**- 14,042**	**74,887**	**60,845**	**66**	**60,911**
OTHER RESERVES							
Changes in other reserves			**- 11,573**	**11,573**	**-**	**-**	**-**
Transactions with shareholders, recognized directly in equity							
Purchase own ordinary shares	**-**	**-**	**-**	**- 46,820**	**- 46,820**	**-**	**- 46,820**
Distributions to shareholders							
Cash dividend	**-**	**-**	**-**	**- 66,999**	**- 66,999**	**-**	**- 66,999**
Balance as at 31 December 2019	**1,354**	**636,968**	**404,117**	**1,448,913**	**2,491,352**	**3,350**	**2,494,702**

*) The impact of IFRS 16 and IFRIC 23 on Group equity as at 1 January 2019 is nil. Reference is made to note 2 under ´Compliance with International Financial Reporting Standards’.

The notes on pages 83 to 135 are an integral part of these Consolidated Financial Statements.

(in thousands of EUR)	ISSUED CAPITAL	SHARE PREMIUM	OTHER RESERVES	RETAINED EARNINGS	TOTAL	NON-CONTROLLING INTERESTS	TOTAL GROUP EQUITY
Note	*[23.1]*	*[23.2]*	*[23.6]*	*[23.3]*			
Balance as at 31 December 2017 REVISED*)	**1,334**	**636,988**	**507,353**	**1,877,263**	**3,022,938**	**2,375**	**3,025,313**
Adjustments due to first application of IFRS 9	-	-	-	- 1,408	- 1,408	-	- 1,408
Balance as at 1 January 2018 REVISED*)	**1,334**	**636,988**	**507,353**	**1,875,855**	**3,021,530**	**2,375**	**3,023,905**
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD							
Net Group profit/loss (-)				- 435,850	- 435,850	2,114	- 433,736
Other comprehensive income for the period							
Defined benefit plan actuarial gains/losses (-) and asset limitation, after income tax			- 3,906	-	- 3,906	-	- 3,906
Foreign currency translation differences for foreign operations, after income tax			36,349	-	36,349	- 13	36,336
Effective cash flow hedges, after income tax			- 16,485	-	- 16,485	-	- 16,485
Change in fair value of cash flow hedges from joint ventures and associates, after tax			- 173	-	- 173	-	- 173
Currency translation differences from joint ventures and associates, after tax			- 4,217	-	- 4,217	-	- 4,217
Total other comprehensive income for the period			11,568	-	11,568	- 13	11,555
Total comprehensive income for the period			11,568	- 435,850	- 424,282	2,101	- 422,181
OTHER RESERVES							
Changes in other reserves			- 89,189	89,189	-	-	-
Transactions with shareholders, recognized directly in equity							
Purchase own ordinary shares	-	-	-	- 16,633	- 16,633	-	- 16,633
Distributions to shareholders							
Cash dividend	-	-	-	- 36,289	- 36,289	- 1,851	- 38,140
Stock dividend	20	- 20	-	-	-	-	-
Movements in interests in subsidiaries							
Acquisition of Gardline						659	659
Balance as at 31 December 2018	**1,354**	**636,968**	**429,732**	**1,476,272**	**2,544,326**	**3,284**	**2,547,610**

*) The impact of IFRS 15 on Group equity as at 31 December 2017 is nil. The revision as per 1 January 2018 contains the first time application of IFRS 9.

The notes on pages 83 to 135 are an integral part of these Consolidated Financial Statements.

EXPLANATORY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. GENERAL

Royal Boskalis Westminster N.V. is a leading global services provider operating in the dredging, dry and maritime infrastructure and maritime services sectors. Royal Boskalis Westminster N.V. (the 'Company') has its registered office in Sliedrecht, the Netherlands, and its head office is located at Rosmolenweg 20, 3356 LK in Papendrecht, the Netherlands. The Company is registered at the Chamber of Commerce under number 23008599 and is a publicly listed company on the Euronext Amsterdam.

The consolidated financial statements of Royal Boskalis Westminster N.V. for 2019 include the Company and group companies (hereinafter referred to jointly as the 'Group' and individually as the 'Group companies') and the interests of the Group in associates and entities over which it has joint control. The consolidated financial statements were prepared by the Board of Management and were signed on 4 March 2020. The financial statements for 2019 will be submitted for approval to the Annual General Meeting of Shareholders on 13 May 2020.

2. COMPLIANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS

2.1 COMPLIANCE STATEMENT

The consolidated financial statements and the accompanying explanatory notes have been prepared 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.

2.2 ADOPTED NEW STANDARDS

The accounting principles applied to the valuation of assets and liabilities and the determination of results are the same as the valuation principles applied to consolidated financial statements in prior years, except for the relevant changes mentioned in section 2.3 'Changes in Principles of Financial Reporting'.

2.3 CHANGES IN PRINCIPLES OF FINANCIAL REPORTING

The Group applied IFRS 16 'Leases' and IFRIC 23 'Uncertainty over Income Tax Treatments' for the first time. Both standards are effective as of 1 January 2019, and do not require a revision of the comparative figures.

IFRS 16 Leases

IFRS 16 ´Leases´ replaces IAS 17 'Leases' and provides a new framework for the recognition of lease contracts and is effective as of 1 January 2019. This new standard relates to changes in accounting for operational lease commitments of the Group (note 30). IFRS 16 requires lessees to recognize a liability in their Consolidated Statement of Financial Position and to capitalize the right-of-use of a leased asset if it is leased for a period exceeding one year. As allowed by IFRS 16, the Group has applied this standard retrospectively with the cumulative effect of initially applying IFRS 16 recognized as of 1 January 2019. The comparative figures for 2018 have not been restated. At 1 January 2019 the application of IFRS 16 does not change the group equity. Over 2019 EBITDA increased by EUR 23.8 million and the net Group result decreased by EUR 1.2 million.

The impact of the adoption of this standard is further explained and quantified in note 3.33.

IFRIC 23 Uncertainty over Income Tax Treatments

IFRIC 23 'Uncertainty over Income Tax Treatments' was issued in June 2017 and is effective as of 1 January 2019. The interpretation of IFRIC 23 applies to the determination of taxable profit (taxable loss), tax bases, unused tax losses, unused tax credits and tax rates where there is uncertainty over income tax treatments under IAS 12. Under IFRIC 23 the key requirement is to question whether it is probable that the tax authorities will accept the tax treatment the Group has chosen under the assumption that tax authorities will have full knowledge of all relevant information in assessing a proposed tax treatment. If it is probable that the tax authorities will accept the tax treatment, the entire amount of the tax position determined should be recognized. If it is not probable that the tax treatment will be accepted by the tax authorities, the financial consequences of this uncertainty should be accounted for in the tax position. The Group can only reassess and change recognized uncertain tax positions in the event of a change in the facts and circumstances on which the judgement or estimate was based. The application of IFRIC 23 had no material impact on Group results and is not expected to materially impact the results of the Group in foreseeable future.

2.4 NEW STANDARDS AND INTERPRETATIONS NOT YET ADOPTED

There are no standards, amendments to standards or interpretations with an important consequence for the Group not yet adopted in the consolidated financial statements.

3. PRINCIPLES OF FINANCIAL REPORTING

The principles of financial reporting subsequently disclosed are applied consistently for all periods included in these consolidated financial statements with the exception of the first time application of IFRS 16 and IFRIC 23 as described in note 2.3. The principles of financial reporting have been applied consistently by the Group companies.

3.1 FORMAT AND VALUATION

The consolidated financial statements are presented in euros, the Group's presentation currency. The consolidated financial statements are based upon historical cost to the extent that

IFRS does not prescribe another accounting method for specific items. Preparing financial statements means that estimates and assumptions made by management partially determine the amounts recognized under assets, liabilities, revenue and costs. The estimates and assumptions are mainly related to the measurement of intangible assets (including goodwill), property, plant and equipment, joint ventures and associates, expected results on the completion of projects, pension liabilities, taxation, provisions and financial instruments. Judgements made by management within the application of IFRS which have a material effect on the financial statements are the qualifications of investments as Group companies, joint operations, joint ventures or associates. Details are incorporated in the explanatory notes to these items. Other than the elements already explained in the explanatory notes to the financial statements, no critical valuation judgements relating to the application of the principles need further explanation. The estimates made and the related assumptions are based on management's experience and understanding and the development of external factors that can be considered reasonable under the given circumstances. Estimates and assumptions are subject to alterations as a result of changes in facts and insights and may have different outcomes in different reporting periods. Any differences are recognized in the Statement of Financial Position, or the Statement of Profit or Loss, or the Statement of Other Comprehensive Income, depending on the nature of the item. Actual results may deviate from results reported previously on the basis of estimates and assumptions. Unless stated otherwise, all amounts in the notes to these financial statements are stated in thousands of euros.

3.2 CONSOLIDATION

The Group consolidates companies over which control is exercised when the Group is exposed or has the right to variable returns from its involvement with the investee and has the ability to affect such returns. Subsidiaries are included in the consolidation for 100%, taking into account any minority interests. For joint operations the Group accounts for its specific rights and obligations. Joint ventures and associates are accounted for using the equity method.

3.2.1 SUBSIDIARIES

Subsidiaries are included in the consolidation for 100% on the basis of existing control, taking into account any minority interests. The figures of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

Control exists if the Group has:

- the ability to direct relevant activities through its voting power;
- the right to variable returns from its involvement with the investee; and
- the ability to use its power to affect such returns.

In assessing whether the Group has acquired control, and whether such control exists in the sense that it has power over the investee, the Group takes into consideration voting rights, or similar rights in an entity, potential voting rights that are currently exercisable, and all other relevant facts and circumstances.

If and when the Group loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, any non-controlling interests and any components of equity related to the subsidiary. Any resulting gain or loss is recognized in the statement of profit or loss. If the Group retains any stake in the former subsidiary, then such interest is measured at fair value at the date that control is lost.

3.2.2 JOINT OPERATIONS

If the Group has joint control over and is entitled to the rights to the assets and is liable for the liabilities of the partnership, the partnership is classified as a joint operation. Such a joint control has been laid down in a contract and strategic decisions on financial and operational policy are taken by unanimous agreement. Joint operations mainly relate to project driven construction consortiums.

Joint operations are included in the consolidated financial statements on a pro rata basis in accordance with the participation interest of the Group in the joint operation, also referred to as proportionate consolidation.

3.2.3 JOINT VENTURES AND ASSOCIATES

The Group divides strategic investments into joint ventures and associates based on the type and degree of influence.

Joint ventures are those entities over which the Group has joint control. Such joint control is laid down in a contract and strategic decisions on financial and operational policy are taken by unanimous agreement. The Group is only entitled to the net assets of the joint ventures.

Shareholdings other than subsidiaries and joint ventures, where there is significant influence on the financial and operating policy, are recognized under associates. Significant influence is presumed to exist when the Group holds 20 percent or more of the voting power of another entity.

The consolidated financial statements include the Group's share in the result of associates, after adjustments to align the accounting policies with those of the Group, from the date that significant influence commences until the date it ceases to exist (see note 3.8).

If the ownership in a joint venture or associates is reduced, but joint control or significant influence is retained, dilution gains and losses arising from joint ventures and associates are recognized in the statement of profit or loss and only a proportionate share of the amount previously recognized in the statement of other comprehensive income is recycled to the consolidated statement of profit or loss, where appropriate.

If the Group loses significant influence over or joint control of an investment, it derecognizes the carrying amount of that investment (including any goodwill included in the carrying amount) and recognizes any resulting gain or loss, including the recycling of amounts previously recognized in the statement of other comprehensive income, from this event in the consolidated statement of profit or loss. Any investment retained is recognized at fair value.

3.2.4 ELIMINATION OF TRANSACTION UPON CONSOLIDATION

Intragroup receivables and payables, as well as intragroup transactions, finance income and expenses and unrealized results within the Group are eliminated in the preparation of the consolidated financial statements. The Group recognizes its share in the results on transactions that transfer assets and liabilities between the Company and its investments or between its investments, to the extent these are considered realized as transactions with third parties and its joint venture partners, using proportionate elimination.

3.2.5 BUSINESS COMBINATION AND ACQUISITIONS OF NON-CONTROLLING INTERESTS

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.

The Group measures goodwill at the acquisition date as:
- the fair value of the consideration transferred; plus
- the recognized amount of any non-controlling interests in the acquiree; plus
- if the business combination is achieved in stages, the fair value of the existing equity interest in the acquiree (refer also note to 3.8); less
- the net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

If the excess is negative (gain on acquisition), the Group reassesses the correctness and completeness of the identified assets acquired and liabilities assumed, and the appropriateness of underlying assumptions and measurement approaches applied for valuation purposes. After such reassessment, the determined gain on a bargain purchase is immediately recognized in the statement of profit or loss.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are recognized in the statement of profit or loss. Costs related to the acquisition, other than those associated with the issue of debt or equity securities, that the Group incurs in connection with a business combination are expensed as incurred.

A newly acquired non-controlling interest is valued at either the fair value or the proportionate share of the fair value of the acquired asset and liabilities, determined per transaction.

Accounting for acquisitions of non-controlling interests

Acquisitions of non-controlling interests are accounted for as transactions with owners in their capacity as owners and therefore no goodwill is recognized as a result of such transactions.

3.3 FOREIGN CURRENCIES

The assets and liabilities of foreign Group companies and joint ventures that are denominated in functional currencies other than the euro are translated at the exchange rates as at the end of the reporting period. The statement of profit or loss items of the foreign Group companies and joint operations concerned have been translated at average exchange rates. Resulting currency translation differences are added or charged directly to the currency translation reserve in group equity. Exchange rate differences as a result of operational transactions are included in the Consolidated Statement of Profit or Loss for the reporting period.

At the end of each reporting period monetary items denominated in foreign currencies are translated at the rates prevailing at that date. The foreign currency gain or loss on monetary items is the difference between amortized cost in the functional currency at the beginning of the year, adjusted for effective interest and payments during the year, and the amortized cost in foreign currency translated at the exchange rate at the end of the year. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Foreign currency differences on non-current receivables, loans and other borrowings are recognized as finance income and expenses with the exception of differences resulting from financial instruments assigned to a hedged position (see section 3.4.3).

Joint ventures and associates with a functional currency other than the presentation currency of the Group are translated according to the aforementioned method, taking into account that assets and liabilities of these interests are not consolidated.

3.4 FINANCIAL INSTRUMENTS

3.4.1 CLASSIFICATION OF FINANCIAL INSTRUMENTS

The classification of financial assets is based on the nature and purpose of the financial asset in relation to the Groups' business activities. Financial assets, amongst other trade receivables, that arise from the Groups' business operations are held to receive the contractual cash flows. These assets are measured at amortized costs less any allowance for impairment of financial instruments. Except for derivatives, financial liabilities are measured at amortized cost. Derivatives are measured at fair value with measurement changes through profit or loss, with the exception of hedges (derivatives assigned to a hedged position) for which fair value changes are included in the cash flow hedge reserve. The Group uses derivatives to mitigate risks and assigns them to hedged positions.

3.4.2 DERIVATIVES AND CASH FLOW HEDGING

It is the policy of the Group to use cash flow hedges to cover all operational currency risks, which mainly relate to future cash flows from contracts which are denominated in currencies other than the relevant functional currency, if it is highly probable that such cash flows will be realized. Fuel price risks and interest rate risks relating to future cash flows can be hedged from time to time using specific derivatives.

Hedge accounting is applied to the majority of cash flow hedges as follows. On initial designation of the hedge the Group documents the relationship between the hedging instrument(s) and hedged item(s), including amongst other the risk management objectives, hedge strategy and the methods that will be used to assess the effectiveness of the hedge. The Group makes an assessment, both at the inception of the hedge relationship and on an ongoing basis, of the economic relationship between the hedging instruments and the underlying risk. For a cash flow hedge of a forecast transaction, the transaction should be deemed highly probable to occur and present an exposure to cash flow variations that could ultimately affect reported net income.

The application of hedge accounting means that movements in the market value of cash flow hedges not yet settled – including results realized on the 'rolling forward' of existing hedges as a result of differences between the duration of the hedges concerned and the underlying cash flows – will be directly added or charged to the hedging reserve in group equity, taking into account the applicable taxation. If a cash flow hedge expires, is closed or settled, or if the hedge relationship with the underlying cash flows can no longer be considered effective, the accumulated result will continue to be recognized in group equity as long as the underlying cash flow is still expected to take place. If and when the underlying cash flow actually takes place, the accumulated result is included directly in the Statement of Profit or Loss. Movements in the market value of cash flow hedges to which no hedge accounting is applied (ineffective cash flow hedges and the ineffective portion of effective cash flow hedges) are included in the Statement of Profit or Loss for the reporting period. Results from settled cash flow hedges and movements in the market value of ineffective cash flow hedges insofar these relate to non-current receivables, loans and other borrowings are recognized as finance income and finance expenses and otherwise in the related items within operating result. The purchase or sale of financial instruments is generally recorded at transaction rate. Derivatives are stated at fair value; attributable transaction costs are recognized in the Statement of Profit or Loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes therein are accounted for as described.

3.4.3 NET INVESTMENT HEDGING

Foreign currency differences on loans and other borrowings that are assigned to net investment hedging of Group companies that have a functional currency other than the euro are treated similarly to cash flow hedges. These translation differences are recognized in other comprehensive income and are accumulated in the currency translation reserve. A possible ineffective portion is included in the profit or loss. When the relevant Group company is disposed or sold the accompanying portion in the accumulated Currency Translation Reserve is reclassified to profit or loss.

3.5 IMPAIRMENT

At each reporting date, the Group reviews the carrying amounts of its non-financial assets (other than inventories and deferred tax assets) to determine whether there is any indication of impairment. If an indication of impairment exists, then the recoverable amount of the asset is estimated. Goodwill and intangible assets with an indefinite useful life are tested annually for impairment.

The recoverable amount of an asset or cash-generating unit (or group of units) is the higher of its value in use and its fair value less cost of disposal. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects the current market assessments, the time value of money and the risks specific to the asset or the cash-generating unit.

An impairment charge is recognized when the carrying amount of an asset or the cash generating unit to which it belongs exceeds its recoverable amount.

Impairment charges are recognized in the statement of profit or loss. Impairment charges recognized in respect of a cash generating unit are allocated first to reduce the carrying amount of any goodwill allocated to that cash-generating unit and, if applicable, subsequently to reduce the carrying amounts of the other assets of that cash-generating unit on a pro rata basis.

An impairment charge on goodwill is not reversed. For other assets an impairment charge 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 amortization, if no impairment charge had been recognized.

For unbilled revenue and financial assets measured at amortized cost the Group recognizes a loss allowance based on the expected loss on unbilled revenue and on receivables. The Group assesses unbilled revenue, the aging of the receivables and specific information to establish a provision matrix that is adjusted if necessary for specific forward-looking information about the receivables and the economic environment. The Group applies the simplified method to determine its loss allowance for current trade receivables and unbilled revenue.

In the event that objective evidence for impairment of a joint venture or an associate exists, the Group determines the recoverable amount. An impairment charge is measured by comparing the recoverable amount of the investment with the carrying amount. An impairment charge is recognized in the Statement of Profit or Loss and is reversed if there has been a favorable change in the estimates used to determine the recoverable amount.

3.6 INTANGIBLE ASSETS

Goodwill arises upon acquiring Group companies and joint operations and is calculated as the difference between the acquisition price and the fair value of the assets acquired and liabilities assumed, according to the accounting principles of the Company. Goodwill is allocated to the relevant cash-generating unit. These cash-generating units represent the lowest level within the Group at which goodwill is monitored for internal management purposes and not exceeding the level of the Group's operational segments. Goodwill and other intangible assets are presented net of accumulated amortization and accumulated impairment charges.

Amortization of trademarks valued at acquisition takes place over 10 years, while the amortization of customer portfolios and contracts valued at acquisition takes place over the remaining useful life (at acquisition date, determined to be between 7 and 22 years). Methods for determining amortization and useful life are reassessed at the end of each financial year and amended if necessary.

Goodwill and intangible assets with an indefinite useful life are not amortized, but are tested for impairment every year or in case of an indication of impairment (see note 3.5). In respect of joint ventures and associates, the carrying amount of goodwill is included in the carrying amount of the investment.

Other intangible assets acquired in a business combination are capitalized only when it is probable that future economic benefits embodied in an asset, will flow to the Group and the cost of the asset can be reliably measured. Other intangible assets with a finite useful life are stated at cost less accumulated amortization and accumulated impairment charges.

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is expensed as incurred.

3.7 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost less accumulated depreciation calculated from the date of commissioning and accumulated impairment charges. The cost price is based on the purchase price and/or the internally generated cost based on directly attributable expenses. The depreciation, taking into account an assumed residual value, is calculated over the estimated remaining useful lives assigned to the various categories of assets. Modifications and capacity enhancing investments are also capitalized at cost and amortized over the remaining life of the asset. Property, plant and equipment under construction are included in the Statement of Financial Position on the basis of installments paid, including interest during construction. In the event that property, plant and equipment consists of components with different useful lives, such components are accounted for as separate items.

Buildings are depreciated over periods ranging from 10 to 30 years. The depreciation periods for components of the majority of the floating and other construction materials range from 5 to 30 years. Furniture and other fixed assets are depreciated over a period between 3 and 10 years. Land is not depreciated. The wear of dredging equipment is highly dependent on unpredictable project-specific combinations of soil conditions, material to be processed, maritime circumstances, and the intensity of the deployment of the equipment. As a result of these erratic and time-independent patterns, the maintenance and repair expenses to keep the assets in their operational condition are charged to the Statement of Profit or Loss.

Methods for determining depreciation, useful life and residual value are reassessed at the end of each financial year and amended if necessary.

3.8 JOINT VENTURES AND ASSOCIATES

Joint ventures and associates are initially recognized at cost including the goodwill determined at acquisition date. Subsequently joint ventures and associates are accounted for using the equity method, adjusted for differences with the accounting principles of the Group, less any accumulated impairment charges. If the Group's share of losses exceeds the carrying amount of the joint venture or associate, the carrying amount is reduced to zero and the recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the joint venture or associate. Joint ventures and associates also include the amounts invested by the Group in joint ventures and associates by means of interest-bearing loans.

3.9 NON-CURRENT FINANCIAL ASSETS

Non-current financial assets mainly comprise (other) non-current receivables which are carried at amortized cost. Accumulated impairment charges are deducted from the carrying amount.

3.10 FINANCIAL INSTRUMENTS AVAILABLE FOR SALE

Financial instruments available for sale, as regulated by IFRS 9 Financial Instruments, include equity investments (certificates on shares) and are recognized initially at fair value increased with transaction costs. After first recognition, financial instruments available for sale are subsequently measured at fair value with unrealized gains or losses recognized in other comprehensive income. At derecognition or reclassification to associates, any cumulative unrealized result is recycled to and recognized in the statement of profit or loss. In case of impairment, the cumulative loss is reclassified from the other comprehensive income to the statement of profit or loss.

3.11 INVENTORIES

Inventories, which mainly consist of fuel, auxiliary materials and spare parts, are stated at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of disposal.

3.12 UNBILLED AND DEFERRED REVENUE

Unbilled revenue (an asset) or Deferred revenue (a liability) concerns the balance of revenue recognized on contracts (see note 3.22) less progress billings and advance payments. Whether this balance results in an asset or a liability is assessed at the individual contract level.

3.13 TRADE AND OTHER RECEIVABLES

Trade and other receivables are stated initially at fair value and subsequently at amortized cost less credit losses. Amortized cost is determined using the original effective interest rate. Trade and other receivables include prepayments (at historical cost), amongst other cost that are made to fulfil a contract for a customer. Such costs are capitalized and amortized over the lifetime of the contract.

3.14 CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of cash and bank balances, deposits with terms of no more than three months or that qualify as highly liquid investments that are readily convertible and which are subject to insignificant risks of change in value. The explanatory notes disclose the extent to which cash and cash equivalents are not freely available as a result of transfer restrictions, joint control or other legal restrictions. Bank overdrafts are included as a component of cash and cash equivalents for the purpose of the consolidated statement of cash flows.

3.15 SHARE CAPITAL

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares are recognized as a deduction from equity, net of any tax effects. Transaction costs directly attributable to share buy backs are recognized as a deduction from equity, net of any tax effects.

3.16 INTEREST-BEARING BORROWINGS

Interest-bearing borrowings are liabilities mainly to financial institutions. At initial recognition, interest-bearing borrowings are stated at fair value less transaction costs. Subsequently, interest-bearing borrowings are stated at amortized cost with any difference between cost and redemption value being recognized in the statement of profit or loss over the period of the borrowings using the original effective interest rate.

3.17 EMPLOYEE BENEFITS

Defined contribution pension plans

A defined contribution pension plan is a post-employment benefit scheme under which the Group pays fixed contributions into a separate pension fund or an insurance company. The Group has no legal or constructive obligation to pay further amounts if the pension fund or insurance company has insufficient funds to pay employee benefits in connection with services rendered by the employee in the current period or prior periods. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense as part of the personnel expenses in the statement of profit or loss when they are owed. Prepaid contributions are recognized as an asset. Contributions to a defined contribution pension plan payable more than 12 months after the period during which the employee rendered the services, are discounted.

Defined benefit pension plans

A defined benefit pension plan is every post-employment benefit plan other than a defined contribution plan. For each separate defined benefit pension plan, the net asset or liability is determined as the balance of the discounted value of the future payments to employees and former employees, less the fair value of plan assets. The calculations are done by qualified actuaries using the projected unit credit method. The discount rate equals the yield on high-quality corporate bonds as at the date of the statement of financial position, with the period to maturity of the bonds approximating the duration of the liability. If the calculation results in a positive balance for the group, the asset is included up to an amount equal to any unrecognized past service pension costs and the discounted value of economic benefits in the form of possible future refunds or lower future pension premiums from the fund. In calculating the discounted value of economic benefits, the lowest possible financing obligations are taken into account as applicable to the individual plans in force within the Group. An economic benefit is receivable by the Group if it can be realized within the period to maturity of the plan or upon settlement of the scheme's obligations. Actuarial gains and losses, including any movements in limits on net pension assets, are recognized in the unrecognized results within the statement of other comprehensive income. If plan benefits are changed or if a plan is amended, past service costs or a resulting curtailment profit or loss is recognized directly in the statement of profit or loss. The Group recognizes profit or losses on the settlement of defined benefit plans at the time of settlement.

Short-term employee benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed when the related service is provided.

A liability is recognized for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past services provided by the employee, and the obligation can be estimated reliably.

Other long-term employee benefits

Other long-term employee benefits mainly consist of jubilee benefits. The calculation of these liabilities is executed according to the 'projected unit credit' method, using the actuarial assumptions for the predominant defined benefit plan.

Remuneration plans

Members of the Board of Management and some senior employees participate in a bonus plan that is based on the development of the share price, whereby the bonus is distributed in cash. The fair value of the amount payable over the year is recognized as personnel expenses in the statement of profit or loss, with a corresponding increase in liabilities. The liability is remeasured each reporting date and at settlement date. Any changes in the fair value of the liability are recognized as personnel expenses in the statement of profit or loss.

EU-IFRS expenses regarding the remuneration of the Board of Management include the amounts paid, payable and accrued for annual salaries and remuneration, pension plans, short-term and long-term variable remunerations and other reimbursements. The short-term and long-term variable remuneration expenses of the Board of Management, based on EU-IFRS, include the charge that relates to the short-term variable part for targets for the reporting year and the charge for the long-term variable part for targets that, until the actual payment is determined by the Remuneration Committee, are based on the assumption that the performance of the Board of Management is on target. This charge also includes any changes to the amounts accrued in previous years.

3.18 PROVISIONS

Provisions are determined on the basis of estimates of future outflows of economic benefits relating to operational activities for legal or constructive obligations of an uncertain size or with an uncertain settlement date that arise from past events and for which a reliable estimate can be made. Provisions are discounted insofar as the difference between the discounted value and nominal value is material. If applicable, provisions relate, amongst other things, to reorganizations, warranties, onerous contracts, soil contamination, legal proceedings and received claims.

Provisions for reorganization costs are recognized when the Group has a detailed formal plan for the restructuring and has announced its main features to those affected by it at the date of the Statement of Financial Position or when the execution of the plan has commenced.

Provisions for warranties are recognized based on the best estimate of the expected cash outflows or cost of repair to settle contractually agreed warranties during the defect notification period for completed projects. The carrying amount of these provisions is estimated based on common industry practice and the Group's experience with warranty claims for relevant projects.

A provision for onerous contracts, including contracts with customers, is recognized when the expected benefits to be derived by the Group from a contract are lower than the remaining unavoidable cost of meeting its obligations under the contract.

In accordance with the Group's policy and applicable legal requirements, a provision for site restoration in respect of contaminated land, and the related expenses, is recognized if the land is contaminated.

3.19 LEASES

ACCOUNTING POLICY APPLICABLE FROM 1 JANUARY 2019

For any new contracts the Group enters into as a lessee, the Group considers whether a contract is, or contains a lease. A lease is a contract that conveys the right to use an asset (the underlying asset) for a period of time in exchange for a consideration. At commencement date of the lease, the Group recognises a right-of-use asset and a lease liability on the balance sheet.

Right-of-use assets

The right-of-use asset is measured at cost, which is made up of the initial measurement of the lease liability, any initial direct costs incurred by the Group, an estimate of any costs to dismantle and remove the asset at the end of the lease, and any lease payments made in advance of the lease commencement date (net of any incentives received).

The Group depreciates the right-of-use assets on a straight-line basis from the lease commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The Group revaluates the right-of-use asset for remeasurements of the lease liability.

Real estate is depreciated over periods ranging from 3 to 10 years, vessels over periods ranging from 2 to 5 years and other right-of-use assets over periods ranging from 2 to 5 years.

Lease liability

At the commencement date, the Group measures the lease liability at the present value of the lease payments unpaid at that date, discounted using the interest rate implicit in the lease if that rate is readily available or an incremental borrowing rate as determined by the Group.

Lease payments included in the measurement of the lease liability are made up of fixed payments (including in substance fixed), variable payments based on an index or rate, amounts expected to be payable under a residual value guarantee and payments arising from options reasonably certain to be exercised.

Subsequent to initial measurement, the liability will be reduced for payments made and increased for interest. It is remeasured to reflect any reassessment or modification, or if there are changes in in-substance fixed payments.

Short-term lease and lease with a low value of the underlying asset

The payments of short-term leases (duration is equal to or less than 12 months) and leases of low-value underlying assets (equal to or less than USD 5.000) are expensed in profit or loss on a straight-line basis over the lease term. Instead of recognising a right-of-use asset and lease liability.

ACCOUNTING POLICY APPLICABLE BEFORE 1 JANUARY 2019

Leases in terms of which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Upon initial recognition, the leased asset is classified as a tangible fixed asset and 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.

Other leases are operating leases which are not recognized in the Group's consolidated statement of financial position and are disclosed as part of the other commitments and contingent liabilities.

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized 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 lease 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 lease liability.

3.20 TRADE AND OTHER PAYABLES

Trade and other payables are recognized initially at fair value and subsequently at (amortized) cost. If the difference between the discounted and nominal value is not material, trade and other payables are stated at cost.

3.21 ASSETS HELD FOR SALE

Assets are classified as held for sale (disposal group) when it is highly probable that they will be recovered primarily through sale rather than through continuing use. Such assets are generally measured at the lower of their carrying amount and fair value less costs to sell. Liabilities related to the assets held for sale are separately recognized as liabilities held for sale. Once classified as held for sale, intangible assets and property, plant and equipment are no longer amortized or depreciated. For a joint venture or associate held for sale, the use of the equity method is discontinued.

3.22 REVENUE

The Group has contracting activities in all three of its operational segments. Almost all activities are based on contracts with customers. These activities include construction projects and the execution of service-related contracts. The duration of the construction projects varies from approximately one month to several years. Service-related contracts also vary in duration, mostly from several days to more than a year, in the latter case due to a combination of multiple transports in a single contract. Contracts are agreements under which the Group and the customer have mutually enforceable rights and obligations. A combination of contracts rarely occurs but contract modifications, such as those related to additional work, are common. Additional work included in the recognition of revenue is based on mutually agreed contract modifications. In most cases such modifications or extended services are not distinct and therefore form part of a single performance obligation that is partially completed at the time of the contract modification. Most often the contracts contain only one performance obligation. Performance obligations are the asset to be constructed for the customer or the service that is to be rendered. Revenue recognized is based on contract considerations, including fixed prices and variable prices as well as indexation of raw materials and other costs, possible claims, incentives or liquidated damages. If there is a right to variable remuneration, such as incentive agreements, this is taken into account to the extent that it is highly unlikely that it will be reversed at a later date. Revenue is recognized over time when the customer simultaneously receives and consumes the benefits provided through the Group's performance or when the Group creates or enhances an asset that the customer controls.

Revenue from the contracting of projects in the Dredging & Inland Infra and Offshore Energy operational segments, excluding marine transport and other offshore related services, is recognized based on the progress of the project, mainly using the 'cost-to-cost' method. This method, as applied, adequately reflects the extent of the work performed for heterogeneous services for different projects in the period and includes the considerable use of equipment inherent to the Group's activities. The 'cost-to-cost' formula, using (actual) costs as the numerator and estimated total costs as the denominator, includes project costs consisting of payroll costs, materials, costs of subcontracted work, costs of local representatives, rental charges and maintenance costs for the equipment used and other project costs. The Group makes significant estimates and judgements for the projects that depend on the nature of specific project circumstances.

Revenue from the contracting of salvage projects (part of the operational segment Towage & Salvage) is recognized based on the progress of the project. For salvage projects completed at the date of the Statement of Financial Position but for which the proceeds are not finally determined between parties, revenue is recognized at expected proceeds, insofar it is highly unlikely that these will be reversed at a later date.

Revenue also includes revenue from services rendered to third parties during the reporting period. Such services include marine transport and other services of Offshore Energy. These services are charged to the customers at day rates or other rates and revenue is recognized/allocated, to a large extent, based on the number of sailing days of the vessel. The output measure relating to total sailing days is considered to be appropriate as sailing days are homogeneous.

In the event that the period between payment and the service provided, or the other way around, is less than one year, the Group does not adjust the contract consideration for finance components.

3.23 OTHER INCOME AND OTHER EXPENSES

Other income and Other expenses mainly consist of book results from disposals. If a business combination results in a gain on acquisition, this gain is also recognized in Other income.

3.24 RAW MATERIALS, CONSUMABLES, SERVICES AND CONTRACTED WORK

Raw materials, consumables, services and contracted work consist of the costs recognized for work performed during the reporting period, excluding personnel expenses, amortization, depreciation and impairments. This item also includes equipment utilization costs, costs of short-term, low value or variable (if applicable) lease expenses, general overhead costs, external costs for research and development where not capitalized, currency translation differences, fair value changes of derivatives related to hedging foreign currency cash flows of projects, and other results/late results.

3.25 PERSONNEL EXPENSES

Personnel expenses consist of wages and salaries for own personnel and the related social security charges and pension costs, including paid and accrued contributions for defined contribution pension plans and movements in assets and liabilities from defined benefit plans including curtailments and settlements, insofar as applicable, and excluding actuarial gains and losses and the limitations on net pension plan assets added or charged directly to group equity.

3.26 FINANCE INCOME AND EXPENSES

Finance income comprises interest received and receivable from third parties, currency gains on financing and compensating results of negative changes in the fair value of financial instruments used to hedge interest or currency results on the financing concerned (hedged item), for which the results of the hedged item are included in the finance income. Interest income is recognized in the statement of profit or loss as it accrues, using the effective interest rate method.

Finance expenses include interest paid and payable to third parties which are reported using the effective interest method, expenses resulting from early repayments, arrangement fees, currency losses on financing and results of positive changes in fair value of financial instruments used to hedge interest or currency results on the financing concerned (hedged item), for which the results of the hedged item are included in the finance expenses. The interest component of lease payments is recognized in the statement of profit or loss using the effective interest rate method.

Borrowing costs not directly attributable to the acquisition, construction or production of a qualifying asset are recognized in the statement of profit or loss.

3.27 SHARE IN RESULT OF JOINT VENTURES AND ASSOCIATES

Share in result of joint ventures and associates comprises the share in the results after taxation of these investments (see note 3.2.3). It includes interest income resulting from capital invested in joint ventures and associates by means of interest-bearing loans.

3.28 TAXATION / DEFERRED INCOME TAX ASSETS AND LIABILITIES

Taxation is calculated on the basis of the result before taxation for the reporting period, taking into account the applicable tax provisions and tax rates, and also includes adjustments on taxation from prior reporting periods and movements in deferred taxes recognized in the reporting period. Taxation is included in the statement of profit or loss unless it relates to items recognized directly in equity, in which case taxation is included in equity. Income tax expenses also include the corporate income tax levied on deemed profit determined by revenue (withholding tax). Temporary differences are accounted for in deferred tax assets and/or deferred tax liabilities. Deferred tax assets are only recognized to the extent that it is probable that taxable profit will be available for realization in the foreseeable future. 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 realized. Deferred tax assets and liabilities are offset if there is a legally enforceable right to do so, and if they relate to income taxes levied by the same tax authority on the same taxable entity or on different tax entities, but provided there is an intention to settle the tax liabilities and assets on a net basis or the tax assets and liabilities will be realized simultaneously. Deferred income tax assets and liabilities are recognized at nominal value. Additional (income) taxes that arise from the distribution of dividend are recognized at the same time that the liability to pay the related dividend is recognized.

Boskalis is exposed to tax risks which could result in double taxation, additional tax payments, penalties and interest payments. The source of these risks could originate from local tax rules and regulations as well as international and EU regulatory frameworks. These include transfer pricing risks on internal cross-border deliveries of services, tax risks related to acquisitions and divestments, tax risks related to permanent establishments, tax risks relating to tax losses, interest and tax credits carried forward and potential changes in tax law that could result in higher tax expenses and payments. With regard to these tax risks a liability is recognized if, as a result of a past event, Boskalis has an obligation that can be estimated reliably and it is probable that an outflow of economic benefits will be required to settle the obligation.

3.29 EARNINGS PER SHARE

The Group discloses earnings per ordinary share as well as diluted earnings per ordinary share. Earnings per ordinary share are calculated based on the result attributable to the Group's shareholders divided by the calculated weighted average number of issued ordinary shares during the reporting period, taking into account any shares that have been issued or repurchased during the reporting period. In calculating the diluted earnings per share the result attributable to the Group's shareholders and the weighted average number of issued ordinary shares are adjusted for all potentially diluting effects on ordinary shares.

3.30 DIVIDEND

Dividends are recognized as a liability in the period in which they are declared.

3.31 DETERMINATION OF FAIR VALUE

A number of the Group's accounting policies and disclosures require the determination of fair value, for both financial and non-financial assets and liabilities. Fair value is determined for measurement and/or disclosure purposes based on the following methods:

Intangible assets
The fair value of other intangible assets recorded as a result of a business combination is based on the discounted cash flows expected to be derived from the use and eventual sale of the assets.

Joint ventures and associates
Where relevant, the fair value of joint ventures and associates is determined or disclosed based on quoted prices or business valuations.

Property, plant and equipment
The fair value of property, plant and equipment recognized as a result of a business combination is based on market values. The market value of property is the estimated amount for which a property could be exchanged on the date of valuation between a willing buyer and a willing seller in an arm's length transaction, after proper marketing wherein each party acted knowledgeably, prudently and without compulsion.

Trade and other receivables
The fair value of trade and other receivables, other than due from customers, is estimated as the present value of future cash flows, discounted at the market rate of interest at the reporting date.

Share-based payment transactions
The fair value is determined based on quoted prices.

Derivatives
The fair value of derivatives is based on the estimated amount to be paid or received for a settlement of the contract as at the reporting date taking into account the actual interest rate and the credit rating of the counterparty. The fair value is based on broker quotes tested for reasonableness by discounting estimated future cash flows based on the terms and maturity of each contract and using market interest rates for a similar instrument at the measurement date.

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.

Fair value hierarchy
Assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy 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 (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

3.32 CONSOLIDATED STATEMENT OF CASH FLOWS

The consolidated statement of cash flows is drawn up using the indirect method. Cash is defined as cash and cash equivalents including bank overdrafts as presented in the explanatory notes to the cash and cash equivalents. Cash flows are presented separately in the statement of cash flows as cash flows from operating activities, investing activities and financing activities. The cash flows in the statement of cash flows also included the cash flows, if any, related to disposal groups.

3.33 FIRST-TIME APPLICATION OF IFRS 16 LEASES

The Group applied IFRS 16 with effect from 1 January 2019. With respect to IFRS 16 the Group applied the retrospective approach and has used the transition option meaning that the cumulative effects of initially applying IFRS 16 are recognized in the Consolidated Statement of Financial Position as at 1 January 2019. Comparative figures for 2018 have therefore not been restated. The reconciliation of the financial statement line items at 1 January 2019 from IAS 17 to IFRS 16 is set out below.

As of the transaction date for leases with similar characteristics a single discount rate is applied. The Group also applies the expedients that lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term. IFRS 16 is applied to or grandfathered to the lease contracts defined in 2018 according to IAS 17. The right-of-use asset is set equal to the lease liabilities at transition dated. The main estimates made by management are related to the applied discount rate and the term of the lease. The lease liabilities were discounted at the incremental borrowing rates as at 1 January 2019. The weighted average discount rate is 1.8%.

Reconciliation of the IFRS 16 opening balance of the lease liabilities as at 1 January 2019 is based on the lease obligations as at 31 December 2018:

(in millions of EUR)	**TOTAL**
Off-Balance lease obligations as at 31 December 2018	**87**
Estimated extensions of leases, exceeding legal obligations	10
Effects of discounting the lease liability	-9
Leases less than 12 months and other effects	-7
On balance lease liabilities as of 1 January 2019	**81**

The Group assesses whether a contract is, or contains a lease. For all leases present as at 1 January 2019 an opening balance sheet adjustment has been made as at 1 January 2019 to reflect the impact of adoption as at this date. The right-of-use assets and lease liability as at 1 January 2019 amounted to EUR 81.0 million (31 December 2019: respectively EUR 103.9 million and EUR 108.3 million).

In 2019 the depreciation charges of EUR 27.3 million and interest charges of EUR 1.8 million were recognized in the Consolidated Statement of Profit or Loss. Over 2019 EBITDA increased by EUR 23.8 million and the net Group result decreased by EUR 1.2 million.

4. SEGMENT REPORTING

The Group recognizes three operational segments which comprise the divisions of the Group as described below. These divisions offer different products and services and are managed separately because they require different strategies. Each of the divisions reports on a quarterly basis, by means of internal management reporting to the Board of Management.

The following is a brief summary of the activities of the operational segments:

- Dredging & Inland Infra

Traditionally, dredging is the core activity of the Group. It involves all activities required to remove silt, sand and other layers from the seabed and river bed and in some cases using it elsewhere where possible, for example for coastal protection or land reclamation. The services provided also include the construction and maintenance of ports and waterways, and coastal defense and riverbank protection, as well as associated specialist services such as underwater rock fragmentation. In addition, the Group is active in the extraction of raw materials using dredging techniques and dry earthmoving. In the Netherlands, the Group also operates as a contractor of dry infrastructure projects. This involves the design, preparation (by means of dry earthmoving) and execution of large-scale civil infra works, such as the construction of roads and railroads, bridges, dams, viaducts and tunnels. These activities include performing specialist works such as soil improvement and land remediation.

- Offshore Energy

With the offshore contracting capabilities and services the Group supports activities of the international energy sector, including oil and gas companies and providers of renewable energy such as wind power. The Group is involved in the engineering, construction, maintenance and decommissioning of oil and LNG-import/export facilities, offshore platforms, pipelines and cables and offshore wind farms. In performing these activities the Group applies its expertise in the areas of heavy transport, lift and installation work, as well as diving and ROV services complemented with dredging, offshore pipeline installation, rock installation, offshore cable installation, marine activities and survey activities. The acquired activities of Bohlen & Doyen have been part of this segment since 1 April 2019.

- Towage & Salvage

In ports and terminal locations around the world towage and terminal services are provided to ocean-going vessels through the joint ventures Keppel Smit Towage and Smit Lamnalco. Keppel Smit Towage offers assistance to incoming and outgoing vessels in various ports in the Asia-Pacific region. The Group completed the sale of its interest in the harbor towage partnership Kotug Smit Towage as of 1 August 2019 and its interest in the harbor towage partnership Saam Smit Towage as of 30 October 2019. In addition, a full range of terminal services for the operation and management of onshore and offshore terminals is offered through Smit Lamnalco. These services include assistance with the berthing and unberthing of tankers at oil and LNG terminals as well as additional support services. With a combined fleet of over 250 vessels assistance is provided to, amongst others, oil and chemical tankers, container ships, reefers, RoRo ships and mixed cargo ships in around 60 ports and terminal locations around the world. SMIT Salvage provides marine salvage-related services and assistance to vessels in distress and is able to act at anytime and anywhere in the world. It is able to do so by operating out of four locations which are strategically situated in relation to the main international shipping routes: Houston, Cape Town, Rotterdam and Singapore. The removal of shipwrecks or damaged offshore platforms almost always takes place at locations where the wreck forms an obstruction to traffic or presents an environmental hazard.

- Segments

The operational segments are monitored based on the segment result (operating result) and EBITDA. The segment result and EBITDA are used to measure the performance of operational segments, both between segments and compared to other companies in the same industry. Inter-operational segment services, if any, take place on an arm's length basis. In the reporting period there were no material inter-operational segment services. For contracts executed in a joint operation of two segments, the segments only report their own share in revenue and the results recognized, resulting in no material related party transactions between segments that need to be eliminated. EBITDA is defined as being the segment result before depreciation, amortization and impairments.

OPERATIONAL SEGMENTS

2019	DREDGING & INLAND INFRA	OFFSHORE ENERGY	TOWAGE & SALVAGE	HOLDING & ELIMINATIONS	GROUP
Revenue	**1,517,706**	**1,020,359**	**132,117**	**- 25,582**	**2,644,600**
EBITDA	**241,575**	**47,355**	**41,613**	**45,293**	**375,836**
Share in result of joint ventures and associates	**3,260**	**5,976**	**16,461**	**- 107**	**25,590**
Operating result (before extraordinary income)	**107,553**	**- 70,871**	**37,880**	**- 46,099**	**28,463**
Extraordinary income				**82,258**	**82,258**
EBIT					**110,721**
Non-allocated finance income and expenses					**- 15,681**
Non-allocated income tax expenses					**- 20,141**
Net Group profit / loss (-)					**74,899**
Carrying amount of joint ventures and associates	**13,922**	**66,639**	**279,713**	**67,781**	**428,055**
Investments in property, plant and equipment	**128,330**	**89,295**	**1,544**	**28,421**	**247,590**
Additions to right-of-use assets	**29,724**	**9,968**	**120**	**4,644**	**44,456**
Depreciation on property, plant and equipment and right-of-use assets	**134,022**	**115,619**	**2,783**	**9,134**	**261,558**
Amortization of intangible assets	**-**	**2,607**	**950**	**-**	**3,557**
Reversal of impairment charges on sale vessel	**-**	**-**	**-**	**27,000**	**27,000**
Reversal of impairment charges on sale Kotug Smit Towage	**-**	**-**	**-**	**13,146**	**13,146**

2018**)	DREDGING & INLAND INFRA	OFFSHORE ENERGY	TOWAGE & SALVAGE	HOLDING & ELIMINATIONS	GROUP
Revenue	1,428,731	1,041,358	131,658	- 32,198	2,569,549
EBITDA*)	243,830	111,346	36,362	- 37,972	353,566
Share in result of joint ventures and associates, before extraordinary charges	4,354	3,834	19,990	208	28,386
Operating result (before extraordinary charges)	123,357	5,002	33,131	- 42,527	118,963
Extraordinary charges, including within joint ventures					- 519,474
EBIT					- 400,511
Non-allocated finance income and expenses					- 13,281
Non-allocated income tax expenses					- 19,944
Net Group profit / loss (-)					- 433,736
Carrying amount of joint ventures and associates	19,387	63,753	347,620	- 1,127	429,633
Investments in property, plant and equipment	112,079	73,090	1,261	8,323	194,753
Depreciation on property, plant and equipment	120,449	103,847	2,281	4,555	231,132
Amortization of intangible assets	24	2,497	950	-	3,471
Impairment charges on property, plant and equipment	-	136,864	-	-	136,864
Impairment charges on goodwill	-	154,939	-	-	154,939
Impairment charges on joint ventures and associates	-	-	189,879	-	189,879
Impairment charges within joint ventures	-	-	20,556	-	20,556

*) EBITDA before extraordinary charges.
**) Excluding the application of IFRS 16. Reference is made to note 2.3 under 'IFRS 16 Leases'.

As required by IFRS, the information as presented above reconciles to the internal management information of the Board of Management. In measuring the financial performance of operational segments certain line items relating to extraordinary charges were presented differently in the internal management information compared to in the EU-IFRS consolidated financial statements.

In the EU-IFRS Consolidated Statement of Profit or Loss the Result from operating activities (EBIT) shows a profit of EUR 110.7 million and includes reversal of impairment charges as a result of sales transactions of EUR 40.1 million and a book profit on the sale Saam Smit Towage of EUR 42.1 million. In this table above these items are presented as part of the extraordinary income. Similar in 2018, Results from operating activities (EBIT) shows a loss of EUR 400.5 million, including impairment charges of EUR 481.7 million, related additions to provision of EUR 17.2 million and impairment charges accounted for within joint ventures of EUR 20.6 million, totaling the extraordinary charges to EUR 519.5 million. The (reversal of) impairment charges are specified for each operational segments in the table above. EBITDA for operational segment in the table above equals the operating result before depreciation and amortization. Group EBITDA as stated in the management information amounts to EUR 375.8 million (2018: EUR 353.6 million).

5. BUSINESS COMBINATIONS AND OTHER SIGNIFICANT TRANSACTIONS

5.1 INVESTMENT IN HORIZON

On 21 February 2019 the Group has gained, based on voting rights, joint control in the Horizon Group (Horizon). As a result the investment of 62.5% is classified as a joint venture. The consideration amounted to EUR 68.6 million, of which EUR 67.5 million paid in cash.

5.2 ACQUISITION OF OFFSHORE ACTIVITIES OF BOHLEN & DOYEN GMBH

On 1 April 2019 the Group has obtained control over the offshore activities of Bohlen & Doyen GmbH, Germany (hereinafter: Bohlen & Doyen) through the acquisition of the assets, liabilities, employees and some projects. This transaction is classified as a business combination and is included as such in the consolidation. The acquisition of the Bohlen & Doyen business strengthens the position of the Group in the offshore cable market.

After the Group obtained control, the Bohlen & Doyen business has contributed EUR 13.4 million to Group revenue. This comprises the revenue from the contracts acquired. The acquisition has resulted in a positive impact of approximately EUR 0.4 million in the segment Offshore Energy, including the gain on acquisition (EUR 1.1 million) and expenses resulting from the integration in the Group. The group incurred EUR 5.4 million for integration and restructuring costs. Had the Group acquired the Bohlen & Doyen business at the beginning of the year, management estimates that this would not have had an (additional) material impact on the consolidated revenue and result over 2019. The Group had incurred cost of EUR 0.1 million for the services of external advisors relating to this transaction. These costs are included as expenses in the Consolidated Statement of Profit or Loss as part of Raw materials, consumables, services and subcontracted work and are included in the segment result under Holding & Eliminations.

Consideration paid

The consideration paid amounted to EUR 23.3 million in cash.

Identifiable assets acquired and liabilities assumed

As a result of the acquisition the following identifiable assets were acquired and liabilities assumed:

As at 1 April 2019 (in thousands of EUR)	
Property, plant and equipment	**24,490**
Right-of-use assets	**6,063**
Inventory	**60**
Lease liabilities	**- 6,063**
Current other liabilities and payables	**- 208**
Net amount of identified assets acquired and liabilities assumed	**24,342**

The following valuation methods were used in assessing the fair value of identified, material, assets and liabilities assumed:

- The fair value of the individual vessels (property, plant and equipment) is mainly determined based on a market approach performed by an external valuator.
- The fair value of other material assets identified and liabilities assumed is based on the market value at which the assets or liabilities are or could be settled with contractual parties.
- The fair value of the right-of-use assets equals the lease liabilities that are determined using an income approach for the expected cash flows and the appropriate discount rate.

Gain on acquisition

The business combination resulted in a gain on acquisition of EUR 1.0 million, recognized in Other income in the Consolidated Statement of Profit or Loss, because the net amount of assets acquired and liabilities assumed was higher than the consideration paid. A gain was expected given the agreement with the seller on the expenses to be borne by Boskalis that do not qualify as an assumed liability under IFRS as at 1 April 2019. Before recognizing the gain, the Group reassessed the completeness of assets identified and liabilities assumed, and also reassessed the underlying assumptions and measurement techniques. A deferred tax liability of EUR 0.3 million was recognized in the Consolidated Statement of Profit or Loss regarding the profit relating to the bargain purchase of this business combination of EUR 1.0 million (after tax: EUR 0.7 million).

5.3 SALE OF INTEREST IN PARTNERSHIP SAAM SMIT TOWAGE

Since the fourth quarter of 2018 the Group had classified these activities from the Towage & Salvage operational segment as assets held for sale at book value. Early February 2019 the Group signed an agreement with Sudamericana Agencias Aereas y Maritimas S.A. (SAAM) relating to the sale and purchase of the Group's interest in the partnership Saam Smit Towage. On 30 October 2019 the Group completed the sale of its investment in Saam Smit Towage, within the operational segment Towage & Salvage. The sale resulted in a consideration of USD 203 million in cash and a pre-tax book profit of EUR 42.1 million (EUR 35.6 million post tax), including a profit of EUR 42.3 million as a result of the recycling of accumulated currency translation differences to the statement of profit and loss. The book result, reported as part of Other income, is recognized in the statement of profit or loss as shown in the 'Operational segments´ table, included in the Holding & Eliminations segment in note 4.

5.4 SALE OF INTEREST IN PARTNERSHIP KOTUG SMIT TOWAGE

Since the first quarter of 2019 the Group had classified these activities from the Towage & Salvage operational segment as assets held for sale at book value. In March 2019 the Group, together with its co-shareholder Kotug International B.V. (Kotug), signed a letter of intent with Boluda Group relating to the sale and purchase of the Group's interest in the partnership Kotug Smit Towage. On 1 August 2019 the Group completed the sale of its investment in Kotug Smit Towage, within the operational segment Towage & Salvage. The sale resulted in a consideration of EUR 93.6 million in cash and a book profit of EUR 13.1 million that is included in Reversal of impairments evidenced by a sale transaction in the profit or loss. The book result, reported as part of Other income, is recognized in the statement of profit or loss as shown in the 'Operational segments´ table, included in the Holding & Eliminations segment in note 4.

6. REVENUE

Revenue by region can be specified as follows:

	REVENUE	
	2019	2018
The Netherlands	**619,310**	605,582
Rest of Europe	**919,469**	951,989
Australia / Asia	**433,525**	336,070
Middle East	**357,485**	355,238
Africa	**88,255**	106,148
North and South America	**226,556**	214,522
	2,644,600	2,569,549

A region is determined as the location at which projects are realized and services are provided. For sea transport the region refers to the port of arrival (or nearest point of arrival) of the transport or the project location for offshore installation. A large part of the Group's revenue is generated on projects for a variety of clients in various countries and geographical areas. Because of the often-incidental nature and spread of the contracts none of these clients qualifies structurally as a material client in relation to the total revenue of the Group.

Revenue by activity can be specified as follows:

	REVENUE	
	2019	2018
Contracting activities	**2,217,671**	2,119,808
Service activities	**426,929**	449,741
	2,644,600	2,569,549

Revenue from contracting activities mainly comprises net revenue from the operational segments of Dredging & Inland Infra and Offshore Energy (excluding marine transport and other offshore services), and salvage projects. For most of the contracting activities the most common type of contract is based on a fixed/lump sum price. In these cases the contractor's price must take into account virtually all the operational risks as well as the costs and other risks associated with the procurement of materials and subcontractor services. In most cases it is not possible to charge clients for any unforeseen costs and the Group acts as contractor and principal of the engagement.

Revenue from services rendered to third parties is primarily realized in the Offshore Energy (marine transport and other services) operational segment and in the joint ventures within the Towage & Salvage operational segment. The services are usually charged at day rates.

The value of the order book equals the contract revenue of projects yet to be completed and services yet to be rendered at balance sheet date and amounts to EUR 4.7 billion (2018: EUR 4.3 billion).

Contracts are not included in the order book until agreement has been reached with the client. The Group estimates that 44% of the order book will be executed next year (31 December 2018: 40%). Actual execution depends on several factors, such as weather, soil, technical conditions, cooperation with subcontractors, the availability of cargo and other factors.

7. OTHER INCOME AND OTHER EXPENSES

In 2019 other income includes the book results on the sale of SAAone PPP B.V. and share in SAAM Smit Towage (reference is made to note 5.3). This also includes book profits on the disposal property, plant and equipment for EUR 7.2 million (2018: EUR 7.1 million) and the gain on the acquisition of Bohlen & Doyen for EUR 1.0 million.

Other expenses relates to book losses on the disposal of equipment, amounting to EUR 0.5 million (2018: EUR 2.5 million).

8. RAW MATERIALS, CONSUMABLES, SERVICES AND SUBCONTRACTED WORK

As part of this line item costs related to short term leased equipment and low value leases are reported for an amount of EUR 1 million (2018: operational lease expenses EUR 29 million). Reference is made to notes 2.3, 3.33 and 27 on the changed accounting for operational leases.

9. PERSONNEL EXPENSES

	2019	2018
Wages and salaries	**- 374,373**	- 352,013
Social security expenses	**- 43,543**	- 39,278
Pension expenses for defined benefit pension plans	**- 1,728**	- 1,542
Pension expenses for defined contribution pension plans	**- 41,626**	- 41,133
	- 461,270	- 433,966

A number of senior managers participates in a long-term incentive plan based upon the development of the share price, which is settled on a cash basis. The fair value of the related liability for the year is included as part of the personnel expenses in the statement of profit or loss. The related charge for 2019 amounts to EUR 3.4 million (2018: EUR 1.6 million) and the corresponding liability is EUR 4.2 million (2018: EUR 4.6 million). For the remuneration of the Board of Management and the Supervisory Board refer to note 31.2.

In 2019 expenses for reorganization were incurred for an amount of EUR 2.8 million. In 2018 reorganization expenses were incurred for an amount of EUR 6.8 million, which are fully reported under Raw materials, consumables, services and subcontracted work.

10. REVERSAL OF IMPAIRMENTS EVIDENCED BY A SALE TRANSACTION AND IMPAIRMENT CHARGES

During 2019 the Group reversed two impairments for a total amount of EUR 40.1 million as a result of sale transactions. The Group reversed EUR 27.0 million related to the sale of an impaired vessel and EUR 13.1 million relating to the impairment on Kotug Smit Towage as a result of the finalization of the sale to Boluda Group (reference is made to note 5.4).

In 2018 the Group incurred a non-cash impairment loss of EUR 502.2 million. This impairment charge related mainly to goodwill (EUR 154.9 million), property, plant and equipment (EUR 136.9 million) and impairment losses in joint ventures (EUR 189.9 million). No impairment charges were incurred in 2019.

11. FINANCE INCOME AND EXPENSES

	2019	2018
Interest income on short-term bank deposits	**995**	372
Finance income	**995**	372
Interest expenses	**- 13,117**	- 11,813
Accretion of interest of lease liabilities	**- 1,808**	-
Other expenses	**- 1,751**	- 1,840
Finance expenses	**- 16,676**	- 13,653
Net finance expenses recognized in consolidated statement of profit or loss	**- 15,681**	- 13,281

Amortization relating to interest-bearing borrowings amounts to EUR 0.3 million (2018: EUR 0.5 million) and commitment fees paid to EUR 0.9 million (2018: EUR 0.9 million). There are no fair value adjustments for interest-bearing borrowings (with regard to hedging instruments) in 2019 and 2018.

12. INCOME TAX EXPENSES

The tax charge amounts to EUR 20.1 million (2018: EUR 19.9 million) which can be specified as follows:

	2019	2018
CURRENT INCOME TAX EXPENSES		
Current year	**- 40,687**	- 38,486
Adjustment in respect of current income tax regarding prior financial years	**11,174**	17,507
Reclassification of deferred income taxes regarding prior financial years	**951**	-
	- 28,562	- 20,979
DEFERRED INCOME TAX EXPENSES		
Origination and reversal of temporary differences	**- 387**	1,035
Effect of changes in tax rates on deferred income taxes	**- 1,892**	-
Reclassification of deferred income taxes regarding prior financial years	**- 951**	-
Movement of recognized tax losses carried forward	**11,651**	-
	8,421	1,035
TAXATION IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS	**- 20,141**	- 19,944

The operational activities of the Group are subject to various tax regimes with tax rates ranging from 0.0% to 43.0% (2018: 0.0% to 48.0%). These different tax rates, non-deductible expenses, treatment of tax losses, special taxation regimes, adjustments in respect of prior years and results not subject to taxation, result in an effective tax rate in the reporting period of 21.1% (2018: -4.8%), as disclosed in the consolidated statement of profit or loss.

This effective income tax rate is impacted by the share in the net result from joint ventures and associates by extraordinary income and extraordinary charges. This analysis can be summarized as follows:

		2019			2018	
	Profit / loss (-)	**Income tax expense (-) /benefit**	**Effective Income tax rate**	**Profit / loss (-)**	**Income tax expense (-) /benefit**	**Effective Income tax rate**
Profit/Loss (-) before taxation	**95,040**	**- 20,141**	**21.2%**	- 413,792	- 19,944	- 4.8%
Tax exempted share in results of joint ventures and associates (excluding impairments)	**- 25,590**	**-**	**- 213.6%**	- 28,386	-	7.2%
Extraordinary income	**-82,258**	**6.472**	**85.7%**	-	-	-
Impairment charges and other extraordinary charges	**-**	**-**	**-**	519,474	- 815	24.4%
Profit/Loss (-) before taxation, adjusted	**- 12,808**	**- 13,669**	**- 106.7%**	77,296	- 20,759	26.9%

The reconciliation between the Dutch nominal income tax rate and the effective income tax rate, based on the Profit/Loss (-) before taxation as stated EUR -12.8 million (2018: EUR 77.3 million), is as follows:

	2019		2018	
	INCOME TAX AMOUNT	**EFFECTIVE INCOME TAX RATE**	**INCOME TAX AMOUNT**	**EFFECTIVE INCOME TAX RATE**
Effect on tax (rate):				
Nominal tax rate in the Netherlands	**3,202**	**25.0%**	- 19,324	25.0%
Tonnage tax, withholding tax, other special tax regimes	**-16,936**	**- 132.2%**	- 18,725	24.2%
Different statutory tax rates for other jurisdictions	**16,836**	**131.4%**	16,214	- 21.0%
Weighted average tax (rate)	**3,102**	**24.2%**	- 21,835	28.2%
Increase (decrease) in tax (rate) resulting from:				
Unrecognized income tax losses and temporary differences	**-7,749**	**- 60.5%**	- 5,047	6.5%
Recognition of previously unrecognized tax losses	**1.924**	**15.0%**	8,424	- 10.9%
Tax exempted revaluation results and book results	**1,203**	**9.4%**	-	-
Non-deductible expenses	**-24,274**	**- 189.5%**	- 19,808	25.6%
Prior year adjustments	**12,125**	**94.7%**	17,507	- 22.6%
Adjusted effective tax (rate)	**-13,669**	**- 106.7%**	- 20,759	26.8%

The effective income tax rate, adjusted for extraordinary income and for the net result from joint ventures and associates, was –106.7% (2018: 26.8%, adjusted for impairment charges, other extraordinary charges and for the net result from joint ventures and associates).

13. INCOME TAX RECEIVABLE AND PAYABLE

The current income tax receivables and income tax payables relate to the tax positions of the respective Group companies and consist of financial years yet to be settled less withholding taxes and tax refunds.

14. DEFERRED INCOME TAX ASSETS AND LIABILITIES

	BALANCE AS AT 1 JANUARY 2019		MOVEMENT IN TEMPORARY DIFFERENCES DURING THE YEAR				BALANCE AS AT 31 DECEMBER 2019	
	Asset	Liability	Charged (-)/ added to net profit	Charged to equity	In / (out) consolidation and business combinations	Currency translation differences	Asset	Liability
Intangible assets	**195**	**- 1,999**	**157**	**-**	**-**	**1**	**206**	**- 1,852**
Property, plant and equipment	**128**	**- 3,005**	**- 3,291**	**-**	**- 273**	**3**	**152**	**- 6,590**
Trade and other receivables	**57**	**-**	**-**	**-**	**-**	**-**	**57**	**-**
Hedging reserve	**1,000**	**-**	**- 69**	**- 531**	**-**	**-**	**400**	**-**
Actuarial gains / losses (-) and asset limitation on defined benefit pension plans	**7,324**	**-**	**- 2,584**	**1,852**	**-**	**16**	**6,608**	**-**
Employee benefits	**3,518**	**- 3,400**	**3,009**	**-**	**-**	**- 17**	**3,974**	**- 864**
Provisions	**731**	**-**	**- 720**	**-**	**-**	**14**	**25**	**-**
Interest-bearing borrowings	**249**	**-**	**-**	**-**	**-**	**-**	**249**	**-**
Trade and other payables	**354**	**- 95**	**67**	**-**	**-**	**3**	**428**	**- 99**
Other assets and liabilities	**276**	**- 709**	**377**	**-**	**-**	**- 247**	**253**	**- 556**
Leases	**-**	**-**	**97**	**-**	**-**	**-**	**105**	**- 8**
Foreign branch results	**-**	**- 1,436**	**-**	**-**	**-**	**-**	**-**	**- 1,436**
Income tax losses carried forward	**47**	**-**	**11,651**	**1,135**	**-**	**5**	**12,838**	**-**
	13,879	**- 10,644**	**8,694**	**2,456**	**- 273**	**- 222**	**25,295**	**- 11,405**
Offsetting of deferred income tax assets and liabilities	**- 4,874**	**4,874**					**- 9,955**	**9,955**
Net in the Consolidated Statement of Financial Position	**9,005**	**- 5,770**					**15,340**	**- 1,450**

	BALANCE AS AT 1 JANUARY 2018		MOVEMENT IN TEMPORARY DIFFERENCES DURING THE YEAR				BALANCE AS AT 31 DECEMBER 2018	
	Asset	Liability	Charged (-) /added to net profit	Charged to equity	In / (out) consolidation and business combinations	Currency translation differences	Asset	Liability
Intangible assets	-	- 2,387	583	-	-	-	195	- 1,999
Property, plant and equipment	390	- 3,120	- 103	-	-	- 44	128	- 3,005
Unbilled revenue and deferred revenue	-	- 34	34	-	-	-	-	-
Trade and other receivables	38	-	18	-	-	1	57	-
Hedging reserve	-	- 3,252	321	3,931	-	-	1,000	-
Actuarial gains / losses (-) and asset limitation on defined benefit pension plans	7,069	-	252	- 39	-	42	7,324	-
Employee benefits	4,026	- 3,388	- 484	-	-	- 36	3,518	- 3,400
Provisions	897	-	- 670	-	-	504	731	-
Interest-bearing borrowings	249	-	-	-	-	-	249	-
Trade and other payables	252	- 370	403	-	-	- 26	354	- 95
Other assets and liabilities	308	- 1,163	381	-	-	41	276	- 709
Foreign branch results	600	- 2,336	300	-	-	-	-	- 1,436
Income tax losses carried forward	86	-	-	-	-	- 39	47	-
	13,915	- 16,050	1,035	3,892	-	443	13,879	- 10,644
Offsetting of deferred income tax assets and liabilities	- 4,367	4,367					- 4,874	4,874
Net in the Consolidated Statement of Financial Position	9,548	- 11,683					9,005	- 5,770

Deferred income tax assets are not recognized as long as it is not probable that economic benefits can be expected in future periods. Deferred income tax assets and liabilities within fiscal unities are offset in the statement of financial position.

The following movements in deferred income tax assets and liabilities, including applicable income tax rate changes, together with the items they relate to, are recognized in the statement of other comprehensive income:

	2019		
	BEFORE INCOME TAX	**INCOME TAX (EXPENSE) BENEFIT**	**NET OF INCOME TAX**
Foreign currency translation differences for foreign operations, including net-investment hedges	**22,428**	**1,135**	**23,563**
Fair value of cash flow hedges	**- 7,753**	**- 531**	**- 8,284**
Actuarial gains / losses (-) and asset limitation on defined benefit pension plans	**- 7,822**	**1,852**	**- 5,970**
	6,853	**2,456**	**9,309**

	2018		
	BEFORE INCOME TAX	**INCOME TAX (EXPENSE) BENEFIT**	**NET OF INCOME TAX**
Foreign currency translation differences for foreign operations, including net-investment hedges	32,119	-	32,119
Fair value of cash flow hedges	- 20,589	3,931	- 16,658
Actuarial gains / losses (-) and asset limitation on defined benefit pension plans	- 3,867	- 39	- 3,906
	7,663	3,892	11,555

UNRECOGNIZED DEFERRED INCOME TAX ASSETS

Unrecognized deferred income tax assets regarding income tax losses carried forward and/or timing differences of Group companies amounted to EUR 75.5 million (2018: EUR 77.8 million). These deferred income tax assets are not recognized in the statement of financial position as long as recovery through taxable profit or deductible temporary differences before expiration is not probable.

	2019	
	INCOME TAX LOSSES CARRIED FORWARD	**DEDUCTIBLE TEMPORARY DIFFERENCES**
No later than 1 year	**-**	**-**
Later than 1 year and no later than 5 years	**4,005**	**-**
Later than 5 years	**60,788**	**10,707**
	64,793	**10,707**

	2018	
	INCOME TAX LOSSES CARRIED FORWARD	**DEDUCTIBLE TEMPORARY DIFFERENCES**
No later than 1 year	-	-
Later than 1 year and no later than 5 years	3,232	-
Later than 5 years	64,141	10,392
	67,373	10,392

15. INTANGIBLE ASSETS

	GOODWILL	OTHER	TOTAL
Balance as at 1 January 2019			
Cost	**629,426**	**121,125**	**750,551**
Accumulated amortization and impairments	**- 532,349**	**- 98,562**	**- 630,911**
Carrying amount	**97,077**	**22,563**	**119,640**
Movements			
Amortization	**-**	**- 3,557**	**- 3,557**
Currency translation differences and other movements	**-**	**300**	**300**
	-	**- 3,257**	**- 3,257**
Balance as at 31 December 2019			
Cost	**634,671**	**121,965**	**756,636**
Accumulated amortization and impairments	**- 537,594**	**- 102,659**	**- 640,253**
Carrying amount	**97,077**	**19,306**	**116,383**

	GOODWILL	OTHER	TOTAL
Balance as at 1 January 2018			
Cost	615,737	128,328	744,065
Accumulated amortization and impairments	- 363,721	- 102,914	- 466,635
Carrying amount	252,016	25,414	277,430
Movements			
Amortization	-	- 3,471	- 3,471
Impairment charges	- 154,939	-	- 154,939
Currency translation differences and other movements	-	620	620
	- 154,939	- 2,851	- 157,790
Balance as at 31 December 2018			
Cost	629,426	121,125	750,551
Accumulated amortization and impairments	- 532,349	- 98,562	- 630,911
Carrying amount	97,077	22,563	119,640

Currency translation differences mainly relate to goodwill and other intangible assets resulting from the acquisitions of Dockwise and Fairmount, both of which are denominated in USD. Following impairment charges recognized in previous years, currency translation differences do not occur with respect to the carrying amount of goodwill. However, cost and accumulated amortization and impairments are still impacted by currency translation differences.

15.1 GOODWILL

For the purpose of impairment testing, goodwill is allocated to the cash-generating units (CGU) which represent the lowest level within the Group at which the goodwill is monitored for internal management purposes. This does not exceed the level of Group's operating segments reported in note 4 on Segment reporting.

Goodwill is allocated to the following cash-generating units:

CASH-GENERATING UNIT	OPERATIONAL SEGMENT	2019	2018
Inland Infra	Dredging & Inland Infra	**46,607**	46,607
Salvage	Towage & Salvage	**36,875**	36,875
Dredging	Dredging & Inland Infra	**13,595**	13,595
Total		**97,077**	97,077

When conducting impairment tests on goodwill, the recoverable amounts are determined based on value in use calculations. Value in use is determined by discounting the expected future cash flows from the continuing operations of the CGU.

Management projects cash flows based on past trends and estimates of future market developments, cost developments and investment plans. These projections also factor in market conditions, order book in hand, expected win rates of contracts and expected vessel utilization. Key assumptions in the calculation of value in use are the growth rate applied in the calculation of the terminal value and the discount rate used. Cash flows for the CGUs beyond five years are extrapolated using an estimated long-term growth rate of 1% (2018: 1%). The applicable growth rate does not exceed the long-term average growth rate which may be expected for the activities. The pre-tax discount rate used in the calculations per CGU are: Inland Infra 8.3% (2018: 8.4%), Salvage 6.5% (2018: 6.7%) and Dredging 7.9% (2018: 8.2%) and is determined by means of an iterative calculation using the projected post-tax cash flows, expected tax rate and a post-tax discount rate for each CGU.

The Group has analyzed sensitivity to a reasonable possible change in the discounted expected future cash flows of the carrying amount, including goodwill, of the CGU ('headroom'). The recoverable amounts for Inland Infra, Salvage and Dredging exceed the carrying amounts of the CGUs with significant headroom.

In 2018 the Group incurred a non-cash goodwill impairment charge of EUR 154.9 million with regard to Offshore Energy (to nil). This charge is almost entirely related to current market circumstances that are not expected to materially improve in the foreseeable future, specifically with respect to the lower-end service segments of the offshore energy market.

These market circumstances have resulted in a downward adjustment of the projected future cash flows for the Offshore Energy cash-generating unit (CGU). After recognizing the goodwill impairment charge the recoverable amount for Offshore Energy equals EUR 1.2 billion (2018), based on a value in use calculation.

15.2 OTHER INTANGIBLE ASSETS

Other intangible assets, which are identified and recognized at fair value in business combinations, consist of trade names, technology (including software) and favorable contracts.

16. PROPERTY, PLANT AND EQUIPMENT

	LAND AND BUILDINGS	FLOATING AND OTHER CONSTRUCTION EQUIPMENT	OTHER FIXED ASSETS	PROPERTY, PLANT AND EQUIPMENT UNDER CONSTRUCTION	TOTAL
Balance as at 1 January 2019					
Cost	**138,617**	**4,759,891**	**35,722**	**132,368**	**5,066,598**
Accumulated depreciation and impairment charges	**- 36,680**	**- 2,625,257**	**- 27,051**	**- 3,823**	**- 2,692,811**
Carrying amount	**101,937**	**2,134,634**	**8,671**	**128,545**	**2,373,787**
Movements					
Investments	**429**	**83,983**	**4,835**	**158,343**	**247,590**
Acquired through business combinations	**-**	**24,490**	**-**	**-**	**24,490**
Put into operation	**708**	**48,969**	**-**	**- 49,677**	**-**
Reversal of impairment	**-**	**27,000**	**-**	**-**	**27,000**
Depreciation	**- 4,567**	**- 225,629**	**- 4,073**	**-**	**- 234,269**
Disposals	**- 39**	**- 19,727**	**- 182**	**-**	**- 19,948**
Other movements	**- 51**	**- 27,859**	**506**	**- 935**	**- 28,339**
Currency translation differences	**769**	**13,914**	**61**	**1,046**	**15,790**
	- 2,751	**- 74,859**	**1,147**	**108,777**	**32,314**
Balance as at 31 December 2019					
Cost	**143,792**	**4,415,127**	**40,806**	**241,145**	**4,840,870**
Accumulated depreciation and impairment charges	**- 44,606**	**- 2,355,352**	**- 30,988**	**- 3,823**	**- 2,434,769**
Carrying amount	**99,186**	**2,059,775**	**9,818**	**237,322**	**2,406,101**

	LAND AND BUILDINGS	FLOATING AND OTHER CONSTRUCTION EQUIPMENT	OTHER FIXED ASSETS	PROPERTY, PLANT AND EQUIPMENT UNDER CONSTRUCTION	TOTAL
Balance as at 1 January 2018					
Cost	142,569	4,571,996	29,578	299,338	5,043,481
Accumulated depreciation and impairment charges	- 37,667	- 2,442,733	- 21,195	- 3,823	- 2,505,418
Carrying amount	104,902	2,129,263	8,383	295,515	2,538,063
Movements					
Investments	5,995	76,151	4,001	108,606	194,753
Put into operation	32	274,972	-	- 275,004	-
Impairment charges	-	- 136,864	-	-	- 136,864
Depreciation	- 4,056	- 223,036	- 4,040	-	- 231,132
Disposals	- 5,269	- 11,109	- 198	- 400	- 16,976
Other movements	178	- 179	476	- 66	409
Currency translation differences	155	25,436	49	- 106	25,534
	- 2,965	5,371	288	- 166,970	- 164,276
Balance as at 31 December 2018					
Cost	138,617	4,759,891	35,722	132,368	5,066,598
Accumulated depreciation and impairment charges	- 36,680	- 2,625,257	- 27,051	- 3,823	- 2,692,811
Carrying amount	101,937	2,134,634	8,671	128,545	2,373,787

The Group reviews the (expected) utilization and operational results of the main units of the fleet to determine potential impairments and adjustments of remaining expected useful life and residual value on an annual basis. In 2019 for some units the useful lives were adjusted prospectively. On balance, the impact of these adjustments on net group profit in the reporting period amounts to an expense of merely EUR 3 million, the expected impact on the future four reporting periods amounts to a mere EUR 9 million decrease in expenses.

In 2019 the Group reversed impairment charges of EUR 27.0 million (2018: nil) related to the sale of an impaired vessel. The impairment charge recognized in 2018 of EUR 136.9 million mainly related to Offshore Energy vessels. The recoverable amounts were determined based on the highest of its value in use and its fair value less cost to sell. Value in use is calculated using discounted cash flow models. Fair value less cost to sell was determined by external valuators for vessels what will stay in service (fair value hierarchy: level 3). Vessels that will be taken out of service were valued at scrap values. The full impairment charge of 2018 related to assets that were valued at fair value less costs to sell, including the charge for assets that are or will be taken out of service.

In 2019 and 2018 the capitalized financing costs of investments recognized amounted to zero.

In line with the characteristics of the Group's activities, property, plant and equipment can be deployed on a worldwide scale. As a consequence, segmentation of property, plant and equipment into geographical areas would not provide any additional relevant information.

17. JOINT VENTURES AND ASSOCIATES

The Group participates in a number of joint ventures and associates. The activities and risks of these joint ventures and associates are similar to the activities of the Group. A number of projects, or related activities, within the Dredging & Inland Infra operational segment are placed in privately held companies. The most important one was SAAone Holding B.V. which has been divested during 2019. The Offshore Energy operational segment mainly includes the investments Asian Lift Pte. Ltd and Horizon. Within the Towage & Salvage operational segment, harbor towage services take place through Keppel Smit Towage Pte Ltd and Maju Maritime Pte Ltd in Singapore. In addition, the Group participates in Smit Lamnalco (worldwide terminal services) and Ocean Marine Egypt (terminal services). These joint ventures and associates are in principle financed on a non-recourse basis.

The table below shows the movements in the interests in joint ventures and associates:

	2019		
	JOINT VENTURES	**ASSOCIATES**	**TOTAL**
Balance as at 1 January 2019	**421,408**	**8,225**	**429,633**
Classification as held for sale of Kotug Smit Towage	**- 78,744**	**-**	**- 78,744**
Divestments	**- 2,000**	**-**	**- 2,000**
Acquisition of Horizon	**67,535**	**-**	**67,535**
Share in result of joint ventures and associates	**24,196**	**1,394**	**25,590**
Share in other comprehensive income of joint ventures and associates	**- 10,816**	**641**	**- 10,175**
Dividends received	**- 9,008**	**- 1,183**	**- 10,191**
Currency translation differences and other movements	**7,028**	**- 621**	**6,407**
	- 1,809	**231**	**- 1,578**
Balance as at 31 December 2019	**419,599**	**8,456**	**428,055**

	2018		
	JOINT VENTURES	**ASSOCIATES**	**TOTAL**
Balance as at 31 December 2017	597,572	179,363	776,935
Adjustments due to first application of IFRS 9	- 1,289		- 1,289
Balance as at 1 January 2018	596,283	179,363	775,646
Investments	2,828	400	3,228
Impairment charges	- 107,797	- 82,082	- 189,879
Classification as held for sale of Saam Smit Towage	- 77,205	- 98,604	- 175,809
Share in result of joint ventures and associates	962	6,868	7,830
Share in other comprehensive income of joint ventures and associates	- 3,145	- 1,245	- 4,390
Repayment share capital / share premium	- 1,004	- 207	- 1,211
Dividends received	- 12,393	- 2,731	- 15,124
Currency translation differences and other movements	22,879	6,463	29,342
	- 174,875	- 171,138	- 346,013
Balance as at 31 December 2018	421,408	8,225	429,633

The 2019 share in result of joint ventures and associates amounts to EUR 25.6 million as disclosed in the table above (2018: EUR 7.8 million).

In 2018 the Group incurred a non-cash impairment charge of EUR 190 million relating to towage joint ventures and associates due to deteriorated market conditions that are not expected to materially improve in the foreseeable future.

The main joint ventures of the Group are:

		Interest in joint ventures	
ENTITY	**COUNTRY OF INCORPORATION**	**2019**	2018
Saam Smit Towage Brasil S.A.*	Brazil	**-**	50%
Gardline Marine Sciences do Brasil SA	Brazil	**-**	50%
Lamnalco Marine	Cyprus	**50%**	50%
Ocean Marine Egypt S.A.E	Egypt	**50%**	50%
Asian Lift Pte. Ltd.	Singapore	**50%**	50%
Keppel Smit Towage Pte Ltd	Singapore	**49%**	49%
Maju Maritime Pte Ltd	Singapore	**49%**	49%
Penta-Ocean / Hyundai / Boskalis JV PTE. Ltd	Singapore	**30%**	30%
ACCN B.V.	The Netherlands	**-**	50%
Kotug Smit Partnership B.V.	The Netherlands	**-**	50%
SAAone Holding B.V.	The Netherlands	**-**	17%
Gardline Maritime Ltd.	United Kingdom	**-**	50%
Horizon Survey Company (FZC)	United Arab Emirates	**63%**	-

*Classified as held for sale as per year-end 2018 (see note 5.3)

The main associates of the Group are:

		Interest in associates	
COMPANY	**COUNTRY OF INCORPORATION**	**2019**	2018
Damietta for Maritime Services Company S.A.E.	Egypt	**31%**	31%
Saam Smit Towage Mexico S.A. de C.V.*	Mexico	**-**	49%

*Classified as held for sale as per year-end 2018 (see note 5.3)

The voting rights in associates are equal to the ownership interests.

As at 31 December 2019, the Group participated in the above-mentioned joint ventures and associates. Joint control is established in joint ventures by contract and the Group only has rights to the net assets. Significant influence is established in associates by voting rights and/or by contract, also in those cases where the other (investment) partner has control. None of these joint ventures or associates is individually material based on their share in the financial figures of the Group and their risk profile. The nature of, and changes in, the risks associated with interest in joint ventures and/or and associates is primarily linked to its activities for which a distinction is made in the disclosure. As at 31 December 2019, approximately 65% of the Group's interest in joint ventures and associates relates to harbor towage services and terminal services of the Towage & Salvage operational segment. The summarized figures on a 100% basis of the towage/terminal activities can be presented as follows (excluding Saam Smit Towage and Kotug Smit Towage):

	2019	2018
Towage joint ventures and associates	**Excluding SAAM Smit Towage and Kotug Smit Towage**	Excluding SAAM Smit Towage and Kotug Smit Towage
Revenue	**344**	340
EBITDA	**128**	116
EBIT excluding impairment charges	**63**	57
EBIT including impairment charges	**63**	15
Net debt	**261**	311

In 2018 (100% basis including Saam Smit Towage and Kotug Smit Towage) the revenue amounted to EUR 645 million with an EBITDA of EUR 211 million. The EBIT excluding impairment charges amounted to EUR 91 million (including impairment charges EUR 49 million) and a net debt of EUR 561 million.

Other joint ventures and associates relate to the Dredging & Inland Infra and Offshore Energy Segments and to Holding & Eliminations.

The future cash flows for the Group are legally and contractually limited to the receipt of dividends, with the exception of certain companies, as listed above, for which capped guarantees or capital contributions are agreed (see note 30). As a result of statutory provisions, the Group, as joint venture partner or minority shareholder, cannot independently decide to distribute dividends. Also, the financial position should be sufficient to enable the distribution of dividends to shareholders. There are no contractual provisions that restrict the distribution of the net result as a dividend, with the exception of covenants in loan agreements and the priority of loan repayment over dividend at some of the joint ventures and associates. Legal reserves are formed by the Group for its share in the net result of joint ventures and associates.

In 2019 the Group sold SAAone PPP B.V. and as a result its share in SAAone Holding 2019, our share in the negative equity of SAAone Holding B.V. amounted to nill (31 December 2018: EUR 9.3 million following the recognition of the negative fair value of an interest rate swap). Following the sale of our share in SAAone Holding B.V., the negative fair value of the interest rate swap has been recycled through the Statement of Profit and Loss.

The table below shows the share of the Group in total assets and revenues of its joint ventures and associates that are individually not material to the Group.

	2019		
	JOINT VENTURES	**ASSOCIATES**	**TOTAL**
Total assets	**706,978**	**1,554**	**708,532**
Revenue	**301,736**	**115**	**301,851**

	2018		
	JOINT VENTURES	**ASSOCIATES**	**TOTAL**
Total assets	1,101,946	137,171	1,239,117
Revenue	339,838	44,172	384,010

18. NON-CURRENT FINANCIAL ASSETS

18.1 OTHER NON-CURRENT RECEIVABLES

	2019	2018
Balance as at 1 January	**1,377**	1,249
Loan granted (to joint venture)	**7,874**	-
Repaid loan (from joint venture)	**- 280**	-
Currency translation differences and other movements	**243**	128
Balance as at 31 December	**9,214**	1,377

Other non-current receivables generally comprise loans to joint ventures and associates, and long-term advance payments to suppliers.

19. INVENTORIES

	2019	2018
Fuel and materials	**27,117**	32,754
Spare parts and other inventories	**76,121**	66,316
	103,238	99,070

During 2019 nil million write-down on inventories was recognized (2018: EUR 0.2 million).

20. UNBILLED AND DEFERRED REVENUE

Unbilled and deferred Group revenue relates to the contracting and execution of construction projects and to services. The recognition of revenue, timing of billings and cash collections result in unbilled receivables, accounts receivable and deferred revenue. In the contracting business amounts are billed as work progress in accordance with contractual terms, either at periodic intervals or upon achievement of contractual milestones. In the event that billing occurs subsequent to revenue recognition, unbilled revenue is recognized (as an asset). In the event that payments are received from customers based on deposits or invoices in advance of revenue recognition, deferred revenue is recognized (as a liability). In the services business amounts are billed based on contractually agreed schedules and/or milestones. As revenue is recognized/allocated to a large extent on the basis of sailing days, unbilled revenue or deferred revenue is recognized for the difference between revenues recognized and invoices issued.

	AS AT 31 DECEMBER 2019	AS AT 31 DECEMBER 2018
Unbilled revenue	**279,981**	304,856
Deferred revenue	**- 315,756**	- 221,920
	- 35,775	82,936

Unbilled and deferred revenue of the Group is influenced by the mix of projects and services that are executed at a certain point of time. Inherent to the Group's activities, the nature and amount of unbilled and deferred revenue depends on the specifics of the projects, due to the variety clients and to the ever-changing client base, contracts with different payment conditions, milestones and other details of contracts executed within a wide spectrum of economic environments. Furthermore, different payments terms are agreed in the contracts with customers and usually depend on the jurisdiction in which the services are performed.

In 2019 approximately 91% of the unbilled amount of EUR 304,856 thousand at 31 December 2018 was invoiced to customers by the Group (2018: 95% of the unbilled amount of EUR 167,594 thousand as at 31 December 2017). During 2019 unbilled revenue was not impacted by business combinations (during 2018: nil). Almost the entire amount of deferred revenue at 31 December 2018 relates to work performed in 2019.

Contract revenue recognized, unbilled revenue and deferred revenue are subject to judgements and estimates. Especially judgements and estimates on the progress of execution of the projects are the basis for allocating total (project) revenue to cumulative (project) revenues recognized in the Consolidated Statement of Profit or Loss and to future (project) revenues. This allocation of project revenue is based on judgements and estimates of total (project) revenues, including variable considerations, and contract modifications, and expected total costs of the projects. Different estimates would have resulted in different, either higher or lower, revenues, and related costs, for the year. Revenue, and related costs, recognized in the Consolidated Statement of Profit or Loss is not materially impacted by such judgements and estimates. Looking with hindsight at the judgements and estimates made regarding revenue recognized, approximately 1.6% of the revenues recognized in 2018 should have been accounted for as revenue in 2019, of the revenues recognized in 2017 relates approximately 0.5% to 2018.

21. TRADE AND OTHER RECEIVABLES

	2019	2018
Trade receivables	**378,489**	330,324
Amounts due from joint ventures and associates	**5,927**	27,143
Other receivables and prepayments	**317,796**	307,140
	702,212	664,607

22. CASH AND CASH EQUIVALENTS

	2019	2018
Bank balances and cash	**375,900**	311,740
Short-term bank deposits	**23,674**	24,467
Cash and cash equivalents	**399,574**	336,207
Bank overdrafts	**- 29,775**	- 28,330
Net cash and cash equivalents in the consolidated statement of cash flows	**369,799**	307,877

Cash and cash equivalents include EUR 93.4 million (2018: EUR 81.7 million) held by project-driven construction consortiums (joint operations). The Group held EUR 1.5 million (2018: EUR 6.4 million), of which no amount (2018: no amount) in joint operations outside the Netherlands subject to local regulations limiting the transfer of these funds. The other cash and cash equivalents are at the free disposal of the Group.

23. GROUP EQUITY

23.1 SHARE CAPITAL AND DIVIDEND

The authorized share capital of EUR 4.8 million (2018: EUR 4.8 million) is divided into 240,000,000 (2018: 240,000,000) ordinary shares with a par value of EUR 0.01 (2018: EUR 0.01) each and 80,000,000 (2018: 80,000,000) cumulative protective preference shares with a par value of EUR 0.03 (2018: EUR 0.03) each.

Movements of the ordinary shares issued were as follows:

(in number of ordinary shares)	**2019**	2018
Issued and fully paid shares entitled to dividend as at 1 January	**134,067,826**	130,677,293
Repurchased shares	**- 2,341,189**	- 600,441
Stock dividend	**-**	3,990,974
Issued and fully paid shares entitled to dividend as at 31 December	**131,726,637**	134,067,826
Treasury stock	**3,651,701**	1,310,512
Issued and fully paid shares as at 31 December	**135,378,338**	135,378,338

Stock dividend

In 2019 no stock dividend was distributed relating to the 2018 financial year.

Repurchase of shares

On 15 March 2019 the Group announced a share buyback program of EUR 100 million, to reduce the capital outstanding. A total of 2,341,189 shares representing an amount of EUR 46.8 million (including EUR 0.1 million dividend tax) were repurchased in 2019 as part of this program (the previous share buyback program in 2018: 600,441 shares and EUR 16.65 million, including EUR 1.3 million dividend tax).

Shares per balance sheet date

The issued capital as at 31 2019 consists of 135,378,338 ordinary shares (2018: 135,378,338 shares) with a par value of EUR 0.01 each (2018: EUR 0.01) and consequently amounts to EUR 1.4 million (2018: EUR 1.4 million).

23.2 SHARE PREMIUM RESERVE

The share premium reserve consists of additional paid-in capital exceeding the par value of the outstanding shares. The share premium is distributable free of tax.

23.3 RETAINED EARNINGS

Retained earnings consist of additions and distributions based on profit appropriations, effects of changes in accounting principles, losses and movements in the legal reserve. The balance is at the disposal of shareholders. Retained earnings also comprises the unappropriated profit or loss for the current year. A proposal for profit or loss appropriation is disclosed in note 6 of the Company financial statements and is included in Other information.

23.4 DIVIDEND

Royal Boskalis Westminster N.V. announced and distributed the following dividend to holders of ordinary shares:

	2019	2018
Dividend prior year EUR 0.50 respectively EUR 1.00 per ordinary share	**66,999**	130,077
Total dividend distributed	**66,999**	130,077
Stock dividend	**-**	93,788
Cash dividend	**66,999**	36,289
TOTAL DISTRIBUTED DIVIDEND	**66,999**	130,077

In 2019 only cash dividend was distributed to shareholders. An amount of EUR 67 million (2018: EUR 130 million) was distributed and the accompanying dividend tax was paid in 2019.

23.5 EARNINGS PER SHARE

Earnings per share are determined based on the calculation below.

	2019	2018
Earnings per share		
Net group profit/loss (-) attributable to shareholders in thousands of EUR	**74,887**	- 435,850
Weighted average number of shares	**133,248,096**	132,492,433
Earnings per share	**EUR 0.56**	EUR -3.29
Diluted earnings per share		
Weighted average number of shares including dilution effects	**133,248,096**	132,492,433
Diluted earnings per share	**EUR 0.56**	EUR -3.29

The weighted average number of ordinary shares for the financial year is calculated as follows:

(in number of shares)	2019	2018
Issued and fully paid shares at 1 January	**134,067,826**	130,677,293
Weighted effect of new ordinary shares issued due to optional dividend	**-**	1,165,899
Weighted effect of repurchased own ordinary shares due to optional dividend	**-**	1,130,278
Weighted effect of repurchased own ordinary shares	**- 819,730**	- 481,037
Weighted average number of ordinary shares for the financial year	**133,248,096**	132,492,433

23.6 OTHER RESERVES
Movements in other reserves:

	Legal reserves					
	HEDGING RESERVE	REVALUATION RESERVE	CURRENCY TRANSLATION RESERVE	OTHER LEGAL RESERVES	OTHER RESERVES	TOTAL OTHER RESERVES
Note	*[23.6.1]*	*[23.6.2]*	*[23.6.3]*	*[23.6.4]*	*[23.6.5]*	
Balance as at 1 January 2019	**- 11,192**	**101,996**	**231,909**	**132,781**	**- 25,762**	**429,732**
Defined benefit plan actuarial gains/losses (-) and asset limitation, after income tax	**-**	**-**	**-**	**-**	**- 5,970**	**- 5,970**
Foreign currency translation differences for foreign operations, after income tax	**-**	**-**	**22,183**	**-**	**-**	**22,183**
Currency translation differences from joint ventures and associates, after tax	**-**	**-**	**1,326**	**-**	**-**	**1,326**
Effective cash flow hedges, after income tax	**3,217**	**-**	**-**	**-**	**-**	**3,217**
Change in fair value of cash flow hedges from joint ventures and associates, after tax	**- 11,501**	**-**	**-**	**-**	**-**	**- 11,501**
Realization through sale of underlying asset	**-**	**- 21,392**	**-**	**-**	**-**	**- 21,392**
Reclassification relating to settlement of pension plans	**-**	**-**	**-**	**-**	**11,249**	**11,249**
Reclassification of foreign currency differences to statement of profit or loss	**-**	**-**	**- 42,252**	**-**	**-**	**- 42,252**
Reclassification of hedge reserve to statement of profit or loss	**18,955**	**-**	**-**	**-**	**-**	**18,955**
Movement in legal reserve	**-**	**-**	**-**	**- 1,430**	**-**	**- 1,430**
Total movements	**10,671**	**- 21,392**	**- 18,743**	**- 1,430**	**5,279**	**- 25,615**
Balance as at 31 December 2019	**- 521**	**80,604**	**213,166**	**131,351**	**- 20,483**	**404,117**

	Legal reserves					
	HEDGING RESERVE	REVALUATION RESERVE	CURRENCY TRANSLATION RESERVE	OTHER LEGAL RESERVES	OTHER RESERVES	TOTAL OTHER RESERVES
Note	*[23.6.1]*	*[23.6.2]*	*[23.6.3]*	*[23.6.4]*	*[23.6.5]*	
Balance as at 1 January 2018	5,466	101,996	199,777	221,970	- 21,856	507,353
Defined benefit plan actuarial gains/losses (-) and asset limitation, after income tax	-	-	-	-	- 3,906	- 3,906
Foreign currency translation differences for foreign operations, after income tax	-	-	36,349	-	-	36,349
Currency translation differences from joint ventures and associates, after tax	-	-	- 4,217	-	-	- 4,217
Effective cash flow hedges, after income tax	- 16,485	-	-	-	-	- 16,485
Change in fair value of cash flow hedges from joint ventures and associates, after tax	- 173	-	-	-	-	- 173
Movement in legal reserve	-	-	-	- 89,189	-	- 89,189
Total movements	- 16,658	-	32,132	- 89,189	- 3,906	- 77,621
Balance as at 31 December 2018	- 11,192	101,996	231,909	132,781	- 25,762	429,732

Under Dutch law the legal reserves are not available for dividend distribution to shareholders.

23.6.1 HEDGING RESERVE (LEGAL RESERVE)
The hedging reserve comprises the fair value of effective cash flow hedges, not yet realized at the balance sheet date, net of taxation, including results realized on the 'rolling forward' of existing hedges as a result of differences between the duration of the hedges concerned and the underlying cash flows. An amount of EUR 1.0 million (2018: EUR 1.0 million) is included in the hedging reserve relating to discontinued hedges. This will be recognized in the income statement when the future cash flows, that were designated as hedged items, occur. Details about the movements in the hedging reserve are disclosed in note 29.2.

23.6.2 REVALUATION RESERVE (LEGAL RESERVE)

This reserve mainly relates to profit with respect to the revaluation of existing non-controlling interests prior to the recognition of business combinations and book results on contributions in newly formed strategic partnerships. In 2019 an amount of EUR 21.4 million was realized through the sale of the Group's interest in the partnership Saam Smit Towage (EUR 4.4 million) and the sale of the Group's interest in the partnership Kotug Smit Towage (EUR 17.0 million).

23.6.3 CURRENCY TRANSLATION RESERVE (LEGAL RESERVE)

The currency translation reserve comprises all accumulated currency translation differences arising from net investments in foreign operations which are denominated in functional currencies other than the presentation currency used by the Group, including related intragroup financing. These currency translation differences are accumulated as from the IFRS transition date (1 January 2004) and are taken to the Statement of Profit or Loss at disposal or termination of these foreign operations. At the acquisition date of activities (business combinations) with a functional currency other than the euro, the translation reserve of these activities is started at zero.

The cumulative changes of foreign currency instruments used to hedge net investments in foreign operations are included under currency translation reserve for a negative amount of EUR 43.2 million as per 31 December 2019 (31 December 2018: negative amount of EUR 38.1 million); a change of EUR 5.1 million in 2019.

23.6.4 OTHER LEGAL RESERVES

A legal reserve is formed to account for differences between the cost price and the equity value of joint ventures and associates where the Group cannot independently decide on the distribution of dividends, unless such differences are already included in the legal reserve for accumulated currency translation differences on foreign operations.

23.6.5 OTHER RESERVES

Other reserves mainly comprise actuarial movements related to the limitation on net plan assets of defined benefit pension plans and the actuarial gains and losses originating from the difference between the realized and the expected movement in defined benefit obligations and the return on plan assets.

24. INTEREST-BEARING BORROWINGS

	US PRIVATE PLACEMENTS	REVOLVING MULTI-CURRENCY CREDIT FACILITY	OTHER INTEREST-BEARING BORROWINGS	TOTAL 2019	TOTAL 2018
Current	-	-	**282**	**282**	297
Non-current	**283,572**	**150,000**	**4,897**	**438,469**	270,567
Balance as at 1 January	**283,572**	**150,000**	**5,179**	**438,751**	270,864
Movement					
Proceeds	-	-	-	-	154,000
Repayment	-	**- 100,000**	**- 245**	**- 100,245**	- 287
Currency translation differences	**5,230**	-	-	**5,230**	13,649
Other movements	**322**	-	-	**322**	525
Total movements	**5,552**	**- 100,000**	**- 245**	**- 94,693**	167,887
Balance as at 31 December	**289,124**	**50,000**	**4,934**	**344,058**	438,751
Current	-	**50,000**	**255**	**50,255**	282
Non-current	**289,124**	-	**4,679**	**293,803**	438,469
Balance as at 31 December	**289,124**	**50,000**	**4,934**	**344,058**	438,751

As at year-end 2019 US private placements relate to one placement of EUR 289.1 million, calculated at year-end currency rates (year-end 2018: EUR 283.6 million). This placement with a nominal value of USD 325 million, was placed in July 2013. The principal will be repaid after the original duration of ten years. The annual interest rate is 3.66%.

A syndicated revolving multi-currency credit facility was arranged for the Group in 2014 and amounts to EUR 600 million. This credit facility had an original duration of 5 years with two options, executed in 2015 and 2016, respectively and has therefore been extended to 2021. As at 31 December 2019, the group has drawn EUR 50 million under this credit facility (31 December 2018: EUR 150 million).

The Group agreed to comply with a number of customary covenants with the bank syndicate and US private placement holders. Twice a year Boskalis provides a compliance certificate to these lenders, reporting on the covenants for the twelve-month period ending on 30 June and 31 December, respectively. The main financial covenants are a net debt / EBITDA ratio not exceeding 3 and an EBITDA / net interest ratio of at least 4. These covenants are calculated in accordance with definitions agreed with the lenders. In the event that the Group does not meet any of these covenants, the loan may be due immediately. These covenants were met at 31 2019. The net debt / EBITDA ratio was 0.2 (2018: 0.7) and the EBITDA / net interest ratio was 19 (2018: 24).

Interest rates, remaining terms and currencies of the interest-bearing borrowings are disclosed in the explanatory notes to the financial instruments in the interest rate risk paragraph (see note 29.1.3). As at 31 December 2019 the weighted average interest rate for the non-current portion of the interest bearing loans was 3.32% (2018: 2.62%). The non-current portion of interest-bearing borrowings due after more than five years amounted to nil (2018: nil).

25. EMPLOYEE BENEFITS

The liabilities associated with employee benefits consist of liabilities related to defined benefit pension plans and other liabilities relating to a number of defined contribution plans in the Netherlands and other countries as well as jubilee benefits. They amounted to a total of:

		31 DECEMBER	
	Note	**2019**	2018
Defined benefit pension plans	*[25.1]*	**39,523**	32,795
Other liabilities on account of employee benefits		**7,052**	5,507
Liabilities associated with employee benefits		**46,575**	38,302

25.1 DEFINED BENEFIT PENSION PLANS

	DEFINED BENEFIT OBLIGATION	FAIR VALUE PLAN ASSETS	SURPLUS/ DEFICIT (-)	UNFUNDED PENSION LIABILITIES	TOTAL	CHARGED TO CONSOLIDATED STATEMENT OF PROFIT OR LOSS	CHARGED TO CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME
Balance as at 1 January 2019	**178,923**	**150,683**	**- 28,240**	**- 4,555**	**- 32,795**		
Current service expenses	**375**	**-**	**- 375**	**- 52**	**- 427**	**427**	
Past service expenses	**-**	**-**	**-**	**-**	**-**	**-**	
Interest expenses on obligation	**1,797**	**-**	**- 1,797**	**- 77**	**- 1,874**	**1,874**	
Contributions received from the Group	**-**	**2,444**	**2,444**	**-**	**2,444**		
Return on plan assets	**-**	**573**	**573**	**-**	**573**	**- 573**	
Net actuarial results	**22,014**	**14,860**	**- 7,154**	**- 400**	**- 7,554**		**7,554**
Benefits paid	**- 1,765**	**- 1,765**	**-**	**299**	**299**		
Settlement of UK pension fund	**- 97,849**	**- 97,849**	**-**	**-**	**-**	**-**	
Foreign currency exchange rate differences and other changes	**5,576**	**5,655**	**79**	**-**	**79**		
Total movement	**- 69,852**	**- 76,082**	**- 6,230**	**- 230**	**- 6,460**	**1,728**	**7,554**
Balance as at 31 December 2019	**109,071**	**74,601**	**- 34,470**	**- 4,785**	**- 39,255**		
Limitation on net plan assets as at 1 January					**-**		
Movement in limitation net plan assets					**- 268**		**268**
Limitation on net plan assets as at 31 December					**- 268**		
Balance as at 31 December 2019 after limits on net plan assets					**- 39,523**		
Total result defined benefit pension plans					**9,550**	**1,728**	**7,822**

	DEFINED BENEFIT OBLIGATION	FAIR VALUE PLAN ASSETS	SURPLUS/ DEFICIT (-)	UNFUNDED PENSION LIABILITIES	TOTAL	CHARGED TO CONSOLIDATED STATEMENT OF PROFIT OR LOSS	CHARGED TO CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME
Balance as at 1 January 2018	159,058	150,564	- 8,494	- 4,827	- 13,321		
Current service expenses	706	-	- 706	- 48	- 754	754	
Past service expenses	175	-	- 175	-	- 175	175	
Interest expenses on obligation	3,574	-	- 3,574	- 67	- 3,641	3,641	
Contributions received from the Group	-	1,593	1,593	-	1,593		
Return on plan assets	-	3,028	3,028	-	3,028	- 3,028	
Net actuarial results	21,292	1,752	- 19,540	70	- 19,470		19,470
Benefits paid	- 5,373	- 5,373	-	317	317		
Foreign currency exchange rate differences and other changes	- 509	- 881	- 372	-	- 372		
Total movement	19,865	119	- 19,746	272	- 19,474	1,542	19,470
Balance as at 31 December 2018	178,923	150,683	- 28,240	- 4,555	- 32,795		
Limitation on net plan assets as at 1 January					- 15,603		
Movement in limitation net plan assets					15,603		- 15,603
Limitation on net plan assets as at 31 December					-		
Balance as at 31 December 2018 after limits on net plan assets					- 32,795		
Total result defined benefit pension plans					5,409	1,542	3,867

In the Netherlands Boskalis has arranged a pension plan for a large part of its Dutch staff with the Pensioenfonds Grafische Bedrijven (PGB), while other employees in the Netherlands participate in the pension plans of five Dutch multi-employer pension funds or in one of the Dutch insured pension plans. In the Netherlands the tasks and responsibilities of employer, employee and pension provider in relation to pensions are set out in the Dutch Pension Act. The Pension Act stipulates the requirements and conditions that pension plans must comply with, including the requirement of integrating the plan into either a recognized pension fund or with a recognized pension insurance company and also that rights granted must be immediately funded by the employer. The law also sets requirements for the amounts of equity that pension providers should maintain. Compliance with the law is supervised by the Dutch Central Bank (DNB) and the Dutch Financial Markets Authority (AFM). In addition, the Group has a number of foreign pension plans, of which the largest is in the United Kingdom.

Pension plan at Pensioenfonds Grafische Bedrijven

The Group has arranged its pension plan, which is qualified as a defined contribution plan, for the majority of its Dutch staff with Pensioenfonds Grafische Bedrijven, a multi-employer fund. The annual premium contribution by the Group is determined by PGB, based on the actuarial cost of purchasing pension rights on an annual basis. The Group has no obligation to cover any plan deficits, nor are there any specific separate plan assets dedicated to the Group in this pension plan that are managed by PGB. After payment of the annual premium, the Group has no obligation to pay for additional contributions or higher future premiums in the event of a shortfall at PGB, nor if the plan or the fund is terminated. Furthermore, the Group has no entitlement to any surplus in the PGB pension fund. Future cash flows are limited to the payment of future premiums for purchasing (new) rights for the years to come. The premium is influenced by the usual, underlying actuarial assumptions, expected returns and agreed contribution ceiling.

Besides Boskalis, multiple other companies have also arranged their pension plans with PGB. The Group has no direct involvement in the governance of PGB. PGB does not hold specific, segregated pension assets dedicated to the Group. The share of the Boskalis pension plans in total liabilities and assets at PGB is limited.

Dutch multi-employer pension funds

Some of the Dutch staff participate in one of five industry-wide multi-employer pension funds, all within the framework of the Dutch Pension Act as referred to above, of which Bedrijfstak Pensioenfonds Waterbouw is the only one with a proportionately significant premium contribution by Boskalis of 19% (2018: 20%). As at 31 December 2019 the Bedrijfstak Pensioenfonds Waterbouw had a coverage ratio of 112% (2018: greater than 113%).

The Group has no direct involvement in the governance of the multi-employer pension funds. Employers' Associations, of which the Group is a member, designate some of the board members and/or supervisors of the multi-employer pension funds. In addition, the boards also include representatives of employees and retirees, possibly supplemented by one or more independent persons. The pension includes retirement and survivor's pension. These pension funds have indicated they are not able to provide sufficient information for a calculation in accordance with IFRS because there is no reliable and consistent basis to which to attribute the pension obligations, plan assets, and the absolute and relative share of the Group in the fund and to which to allocate income and expenses to the individual member companies of these pension funds. As a result, these defined benefit plans are recognized in these financial statements as a defined contribution plan in accordance with IFRS. In all cases relating to industry-wide multi-employer pension funds, the Group has no obligation whatsoever to pay additional contributions in the case of a deficit in the respective fund, other than paying the annual premium. Nor does the Group have a right to any surpluses in the funds. The premium covers the actuarially determined cost of purchasing the yearly rights for participants. The premium on the basis of the actuarial cost of purchasing rights in years is influenced by customary underlying actuarial assumptions, expected returns and often agreed ceilings. The expected contribution for the coming year is explained below.

Other pension plans

Other pension plans relate to, individually not material, multi-employer pension plans arranged with pension funds in the United Kingdom and insurance companies in the Netherlands, Belgium, the United Kingdom and the United States, as well as to minor unfunded defined benefit plans for two Group companies in Germany. The net defined benefit obligation in the Group's company pension fund in the United Kingdom is transferred by a buy in/buy out transaction to an insurance company early 2019. The pension plans are in compliance with local laws and/or regulations applicable in the aforementioned countries. The Group has no direct and/or significant involvement in the governance of these pension plans. The pension plans are characterized by defined benefit rights over the participant's years of service, which are mainly based on average wages and include retirement and survivor's pension. These pensions are indexed, for the main part with a limit being set to the available contributions and the return on plan assets, respectively. The pension liabilities and pension assets are placed with and managed by the pension funds or insurance companies. The risk for the Group relating to these pensions is therefore limited. The future cash flows for the other arrangements are limited to the actuarially calculated annual premiums based on the cost of purchasing future pension rights. In other funded defined benefit plans there is no enforceable statutory or regulatory direct obligation to cover any deficits to fulfil future actuarial obligations. The contributions are subject to the customary, actuarial assumptions, expected returns and agreed contribution ceiling.

Defined benefit pension plans
As per 2019, the remaining balance of the net defined benefit obligation mainly relates to a closed insured pension plan, for which future cash inflows consist of the Group's entitlement to excess returns achieved by the insurance company and future cash outflows for premiums for price indexation of insured pensions. The net defined benefit obligation for this pension plan is based on an estimate of this future cash outflow for premiums. The Group's entitlement to excess returns is not accounted for as an asset. Both the annual income from excess returns and expense for premiums for price indexation continue to be recognized through the statement of other comprehensive income.

Therefore the expected impact of these remaining defined benefit pension plans on future statements of profit or loss is not significant.

The composition of plan assets is as follows:

	31 DECEMBER	
	2019	2018
Equities	**-**	2,400
Bonds	**70,175**	137,470
Investments quoted in active markets	**70,175**	139,870
Cash (non-interest-bearing)	**494**	917
Other receivables and payables	**3,932**	9,896
Unquoted investments	**4,426**	10,813
TOTAL PLAN ASSETS	**74,601**	150,683

As at 31 December 2019 and 31 December 2018 the plan assets did not include shares issued by Royal Boskalis Westminster N.V.

Pension funds periodically perform asset liability management studies to assess the matching of investment assets with the amount and duration of pension liabilities. Based on the outcome of these studies the nature, mix and duration of assets are regularly adjusted. The average duration of the obligations of the pension plans is about 28 years (2018: 24 years).

The table below presents the pension costs from defined benefit pension plans:

	2019	2018
Total result defined benefit plans	**9,550**	5,409
Pension costs for defined benefit pension plans charged to the consolidated statement of profit or loss	**- 1,728**	- 1,542
Actuarial gains and losses and asset limitation recognized directly in equity	**7,822**	3,867
Income tax	**- 1,852**	39
Actuarial gains and losses and asset limitation recognized directly in equity net of income tax	**5,970**	3,906
Effective return on plan assets	**15,433**	4,780

The pension charges for the main pension plans are predominantly in euros. As a consequence, the exchange rate exposure for pension charges in other currencies is considered not material.

The accumulated actuarial gains and losses and the balance of the limitation on net plan assets amount to:

	2019	2018
Accumulated actuarial gains and losses as at 31 December	**- 26,822**	- 33,017
Asset limitation on net plan assets as at 31 December	**- 268**	-
	- 27,090	- 33,017

In 2020 the Group expects to contribute premiums of EUR 1.6 million (2019: EUR 2.0 million) to funded defined benefit plans and premiums of EUR 0.3 million (2019: EUR 0.3 million) to unfunded defined benefit plans.

The principal actuarial assumptions used for the calculations were:

	2019	2018
Discount rate	**1.20%**	1.97%
Expected future salary increases	**1.00%**	1.00%
Expected future inflation	**1.70%**	1.80%
Expected future pension increases for active participants	**1.00%**	1.01%
Expected future pension increases for inactive participants	**1.00%**	1.00%

Sensitivity to changes in the applied assumptions can be summarized as follows:

Assumptions as at 31 December 2019	Increase of 0.25%	Decrease of 0.25%
Effect on defined benefit obligation		
Change in discount rate	- 6,641	7,257
Change in expected future salary increases	28	- 26
Change in pension increase for active participants	1,850	- 1,761
Change in pension increase for inactive participants	5,179	- 4,813

Assumptions as at 31 December 2018	Increase of 0.25%	Decrease of 0.25%
Effect on defined benefit obligation		
Change in discount rate	- 9,196	10,259
Change in expected future salary increases	2,581	- 2,470
Change in pension increase for active participants	1,758	- 1,663
Change in pension increase for inactive participants	3,843	- 3,580

Historical information:

	2019	2018	2017	2016	2015
Defined benefit obligation	**- 109,071**	- 178,923	- 159,058	- 160,380	- 753,035
Fair value of plan assets	**74,601**	150,683	150,564	153,196	734,794
Surplus / deficit (-)	**- 34,470**	- 28,240	- 8,494	- 7,184	- 18,241
Unfunded pension liabilities	**- 4,785**	- 4,555	- 4,827	- 5,142	- 5,175
Total surplus / deficit (-)	**- 39,255**	**- 32,795**	**- 13,321**	**- 12,326**	**- 23,416**

The reduction of defined benefit obligations and the fair value of plan assets in 2019 mainly relates to the settlement of the UK defined benefit plan in 2019. The reduction in 2016 mainly related to the settlement of two defined benefit plans in 2016.

25.2 DEFINED CONTRIBUTION PENSION PLANS

In 2020 the Group expects to contribute an amount of EUR 42.0 million (2019: EUR 41.0 million) to premiums for defined contributions plans. This concerns contributions to defined contribution pension plans and pension plans arranged with multi-employer pension funds, which are accounted for as defined contribution pension plans in these financial statements, in accordance with IFRS.

26. PROVISIONS

	ONEROUS CONTRACTS	WARRANTIES	RESTRUCTURING	OTHER	TOTAL 2019	TOTAL 2018
Balance as at 1 January	**18,471**	**19,356**	**8,524**	**9,912**	**56,263**	39,356
Provisions made during the year	**44,320**	**3,458**	**3,636**	**9,407**	**60,821**	26,273
Provisions used during the year	**- 11,629**	**-**	**- 4,847**	**- 912**	**- 17,388**	- 7,101
Provisions reversed during the year	**-**	**- 3,159**	**- 474**	**- 638**	**- 4,271**	- 2,262
Exchange rate differences and other movements	**199**	**1**	**- 67**	**47**	**180**	- 3
Balance as at 31 December	**51,361**	**19,656**	**6,772**	**17,816**	**95,605**	56,263
Current	**51,361**	**2,630**	**5,941**	**380**	**60,312**	28,404
Non-current	**-**	**17,026**	**831**	**17,436**	**35,293**	27,859
Balance as at 31 December	**51,361**	**19,656**	**6,772**	**17,816**	**95,605**	56,263

The provision for onerous contracts includes provisions for unfavorable contracts with customers, mainly of the segment Offshore Energy.

Restructuring provisions relate mainly to the restructuring of the head office.

Other provisions mainly relate to various claims made against the Group or threatening to be made including potential sanctions, from legal, regulatory and governmental proceedings or uncertain repayment liabilities. The Group disputes these claims and proceedings and has made an assessment of the amount of cash outflows that can be reasonably estimated. As litigation is inherently unpredictable, the possible outcome is uncertain and the amount may differ from the provisions listed above.

27. LEASES

The Group has lease contracts for real estate, vessels and other assets. The lease period for these contracts varies from 1 to 40 years, in certain cases, mainly relating to rent of (parts of) buildings, with extension options. The Right-of-use assets and Lease liabilities as disclosed below, do not include short term and low value leases. In general, as usual with leases, the Group's obligations under its leases are secured by the lessor's title to or legal ownership of the leased assets.

27.1 RIGHT-OF-USE ASSETS

Movement in right-of-use assets as from 1 January 2019 (reference is made to notes 2.3 and 3.33):

	LAND AND BUILDINGS	FLOATING AND OTHER CONTRUCTION EQUIPMENT	OTHER FIXED ASSETS	TOTAL
Balance as at 1 January 2019				
Cost	**44,978**	**15,714**	**20,337**	**81,029**
Accumulated depreciation charges	**-**	**-**	**-**	**-**
Carrying amount	**44,978**	**15,714**	**20,337**	**81,029**
Movements				
Additions	**23,382**	**10,442**	**10,632**	**44,456**
Depreciation	**- 9,885**	**- 8,492**	**- 8,912**	**- 27,289**
Acquired through business combinations	**6,063**	**-**	**-**	**6,063**
Currency translation differences and other movements	**- 115**	**129**	**- 396**	**- 382**
	19,445	**2,079**	**1,324**	**22,848**
Balance as at 31 December 2019				
Cost	**74,308**	**26,285**	**30,573**	**131,166**
Accumulated depreciation charges	**- 9,885**	**- 8,492**	**- 8,912**	**- 27,289**
Carrying amount	**64,423**	**17,793**	**21,661**	**103,877**

27.2 LEASE LIABILITIES

Movement in lease liabilities as from 1 January 2019 (reference is made to notes 2.3 and 3.33):

	2019
Balance as at 1 January	**81,029**
Additions	**44,456**
Accretion of interest	**1,808**
Payments	**- 23,818**
Assumed in business combinations	**6,063**
Currency translation differences and other movements	**- 1,225**
Balance as at 31 December	**108,313**
Current	**24,285**
Non-current	**84,028**
Balance as at 31 December	**108,313**

The total lease cash out flows for leases are EUR 24.8 million in the year, including the payments relating to short term and low value lease leases (reference is made to note 8).
Interest rates, remaining terms and currencies of the lease liabilities are disclosed in the explanatory notes to the financial instruments in the interest rate risk paragraph (see note 29.1.3).

28. TRADE AND OTHER PAYABLES

	31 DECEMBER	
	2019	2018
Trade payables	**222,422**	176,248
Taxes and social security payables	**34,950**	36,310
Amounts due to joint ventures and associates	**12,972**	4,299
Other creditors and accruals	**731,525**	822,157
	1,001,869	1,039,014

The trade and other payables are generally not interest-bearing.

29. FINANCIAL INSTRUMENTS

GENERAL

Pursuant to the financial policy pursued by the Board of Management, the Group and its Group companies use several financial instruments in the ordinary course of business. The policy with respect to financial instruments is disclosed in more detail in the Corporate Governance section in the Annual Report. The Group's financial instruments are cash and cash equivalents, trade and other receivables, interest-bearing loans and bank overdrafts, trade and other payables and derivatives. The Group enters into derivatives transactions, mainly foreign currency forward contracts, foreign currency options and to a limited extent interest rate swaps, solely to hedge against the related risks. The Group's policy is not to trade in derivatives.

29.1 FINANCIAL RISK MANAGEMENT

The Group has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk, consisting of: currency risk, interest rate risk and price risk

29.1.1 CREDIT RISK

The Group has a strict acceptance and hedging policy in place for credit risks resulting from payment and political risks. Credit risks are usually covered by bank guarantees, insurance, advance payments, etc., except where the risk pertains to creditworthy, first class debtors. Credit risk procedures and the geographical and other diversification of the operations of the Group reduce the risk with regard to credit concentration.

Exposure to 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. Credit risk arises principally from the Group's unbilled revenue, trade and other receivables. The Group's exposure to credit risk is mainly determined by the characteristics and location of each individual customer.

A large part of the Group's contracting activities within the Dredging & Inland Infra and Offshore Energy operational segments is directly or indirectly performed on behalf of state-controlled authorities and oil and gas producers (or contractors thereof) in various countries and geographical areas. Salvage receivables (part of Towage & Salvage) are mainly outstanding with shipping companies and their Protection & Indemnity Associations (or 'P&I clubs'). The creditworthiness of new customers is individually analyzed before payment and delivery terms and conditions are offered. The same applies for contracting activities with clients the Group has done business with previously, even if business has been done for many years. The Group's review may include external credit ratings, if available, and bank references. Customers that fail to meet the Group's creditworthiness criteria may only transact with the Group on the basis of adequate credit insurance, prepayment or a bank guarantee. In general there is a healthy diversification of receivables from different customers in several countries in which the Group performs its activities. Ongoing credit assessments are performed on the financial condition of accounts receivable. The credit history of the Group over recent years indicates that credit losses are insignificant compared to the level of activity. Therefore, management is of the opinion that credit risk is adequately controlled by the currently applicable procedures.

The maximum credit risk as at the balance sheet date, without taking into account the aforementioned financial risk coverage policy and instruments, consists of the carrying amounts of the financial assets as stated below.

	31 DECEMBER	
	2019	2018
Other non-current receivables	**9,214**	1,377
Trade receivables	**378,489**	330,324
Amounts due from joint ventures and associates	**5,927**	27,143
Other receivables and prepayments	**317,796**	307,140
Derivatives	**9,290**	6,367
Income tax receivable	**23,502**	19,457
Cash and cash equivalents	**399,574**	336,207
	1,143,792	1,028,015

The maximum credit risk on trade receivables by operational segment was as follows as at the reporting date:

	31 DECEMBER	
	2019	2018
Dredging & Inland Infra	**205,466**	198,924
Offshore Energy	**21,785**	97,465
Towage & Salvage	**147,907**	29,119
Holding & Eliminations	**3,331**	4,816
	378,489	330,324

Loss allowances relate to the expected credit loss (ECL) on unbilled revenue 0.1% (2018: 0.4%) and trade receivables. For unbilled revenue, the ECL is incorporated in the valuation of (unbilled) revenue. The aging of trade receivables as at 31 December was as follows:

	2019			2018		
	Gross	**Credit loss**	**Credit loss in %**	**Gross**	**Credit loss**	**Credit loss in %**
Not past due	**249,609**	**- 174**	**0.1%**	186,101	- 748	0.4%
Past due 0 - 90 days	**83,361**	**- 86**	**0.1%**	110,461	- 927	0.8%
Past due 90 - 180 days	**18,683**	**- 173**	**0.9%**	25,318	- 717	2.8%
Past due 180 - 360 days	**20,594**	**- 13,049**	**63.4%**	2,465	- 376	15.3%
More than 360 days	**34,706**	**- 14,982**	**43.2%**	18,596	- 9,849	53.0%
	406,953	**- 28,464**		342,941	- 12,617	
Credit loss / Impairment	**- 28,464**			- 12,617		
Trade receivables at book value	**378,489**			330,324		

Loss allowances relate to the expected credit loss (ECL) based on the characteristics of the customers, the aging of the receivables, the performance of the Group credit risk management policy and any convincing forward-looking information. Aging and local payment practices and the legal terms applicable for payments in the respective jurisdiction are relevant to the Group's policy on writing off receivables.

The movement in the loss allowances in respect of trade receivables during the year was as follows:

	2019	2018
Balance as at 1 January based on incurred losses	**12,617**	14,320
Adjustment due to first application of IFRS 9	**-**	153
Balance as at 1 January based on expected losses method	**12,617**	14,473
Provisions made during the year	**19,705**	3,515
Provisions used during the year	**- 1,143**	- 3,372
Provisions reversed during the year	**- 2,976**	- 2,689
Currency exchange rate differences	**261**	690
	15,847	- 1,856
Balance as at 31 December	**28,464**	12,617

At 1 January 2018 the Group reassessed its loss allowances for trade receivables based on the expected loss method according to IFRS 9. In 2017 loss allowances were calculated based on the incurred loss method in IAS 39.

Concentration of credit risk of customers

As at the reporting date there was no concentration of credit risk with any customers.

Credit risk cash and cash equivalents

The Group had cash and cash equivalents of EUR 400 million at 31 December 2019 (2018: EUR 336 million), representing its maximum credit risk exposure on these assets. The cash and cash equivalents are held with bank and financial institution counterparties with investment grade credit ratings.

29.1.2 LIQUIDITY RISK

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due.

The Group's approach to managing liquidity is aimed at ensuring that it will have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions. Liquidity projections including available credit facilities are incorporated in the regular management information reviewed by the Board of Management. The focus of the liquidity review is on the net financing capacity, being free cash (see note 22) plus available credit facilities in relation to financial liabilities (see note 24). The total of free cash and available credit facilities at year-end amounted to EUR 0.9 billion (2018: EUR 0.6 billion). Furthermore, based on the Group's financial ratios it can be concluded that the Group has significant debt capacity available under an (implied) investment grade credit profile.

The following are the contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements:

As at 31 December 2019	Book value	Contractual cash flows	One year or less	1 - 5 years	More than 5 years
US private placements	**289,124**	**326,955**	**10,597**	**316,358**	**-**
Revolving multi-currency credit facility	**50,000**	**50,000**	**50,000**	**-**	**-**
Other interest-bearing borrowings	**4,934**	**5,814**	**607**	**5,207**	**-**
Bank overdrafts	**29,775**	**29,829**	**29,829**	**-**	**-**
Lease liabilities	**108,313**	**120,512**	**25,969**	**46,071**	**48,472**
Trade and other payables	**1,001,869**	**1,001,869**	**1,001,869**	**-**	**-**
Income tax payable	**146,094**	**146,094**	**146,094**	**-**	**-**
Derivatives	**12,570**	**12,570**	**5,584**	**6,986**	**-**
	1,642,679	**1,693,643**	**1,270,549**	**374,622**	**48,472**

As at 31 December 2018	Book value	Contractual cash flows	One year or less	1 - 5 years	More than 5 years
US private placements	283,572	331,124	10,405	320,719	-
Revolving multi-currency credit facility	150,000	151,125	750	150,375	-
Other interest-bearing borrowings	5,179	6,979	642	6,337	-
Bank overdrafts	28,330	28,986	28,986	-	-
Trade and other payables	1,039,014	1,039,014	1,039,014	-	-
Income tax payable	150,719	150,719	150,719	-	-
Derivatives	13,136	13,136	11,435	1,701	-
	1,669,950	1,721,083	1,241,951	479,132	-

29.1.3 MARKET RISK

Market risk concerns the risk that Group income or the value of investments in financial instruments is adversely affected by changes in market prices, such as currency exchange rates, interest rates and fuel prices. The objective of managing market risks is to keep the market risk position within acceptable boundaries while achieving the best possible return.

Currency risk

The presentation currency of the Group is the euro. A number of Group companies (the most important of which being Dockwise) and substantial joint ventures and associates (Smit Lamnalco, Keppel Smit Towage, Asian Lift and up to the sale; Saam Smit Towage) have other functional currencies than the euro. The main other currency is the US dollar (the functional currency of the Dockwise, Smit Lamnalco and up to the sale; Saam Smit Towage) and to a lesser extent the Pound Sterling and Singapore dollar. The revenue and expenses of these companies are largely or entirely based on their functional currency, other than the euro. In 2019 Group companies, joint ventures and associates with a functional currency other than the euro contributed approximately 30% (2018: 20%) to Group revenue, 35% (2018: 35%) to the operating result excluding impairment charges and 30% (2018: 30%) to EBITDA.

The Board of Management has defined a policy to control foreign currency risk based on the hedging by Group companies of material transactions in foreign currencies other than the functional currency. The policy is that these Group companies hedge any material currency risks resulting from operational transactions in currencies other than their functional currency. This is mainly relevant for Group companies involved in dredging or offshore energy projects. The functional currency of a large part of the activities of Group companies is the euro. The expenses of these companies are mainly presented in euros and to a lesser extent in the local currency of the country in which the activities are undertaken. The Group contracts projects mainly in euro, US dollar, Pound Sterling and other currencies pegged to the US dollar.

The Group only uses derivative financial instruments to hedge underlying business transactions, mainly future cash flows from contracted projects. In most cases forward currency contracts are used to hedge foreign currency cash flows. Also, cash / bank overdraft balances are sometimes used to hedge currency exposures from future cash flows. The same currency and quantity are designated to the hedge, resulting in a one-on-one relationship and in principle in a hedge ratio of one. The Group tests the economic relationship of the hedges periodically.

Exposure to currency risk
The Group's currency risk management policy was maintained in 2019 and resulted in a non-material sensitivity of the Group to currency transaction risk.

The following significant exchange rates applied during the year under review:

	Average rate		**Spot rate as at 31 December**	
Euro	**2019**	2018	**2019**	2018
US Dollar	**1.121**	1.180	**1.123**	1.143
Pound Sterling	**0.876**	0.886	**0.847**	0.898
Singapore Dollar	**1.527**	1.590	**1.509**	1.558

Currency translation risk
Currency translation risk arises mainly from the net asset position of net investments in foreign operations. Investments are viewed from a long-term perspective. Currency risks associated with such net investments in foreign operations are not hedged by means of derivatives based on the assumption that currency fluctuations and interest rate and inflation developments balance out in the long run. Items in the statement of profit or loss of these subsidiaries are translated at average exchange rates. Currency translation differences are charged or credited directly to equity.

At the reporting date the net investments in foreign operations were as follows:

	31 DECEMBER	
Euro	**2019**	2018
US dollar	**711,374**	746,524
Pound Sterling	**75,256**	92,665
Singapore dollar	**95,554**	107,346
	882,184	946,535

The Group has mitigated its currency translation risk by formally designating its US Private Placement loan (see note 24), amounting to USD 325 million (EUR 289 million as at 31 December 2019), for its remaining duration, as a hedge for some of its USD net investments in foreign operations. Consequently, the currency loss of EUR 5.2 million on this loan is accounted for in Currency translation differences on foreign operations (see note 23.6.3), partly offsetting the currency result on the translation of Group investments.

For the 2019 financial year, profit before tax, excluding the effect of non-effective cash flow hedges would have been EUR 2.1 million lower (2018: EUR 3.6 million lower) if the corresponding functional currency had strengthened by 5% in comparison to the euro, with all other variables, in particular interest rates remaining constant. This would have been mainly as a result of currency exchange effects on translation of the result of the above-mentioned net investments in foreign operations denominated in US dollars. The total impact on the currency translation reserve would have been around EUR 46 million positive (2018: approximately EUR 49 million positive). A 5% weakening of the corresponding functional currency against the euro at year-end would have had the same but opposite effect, assuming that all other variables had remained constant.

Currency transaction risk, excluding interest-bearing financing
The currency transaction risk resulting from future operational transactions in currencies other than the group company's functional currency can be summarized as follows:

Euro	**2019**	2018
Expected cash flows in US dollars	**291,640**	275,885
Expected cash flows in Australian dollars	**- 6,157**	- 6,158
Expected cash flows in Pounds Sterling	**49,099**	45,735
Expected cash flows in Indian rupees	**15,359**	13,760
Expected cash flows in Swedish kroners	**17,858**	34,593
Expected cash flows in Euros	**-**	- 1,675
Expected cash flows in other currencies	**17,274**	17,365
Expected cash flows	**385,073**	379,505
Cash flow hedges	**- 375,810**	- 372,070
Net position	**9,263**	7,435

Sensitivity analysis
Due to the fact that expected future cash flows in foreign currencies are hedged, the sensitivity of financial instruments, excluding interest-bearing financing, to foreign currency risk is limited for the Group. The Group is mainly funded by interest-bearing borrowings denominated in US dollars (see note 24 'Interest-bearing borrowings'). The US Private Placements expressed in US dollars are used to partly hedge the net investments in Dockwise and Fairmount, including the intercompany financing provided. Therefore and due in part to hedge accounting, the sensitivity in the profit or loss account is limited for financing in currencies other than the euro.

Interest rate risk
The Group has mainly fixed interest rate liabilities and a revolving multi-currency facility with a variable interest rate. With a view to managing interest rate risks, the policy is that interest rates for loans payable are in principle primarily fixed for the entire maturity period. This is achieved by contracting loans that carry a fixed interest rate and/or by using derivatives such as interest rate swaps.

The interest rates and maturity profiles of interest-bearing loans, lease liabilities, deposits and cash and cash equivalents are stated below.

As at 31 December 2019	**Interest rate**	**One year or less**	**1 - 5 years**	**Over 5 years**	**Total**
Cash and cash equivalents	**0.00%**	**375,900**	**-**	**-**	**375,900**
Short-term deposits	**1.61%**	**23,674**	**-**	**-**	**23,674**
US Private Placements (USD)	**3.66%**	**-**	**- 289,124**	**-**	**- 289,124**
Revolving multi-currency credit facility (EUR)	**1.00%**	**- 50,000**	**-**	**-**	**- 50,000**
Other interest-bearing borrowings (EUR)	**7.13%**	**- 255**	**- 4,679**	**-**	**- 4,934**
Lease liabilities	**1.79%**	**- 24,285**	**- 47,462**	**- 36,566**	**- 108,313**
Bank overdrafts	**0.36%**	**- 29,775**	**-**	**-**	**- 29,775**
		295,259	**- 341,265**	**- 36,566**	**- 82,572**

As at 31 December 2018	**Interest rate**	**One year or less**	**1 - 5 years**	**Over 5 years**	**Total**
Cash and cash equivalents	0.00%	311,740	-	-	311,740
Short-term deposits	2.68%	24,467	-	-	24,467
US Private Placements (USD)	3.66%	-	- 283,572	-	- 283,572
Revolving multi-currency credit facility (EUR)	0.50%	-	- 150,000	-	- 150,000
Other interest-bearing borrowings (EUR)	6.95%	- 282	- 4,897	-	- 5,179
Bank overdrafts	2.32%	- 28,330	-	-	- 28,330
		307,595	- 438,469	-	- 130,874

The US Private Placements and some of the cash and cash equivalents, short-term deposits and other interest-bearing borrowings have fixed interest rates.

Sensitivity analysis
In managing interest rate risks the Group aims to reduce the impact of short-term fluctuations on Group earnings. In the long term, however, permanent changes in interest rates have an impact on profit.

At the reporting date the interest rate profile of the Group's interest-bearing financial instruments was:

	2019	2018
FIXED RATE INSTRUMENTS (INCLUDING LEASES)		
Financial assets	**-**	-
Financial liabilities	**- 402,371**	- 288,751
	- 402,371	- 288,751
VARIABLE RATE INSTRUMENTS		
Financial assets	**399,574**	336,207
Financial liabilities	**- 79,775**	- 178,330
	319,799	157,877

A drop of 100 basis points, insofar as possible, in interest rates at 31 December 2019 would have had no material impact on the Group's profit before income tax (2018: no material impact), with all other variables, in particular currency exchange rates, remaining constant. A rise of 100 basis points in interest rates at 31 December 2019 would also have had no material impact on the Group's profit before income tax (2018: no material impact), with all other variables, in particular currency exchange rates, remaining constant.

Price risks
Risks related to price developments on the purchasing side which are usually borne by the Group, for example developments in wages, costs of materials, sub-contracting costs and fuel, are also taken into account when preparing cost price calculations and tenders. Price index clauses are included in contracts wherever possible, especially on projects that extend over a long period of time.

The Board of Management has established a fuel price risk management policy stipulating, amongst other things, approved fuel price risk management instruments based on items such as the amount of fuel costs and the execution period of projects in excess of thresholds. In the event of changes to a project timeline, the Group evaluates the situation to ensure compliance with its risk management objectives and assesses whether a rollover of its position or an adjustment to the hedge is applicable. At year-end 2019 outstanding derivates hedged the price risk of approximately 51,000 tons of gasoil (2018: 18,400 tons) and 1,500 tons of High-Sulphur Fuel Oil (2018: 30,400 tons).

29.2 ON-BALANCE FINANCIAL INSTRUMENTS AND FAIR VALUE

Financial instruments accounted for under assets and liabilities are financial fixed assets, cash and cash equivalents, receivables, and current and non-current liabilities. Derivatives are mainly future cash flows hedged by forward contracts to which hedge accounting is applied.

The fair value of forward exchange contracts is based on their listed market price (unadjusted market prices in active markets for identical assets and liabilities) or discounted cash flows based on relevant conditions and durations of the contracts and including public interest rates for comparable instruments as at the balance sheet date, taking into account the credit risk of the counterparty. The fair value of other financial instruments is based on quoted prices or the actual interest rate as at the balance sheet date, taking into account terms and maturity. The fair value of non-interest-bearing financial instruments with a maturity of twelve months or less is deemed to be equal to their book value.

The fair value of the majority of the financial instruments does not differ materially from the book value, with the exception of a number of loans and other payables with a fixed rate. The fair value of these instruments is disclosed below.

The carrying amount, fair value and the related hierarchy of derivatives and interest-bearing borrowings with fixed interest rates are:

	As at 31 December 2019			As at 31 December 2018		
	CARRYING AMOUNT	**FAIR VALUE**	**HIERARCHY**	CARRYING AMOUNT	FAIR VALUE	HIERARCHY
Assets						
Non-current derivatives	**6,015**	**6,015**	**2**	683	683	2
Current derivatives	**3,275**	**3,275**	**2**	5,684	5,684	2
Liabilities						
Non-current derivatives	**- 6,986**	**- 6,986**	**2**	- 1,701	- 1,701	2
Current derivatives	**- 5,584**	**- 5,584**	**2**	- 11,435	- 11,435	2
Interest-bearing borrowings with fixed interest rates	**- 294,058**	**- 306,753**	**3**	- 288,751	- 293,160	3

Derivatives relate to foreign currency forward contracts used to hedge expected foreign currency cash inflows, with the exception of EUR 0.2 million (2018: EUR 60 thousand) of the current assets and EUR 0.2 million (2018: EUR 2.5 million) of the current liabilities that relate to expected cash outflows for fuel costs.

An amount of EUR 289.1 million (2018: EUR 283.6 million) of the carrying amount of the interest-bearing borrowings with fixed interest rates are designated to net investment hedges.

Derivatives

The composition of notional amounts of the outstanding derivatives (that are allocated in a hedge accounting relation) at year-end is presented below.

2019	**WITHIN ONE YEAR**	**AFTER ONE YEAR**	**TOTAL**
USD forward selling (in US dollar)	**- 336,936**	**- 61,663**	**- 398,599**
USD forward buying (in US dollar)	**53,964**	**38,811**	**92,775**
Forward selling of other currencies (average contract rates in EUR)	**- 87,353**	**- 22,028**	**- 109,381**
Forward buying of other currencies (average contract rates in EUR)	**39,220**	**14,836**	**54,056**
Fuel hedges (in MT)	**27,153**	**25,536**	**52,689**

2018	**WITHIN ONE YEAR**	**AFTER ONE YEAR**	**TOTAL**
USD forward selling (in US dollar)	- 304,188	- 31,654	- 335,842
USD forward buying (in US dollar)	20,044	3,060	23,104
Forward selling of other currencies (average contract rates in EUR)	- 157,852	- 14,547	- 172,399
Forward buying of other currencies (average contract rates in EUR)	75,077	-	75,077
Fuel hedges (in MT)	40,047	9,925	49,972

The average rate of the USD forward contracts as per 31 December 2019 is USD 1.142 (31 December 2018: USD 1.198).

The Board of Management has established a currency risk management policy stipulating, amongst other things, approved currency risk management instruments, based on items such as the amount of expected foreign currency cash flows and the period of these cash flows related to Group currency risk thresholds. In the event of changes to a project timeline and related foreign currency cash flows, the Group evaluates the circumstances to ensure compliance with its risk management objectives and assesses whether a rollover of its position or an adjustment to the hedge is applicable.

The economic relationship between the hedged risk and the assigned derivative is determined by their critical terms. In general the Group uses the same underlying volume and currency of the hedged risk for the derivative, which results in a 1:1 hedge ratio. Limited ineffectiveness occurs in these hedge relationships due to changes in the timing of the hedged transactions. The remaining time to maturity of these derivatives is directly linked to the remaining time to duration of the related underlying contracts in the order book.

Cash flows from forward currency buying and selling can be rolled forward at the settlement date if they differ from the underlying cash flows.

The results on cash flow hedges recognized in Group equity are as follows:

	2019	2018
Hedging reserve as at 1 January	**- 11,192**	5,466
Movement in fair value of cash flow hedges recognized in Group equity	**- 1,437**	- 12,971
Recycled to the Consolidated Statement of Profit or Loss (raw materials, consumables, services and subcontracted work)	**5,185**	- 7,445
Total directly recognized in Group Equity (Consolidated Statement of Other Comprehensive Income, in the item Movement in fair value of cash flows hedges)	**3,748**	- 20,416
Taxation	**- 531**	3,931
Directly charged to hedging reserve (net of taxes)	**3,217**	- 16,485
Change in fair value of cash flow hedges from joint ventures and associates, after taxation	**- 11,501**	- 173
Reclassification of hedge reserve to Statement of Profit or Loss	**18,955**	-
	7,454	- 173
Balance of hedging reserve as at 31 December	**- 521**	- 11,192

Any spot elements of the hedges that are separated from the forward element and basic spread elements are included separately in the hedging reserve. At 31 December 2019 the cost of hedging was EUR 5.4 million negative (2018: EUR 6.2 million positive). During 2019, a decrease of EUR 12.0 million transcends a release of EUR 0.3 million (2018: EUR 7.4 million and a release of EUR 1.2 million respectively).

The results on non-effective cash flow hedges are presented within the costs of raw materials, consumables, services and subcontracted work and amount to EUR 0.4 million positive in 2019 (2018: EUR 2.1 million negative).

The changes in fair values used to assess the effectiveness of the hedge relationships are as follows:

	Derivatives		**Hedged risk**	
	2019	2018	**2019**	2018
USD	**1,271**	- 18,251	**- 2,740**	17,256
Other, including fuel hedges	**1,212**	- 9,270	**- 354**	8,869

Netting of financial instruments
The Group does not net financial instruments in its statement of financial position.

29.3 CAPITAL MANAGEMENT

The Board of Management's policy is to maintain a strong capital base so as to maintain customer, investor, creditor and market confidence and to support the future development of the business. The Board of Management monitors the return on equity, which the Group defines as net operating income divided by total shareholders' equity, excluding minority interests. The Board of Management also monitors the level of dividend to be paid to holders of ordinary shares. For the dividend policy, see the Shareholders Information in the Annual Report.

The Board of Management seeks to maintain a balance between the higher returns that might be possible with higher levels of borrowings and the benefits of a sound capital position. The Group's target is to achieve a long-term return on equity of at least 12%. In 2019 the return was 3.0% (2018: 15.7% negative, adjusted for after-tax extraordinary charges, including those within joint ventures, the return on equity for 2018 was 3.0% positive).

There were no changes in the Group's approach to capital management during the year. Neither the Group nor any Group companies are subject to externally imposed capital requirements.

The Group's solvency calculated as the ratio of total liabilities (EUR 2,102 million, 2018: EUR 1,992 million) to Group equity (EUR 2,495 million; 2018: EUR 2,548 million) amounted to 0.84 (2018: 0.78) at the reporting date.

29.4 OTHER FINANCIAL INSTRUMENTS

By decision of the General Meeting of Shareholders held on 9 May 2001 the foundation Stichting Continuïteit KBW (the 'Foundation') was granted the right to acquire cumulative protective preference shares in Royal Boskalis Westminster N.V. for an amount equal to the nominal amount of the ordinary shares outstanding at the time of issue of the shares concerned, minus the nominal value of one ordinary share. This right qualifies as a derivative financial liability and is subject to the following important conditions. The cumulative protective preference shares shall only be issued to the Foundation against payment of at least one fourth of the nominal sum. Additional payments on cumulative protective preference shares shall only take place after Royal Boskalis Westminster N.V. will have called these payments. After the issue of cumulative protective preference shares to the Foundation, Royal Boskalis Westminster N.V. is obliged, if the Foundation so requires, to reverse the issue by buyback or by cancellation with repayment, at the discretion of Foundation. The dividend regarding the cumulative protective preference shares, if issued, is equal to the average of the Euribor interest, calculated for loans with a term of one year – pro rata the number of days to which such percentage applied – during the financial year for which the distribution is made, plus a maximum of four percentage points. The lastly mentioned increase shall be determined by the Board of Management, subject to the approval of the Supervisory Board. The interest and credit risk is limited. The fair value of the option right is zero. The option of issuing such cumulative protective preference shares was not exercised during the period under review.

30. COMMITMENTS AND CONTINGENT LIABILITIES

Short term and low value lease obligations
At 31 December 2019 the Group has short term and low value lease obligations for EUR 772 thousand, EUR 447 thousand is payable within one year or less and EUR 325 thousand is payable between one and five years.

In 2018 the Group had operational lease obligations for an amount of EUR 86,526 thousand, which related to payments within one year of EUR 23,065 thousand, between one and five years for EUR 43,250 thousand and after more than five years EUR 20,211 thousand. The 2019 amounts are impacted by the implementation of IFRS 16 (reference is made to note 2.2 and 3.33 in these financial statements).

Guarantees
The guarantee commitments as at 31 December 2019 amounted to EUR 857 million (2018: EUR 691 million) and can be specified as follows:

	2019	2018
Guarantees provided with respect to:		
Joint ventures	**57,400**	61,300
Contracts and joint operations	**798,400**	628,300
Lease obligations and other financial obligations	**1,400**	1,400
	857,200	691,000

The above-mentioned guarantees outstanding as at 31 December 2019 refer to guarantees and counter guarantees provided to financial institutions for approximately EUR 856 million (2018: approximately EUR 690 million). At year-end 2019, 35 key Group companies were jointly and severally liable in respect of credit facilities and guarantees provided to several Group companies. In respect of these facilities, it has been agreed to limit the provision of further securities on existing property, plant and equipment.

Group companies are jointly and severally liable for the non-consolidated part of the liabilities of their joint operations amounting to EUR 178 million (2018: EUR 151 million). Group companies are also jointly and severally liable for performance obligations for contracts with third parties in project-driven construction consortiums. In addition, certain recourse obligations exist in respect of project financiers and guarantees of deployment relating to equipment. Where deemed necessary, provisions have been made.

In principle the Group does not provide parent company guarantees to its subsidiaries, other than for commercial reasons. Group companies have filed declarations of joint and several liability for a number of subsidiaries with the Chamber of Commerce.

Capital commitments
As at 31 December 2019 capital expenditure and acquisition commitments amounted to EUR 162 million (year-end 2018: EUR 162 million).

Capital contribution obligations
On behalf of the Group, financial institutions have provided bank guarantees for the amount of the capital contribution obligations as disclosed as part of the aforementioned guarantees and counter guarantees.

Other
Several legal proceedings and investigations, including regulatory and other governmental, are regularly instituted against (entities of) Royal Boskalis Westminster N.V. Tax positions are, inherently to operating internationally and across borders, in certain cases uncertain. Accruals resp. provisions were made where deemed necessary if a reliable estimate of the future cash outflows could be made. Dutch companies form part of a fiscal unity. The companies are therefore liable for the tax obligations of the fiscal unity as a whole.

31. RELATED PARTIES

31.1 IDENTITY OF RELATED PARTIES

The identified related parties of the Group are its Group companies, joint ventures, associates (see note 17), shareholders with significant influence, pension funds that are classified as funded defined benefit pension plans in accordance with IAS 19 and the members of the Supervisory Board and Board of Management. There were no significant changes to the companies and people related to the Group other than the following:

- A stake of 62.5% was acquired in Horizon as per 21 February 2019;
- The Group acquired the offshore activities of Bohlen & Doyen GmbH on 1 April 2019;
- The stake in SAAone PPP B.V. was sold in 2019;
- Share in Kotug Smit Towage was sold on 1 Augustus 2019;
- Share in Saam Smit Towage was sold on 30 October 2019;
- Mr. C. van Noort was appointed as a member of the Board of Management in the role of CFO at the General Meeting of Shareholders on 8 May 2019;
- Mr. J.H. Kamps resigned as CFO and member of the Board of Management at the General Meeting of Shareholders on 8 May 2019;
- Ms. J.A. Tammenoms Bakker was appointed as a member of the Supervisory Board at the General Meeting of Shareholders on 8 May 2019;
- Mr. D.A. Sperling was appointed as a member of the Supervisory Board at the General Meeting of Shareholders on 8 May 2019;
- Mr. C. van Woudenberg resigned as a member of the Supervisory Board at the General Meeting of Shareholders on 8 May 2019.

GROUP COMPANIES

The following are the most relevant active Group companies, presented in accordance with the operational segment (division) where the respective entity primarily performs and reports on its activities.

COMPANY	CITY	COUNTRY	2019	2018
DREDGING & INLAND INFRA				
Boskalis Dredging & Inland Infra Holding B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Environmental B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis International B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Nederland B.V.	Rotterdam	The Netherlands	**100%**	100%
Boskalis Nederland Infra B.V.	Rotterdam	The Netherlands	**100%**	100%
Boskalis Secundaire Grondstoffen B.V.	Rotterdam	The Netherlands	**100%**	100%
Boskalis Transport B.V.	Rotterdam	The Netherlands	**100%**	100%
Boskalis Westminster International B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Westminster Shipping B.V.	Papendrecht	The Netherlands	**100%**	100%
BW Marine B.V.	Papendrecht	The Netherlands	**100%**	100%
BW Soco B.V.	Papendrecht	The Netherlands	**100%**	100%
Cofra B.V.	Amsterdam	The Netherlands	**100%**	100%
Hydronamic B.V.	Papendrecht	The Netherlands	**100%**	100%
J. van Vliet B.V.	Amsterdam	The Netherlands	**100%**	100%
MNO Grond- Weg- en Waterbouw B.V.	Rotterdam	The Netherlands	**100%**	100%
MNO Vervat B.V.	Nieuw-Vennep	The Netherlands	**-**	100%
Zandwinningsbedrijf Ahoy B.V.	Rotterdam	The Netherlands	**-**	100%
Zinkcon Dekker B.V.	Papendrecht	The Netherlands	**-**	100%
HDC Wasserbau Nord GmbH	Hamburg	Germany	**100%**	100%
Heinrich Hirdes GmbH	Bremen	Germany	**100%**	100%
Heinrich Hirdes EOD Services GmbH	Hamburg	Germany	**100%**	100%
Heinrich Hirdes Kampfmittelräumung GmbH	Hamburg	Germany	**100%**	100%
Boskalis Westminster Limited	Fareham	United Kingdom	**100%**	100%
Cofra Limited	Fareham	United Kingdom	**100%**	100%
Rock Fall Company Limited	Fareham	United Kingdom	**100%**	100%
Westminster Dredging (Overseas) Limited	Fareham	United Kingdom	**100%**	100%
Westminster Gravels Limited	Fareham	United Kingdom	**100%**	100%
Boskalis Denmark ApS	Copenhagen	Denmark	**100%**	100%
Irish Dredging Company Limited	Cork	Ireland	**100%**	100%
Atlantique Dragage SARL	Saint Germain en Laye	France	**100%**	100%
Sociedad Española de Dragados S.A.	Madrid	Spain	**100%**	100%
Boskalis Italia S.r.l. Unipersonale	Rome	Italy	**100%**	100%
Terramare Oy	Helsinki	Finland	**100%**	100%
Boskalis Sweden AB	Goteborg	Sweden	**100%**	100%
Boskalis Polska Sp. Zo.o	Szczecin	Poland	**100%**	100%

COMPANY	CITY	COUNTRY	2019	2018
Boskalis S.R.L.	Constanta	Romania	**100%**	100%
Terramare Eesti OÜ	Tallinn	Estonia	**100%**	100%
Limited Liability Company "Boskalis"	St. Petersburg	Russian Federation	**100%**	100%
Boskalis Dredging & Inland Infra Holding Limited	Limassol	Cyprus	**100%**	100%
Boskalis Westminster Contracting Limited	Limassol	Cyprus	**100%**	100%
BW Marine (Cyprus) Limited	Limassol	Cyprus	**100%**	100%
Boskalis Maroc s.a.r.l.	Tangier	Morocco	**100%**	100%
Boskalis do Brasil Dragagem e Serviços Maritímos Ltda	Rio de Janeiro	Brazil	**100%**	100%
Stuyvesant Environmental Contracting, LLC	Wilmington	United States of America	**100%**	100%
Stuyvesant Projects Realization, Inc.	Wilmington	United States of America	**100%**	100%
Boskalis Canada Dredging & Marine Service Ltd	Vancouver	Canada	**100%**	100%
Boskalis Marine Contracting and Offshore Services S.A. de C.V.	Veracruz	Mexico	**100%**	100%
Dragamex S.A. de CV	Mexico City	Mexico	**100%**	100%
Boskalis Panama S.A.	Panama City	Panama	**100%**	100%
Boskalis Guyana Inc.	Georgetown	Guyana	**100%**	100%
Boskalis International Uruguay S.A.	Montevideo	Uruguay	**100%**	100%
Dravensa C.A.	Caracas	Venezuela	**100%**	100%
Boskalis East Africa Limited	Nairobi	Nigeria	**100%**	100%
Nigerian Westminster Dredging and Marine Limited	Lagos	Nigeria	**60%**	60%
Boskalis Westminster Contracting FZE	Lekki	Nigeria	**100%**	100%
BKI Gabon S.A.	Libreville	Gabon	**100%**	100%
Boskalis International Maldives Private Limited	Male	Maldives	**100%**	100%
Boskalis Mozambique Limitada	Maputo	Mozambique	**100%**	100%
Boskalis Westminster Oman LLC *	Seeb	Oman	**49%**	49%
Boskalis Westminster Al Rushaid Co Ltd. *	Al Khobar	Saudi Arabia	**49%**	49%
Boskalis Australia Pty Ltd	Perth	Australia	**100%**	100%
Boskalis International (S) Pte Ltd	Singapore	Singapore	**100%**	100%
Koon Zinkcon Pte Ltd *	Singapore	Singapore	**50%**	50%
P.T. Boskalis International Indonesia	Jakarta	Indonesia	**100%**	100%
Boskalis Smit India LLP	Mumbai	India	**100%**	100%
Boskalis Philippines Inc.	Pasay City	Philippines	**100%**	100%
OFFSHORE ENERGY				
Black Marlin B.V.	Papendrecht	The Netherlands	**100%**	100%
Blue Marlin B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Holding I (dollar) B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Holding II (dollar) B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Contracting B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Fleet Management B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Heavy Marine Transport B.V. (formerly Dockwise Shipping B.V.)	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Holding B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore International B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore International Holding B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Marine Contracting B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Marine Services B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Shipping B.V. (formerly Fairstar Fjord B.V.)	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Subsea Contracting B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Offshore Subsea Services (Europe) B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Subsea Cables B.V. (formerly VBMS B.V.)	Papendrecht	The Netherlands	**100%**	100%
BW Marine (NL) B.V.	Papendrecht	The Netherlands	**100%**	100%
Dockwise B.V.	Papendrecht	The Netherlands	**100%**	100%
Dockwise Vanguard B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairmount Alpine B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairmount Expedition B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairmount Glacier B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairmount Marine B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairmount Sherpa B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairmount Summit B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairstar Finesse B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairstar Fjell B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairstar Forte B.V.	Papendrecht	The Netherlands	**100%**	100%
Fairstar Heavy Transport N.V.	Papendrecht	The Netherlands	**100%**	100%
Offshore Equipment B.V.	Papendrecht	The Netherlands	**100%**	100%
Stemat Beheer B.V.	Papendrecht	The Netherlands	**100%**	100%
Stemat Holding B.V.	Papendrecht	The Netherlands	**100%**	100%

COMPANY	CITY	COUNTRY	2019	2018
Stemat Support Services B.V.	Papendrecht	The Netherlands	**100%**	100%
Talisman B.V.	Papendrecht	The Netherlands	**-**	100%
Target B.V.	Papendrecht	The Netherlands	**100%**	100%
Treasure B.V.	Papendrecht	The Netherlands	**-**	100%
Triumph B.V.	Papendrecht	The Netherlands	**100%**	100%
Trustee B.V.	Papendrecht	The Netherlands	**100%**	100%
VBMS Holding B.V.	Papendrecht	The Netherlands	**100%**	100%
White Marlin B.V.	Papendrecht	The Netherlands	**100%**	100%
Dockwise Transport N.V.	Curacao	Curacao	**-**	100%
Boskalis Offshore Belgium N.V. (formerly Unie van Redding- en Sleepdienst N.V.)	Antwerp	Belgium	**100%**	100%
Boskalis Offshore Marine Services N.V.	Antwerp	Belgium	**-**	100%
Boskalis Offshore Transport Services N.V.	Antwerp	Belgium	**100%**	100%
Dredging & Contracting Belgium N.V.	Overijse	Belgium	**100%**	100%
Boskalis Offshore GmbH	Hamburg	Germany	**100%**	100%
Boskalis Offshore International GmbH	Wilhelmshaven	Germany	**100%**	100%
Boskalis Offshore Subops GmbH	Wilhelmshaven	Germany	**100%**	100%
VBMS GmbH	Wilhelmshaven	Germany	**100%**	100%
Boskalis Offshore Limited	Hoddesdon	United Kingdom	**100%**	100%
Boskalis Subsea Limited (formerly VBMS (UK) Limited)	Hoddesdon	United Kingdom	**100%**	100%
Gardline Limited	Great Yarmouth	United Kingdom	**100%**	100%
Gardline Shipping Limited	Great Yarmouth	United Kingdom	**100%**	100%
VBMS ApS	Copenhagen	Denmark	**100%**	100%
Boskalis Offshore AS	Stavanger	Norway	**100%**	100%
Boskalis Offshore Subsea Contracting Azerbaijan LLC	Baku	Azerbaijan	**100%**	100%
Boskalis Offshore Contracting El Salvador S.A. de C.V.	San Salvador	El Salvador	**100%**	-
Boskalis Offshore Subsea Services (Middle East) L.L.C.*	Dubai	United Arab Emirates	**49%**	49%
Boskalis Offshore Singapore Pte. Ltd. (formerly Smit Tak Heavy Lift (S) Pte. Ltd.)	Singapore	Singapore	**100%**	100%
Smit Holding Singapore Pte. Ltd.	Singapore	Singapore	**100%**	100%
Smit Shipping Singapore Pte. Ltd.	Singapore	Singapore	**100%**	100%
Smit Singapore Pte. Ltd.	Singapore	Singapore	**100%**	100%
TOWAGE & SALVAGE				
SMIT Salvage B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Towage Brasil B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Towage Europe B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Towage Holding B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Towage Mexico B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Towage Terminals B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Salvage Pte. Ltd.	Singapore	Singapore	**100%**	100%
Smit Marine South Africa (Pty) Ltd.	Cape Town	South Africa	**100%**	100%
Smit Salvage Americas, LLC	Houston	United States	**100%**	100%
HOLDING & ELIMINATIONS				
Baggermaatschappij Boskalis B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Finance B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Holding B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Marine Infrastructure Investments B.V.	Papendrecht	The Netherlands	**-**	100%
Boskalis Westminster Dredging B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Internationale Beheer B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Internationale N.V.	Papendrecht	The Netherlands	**100%**	100%
Smit International Overseas B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Nederland B.V.	Papendrecht	The Netherlands	**100%**	100%
Smit Vessel Management Services B.V.	Papendrecht	The Netherlands	**100%**	100%
Boskalis Germany Holding GmbH	Hamburg	Germany	**100%**	100%
UAB "Boskalis Baltic"	Klaipeda	Lithuania	**100%**	100%
B.K.W. Dredging & Contracting Limited	Nicosia	Cyprus	**100%**	100%
Boskalis Westminster Dredging Limited	Limassol	Cyprus	**100%**	100%

* The Group holds a legal interest of 50% or less in these entities, but has the majority of voting power. As a consequence, the Group consolidates these subsidiaries in accordance with the principles of financial reporting set out in paragraph 3.

OTHER RELATED PARTIES

Joint ventures and associates

The main active joint ventures and associates are mentioned in note 17.

Pension plans classified as funded defined benefit pension plans
See note 25.1 for information on pension plans that are classified as funded defined benefit pension plans in accordance with IAS 19. There were no changes and further material transactions with these pension funds as disclosed in this note.

Members of the Board of Management and members of the Supervisory Board
The only key management officers qualifying as related parties are the members of the Board of Management and the members of the Supervisory Board.

31.2 RELATED PARTY TRANSACTIONS

Joint ventures and associates
Transactions with joint ventures and associates as part of regular business take place under normal business conditions at arm's length. In 2019 these transactions regarding sales and purchases amounted to EUR 7.3 million and EUR 24.2 million, respectively (2018: EUR 6.7 million and EUR 20.3 million, respectively). Amounts receivable from and amounts payable to joint ventures and associates were EUR 5.9 million and EUR 13.0 million, respectively (2018: EUR 27.1 million and EUR 4.3 million, respectively).

Transactions with members of the Board of Management and members of the Supervisory Board
The remuneration of current and former members of the Board of Management and Supervisory Board of the Company in 2019 and 2018 were as follows:

	ANNUAL SALARIES AND REMUNERATION	EMPLOYER'S PENSION CONTRIBUTIONS	SHORT-TERM AND LONG-TERM VARIABLE REMUNERATION PAID*	OTHER REIMBURSE-MENTS	TOTAL*	2018*
Members of the Board of Management						
Dr. P.A.M. Berdowski	**870**	**301**	**694**	**28**	**1,893**	1,935
T.L. Baartmans	**630**	**188**	**449**	**30**	**1,297**	1,299
B.H. Heijermans (from 1 September 2018)	**487**	**133**	**57**	**8**	**685**	185
J.H. Kamps (up to and including 8 May 2019)	**225**	**67**	**696**	**10**	**998**	1,296
C. van Noort (from 8 May 2019)	**313**	**68**	**-**	**17**	**398**	-
	2,525	**757**	**1,896**	**93**	**5,271**	4,715
Members of the Supervisory Board						
J. van der Veer	**71**			**2**	**73**	67
J.M. Hessels (up to and including 9 May 2018)	**-**			**-**	**-**	25
Ms. I. Haaijer	**49**			**2**	**51**	53
H.J. Hazewinkel	**60**			**2**	**62**	57
J.P. de Kreij (from 9 May 2018)	**52**			**2**	**54**	33
D.A. Sperling (from 8 May 2019)	**34**			**2**	**36**	-
Ms. J.A. Tammenoms Bakker (from 8 May 2019)	**32**			**2**	**34**	-
J. N. van Wiechen	**56**			**2**	**58**	58
C. van Woudenberg (up to and including 8 May 2019)	**20**			**1**	**21**	57
	374			**15**	**389**	350
Total 2019	**2,899**	**757**	**1,896**	**108**	**5,660**	
Total 2018	2,453	578	1,931	103		5,065

* The EU-IFRS expenses for the members of the Board of Management deviate from the remuneration as disclosed in the table above. The EU-IFRS short-term and long-term variable remuneration expenses as charged to the statement of profit or loss include, in addition to the paid variable remuneration as disclosed above the changes in the accrued expenses for future payments of variable remuneration and amount for Dr. P.A.M. Berdowski to EUR 950 thousand, for Mr. T.L. Baartmans to EUR 600 thousand, for Mr. B.H. Heijermans to EUR 371 thousand, for Mr. J.H. Kamps to nil and for Mr. C. van Noort EUR 263 thousand and which adds up to EUR 2,184 thousand (2018: EUR 1,551 thousand). The total EU-IFRS remuneration expense for Dr. P.A.M. Berdowski amounts to EUR 2,149 thousand, for Mr. T.L. Baartmans to EUR 1,448 thousand, for Mr. B.H. Heijermans to EUR 999 thousand, for Mr. J.H. Kamps to EUR 302 thousand and for Mr. C. van Noort to EUR 661 thousand, which adds up to EUR 5,559 thousand in total (2018: EUR 4,335 thousand).

Employer's pension contributions
Employer's pension contributions include the pension compensation for salaries exceeding EUR 108 thousand, as well as the pension premiums paid (EUR 26 thousand per person).

Long-term incentive plan
The members of the Board of Management participate in long-term (three-year) incentive plans, which are based partly on the development of the share price of the ordinary shares of Boskalis and partly on the realization of certain objectives, which are defined by the Supervisory Board and are in line with the strategic agenda and the objectives of Boskalis.

The variable remuneration paid in 2019 is related to the achievement of certain targets during the 2018 financial year (short-term variable remuneration: EUR 866 thousand) and the achievement of certain targets during the 2016 - 2018 period (long-term variable remuneration: EUR 1.030 thousand).

Multi-year overview of variable remuneration
The following variable remuneration was granted to the members of the Board of Management with regard to the years 2017, 2018 and 2019:

	Year of payment		
	2020	2019	2018
Dr. P.A.M. Berdowski	**934**	694	859
T.L. Baartmans	**608**	449	536
B.H. Heijermans (from 1 September 2018)	**278**	57	-
J.H. Kamps (up to and including 8 May 2019)	**-**	696	536
C. van Noort (from 8 May 2019)	**185**	-	-
Total	**2,005**	1,896	1,931

Balance sheet position
On 31 December 2019 the Group recognized a liability in the balance sheet item Trade and other payables of EUR 1.9 million (2018: EUR 2.1 million) relating to the long-term incentive plans for the periods 2017 – 2019, 2018 – 2020 and 2019 – 2021.

31.3 JOINT OPERATIONS

The Group has activities in the Dredging & Inland Infra and Offshore Energy operational segments through joint operations which are not related parties as defined in IFRS. Legally these joint operations comprise project-driven construction consortiums. In joint operations joint control is established by contract and the Group has rights to the assets and is liable for the debts of the operations. An amount of EUR 666 million of Group revenue was realized through joint operations (2018: EUR 547 million). The balance sheet of the Group holds current assets of EUR 304 million (2018: EUR 261 million), including cash and cash equivalents (refer to note 22) and an amount of EUR 271 million (2018: EUR 250 million) of current liabilities that was included on a pro-rata basis in accordance with the Group's interest in these joint operations. Temporary and other surpluses and shortages in the financing of a joint operation are withdrawn or financed by the partners in the joint operation. At year-end 2019, Group companies owed joint operations an amount of EUR 168.8 million (2018: EUR 152.9 million) and held EUR 132.4 million (2018: EUR 131.6 million) in receivables from joint operations. Similar to contracts of Group companies, guarantees are also provided for contracts of joint operations by the Group or one of its Group companies. The guarantee commitments regarding joint operations are disclosed in note 30 as part of the guarantee commitments relating to contracts and joint ventures. Group companies are jointly and severally liable for the non-consolidated part of the liabilities of their joint operations which are disclosed in note 29. The guarantees provided are predominantly backed up by comparable receivables from the clients of the joint operations, reducing the Group's exposure.

The table below shows the legal share in the major joint operations (project driven construction consortiums) in which the Group is involved:

COMPANY	COUNTRY	2019	2018
DREDGING & INLAND INFRA			
Boskalis Van Oord Pluit City JV V.O.F.	The Netherlands	**50%**	50%
BPL Beton	The Netherlands	**50%**	50%
BPL Wegen	The Netherlands	**50%**	50%
Combinatie BadhoeverBogen V.O.F.	The Netherlands	**20%**	20%
Combinatie BaggerIJ	The Netherlands	**50%**	50%
Combinatie Houtribdijk V.O.F.	The Netherlands	**50%**	50%
Combinatie IJburg	The Netherlands	**80%**	80%
Combinatie IJsselweide	The Netherlands	**50%**	50%
Combinatie Isala Delta	The Netherlands	**50%**	50%
Combinatie Ommelanderdiek	The Netherlands	**70%**	70%
Combinatie Regenboog V.O.F.	The Netherlands	**38%**	38%
Combinatie Tessel	The Netherlands	**70%**	70%
MSB Grind & Zand V.O.F	The Netherlands	**33%**	33%
Projectorganisatie Uitbreiding Maasvlakte (PUMA)	The Netherlands	**50%**	50%
SAAone EPCM Bouwcombinatie V.O.F.	The Netherlands	**30%**	30%
SAAone GWW V.O.F.	The Netherlands	**50%**	50%
Unie van Marken V.O.F.	The Netherlands	**70%**	70%
ZSNH Combinatie Van Oord/Boskalis V.O.F.	The Netherlands	**50%**	50%
Boskalis Jan de Nul - Dragagens E Afins LDA	Angola	**50%**	50%
Bahia Blanca	Argentina	**50%**	50%
Fehmarn Belt Contractors I/S	Denmark	**50%**	50%
NMDC-Boskalis-Van Oord-Jan de Nul Consortium for Suez Canal Project	Egypt	**25%**	25%
BSI – JDN Joint - Venture	India	**51%**	51%
Ras Laffan Port Extension	Qatar	**50%**	50%
Penta-Ocean Koon DI Boskalis Ham JV (Jurong 4)	Singapore	**17%**	17%
Boskalis / Penta-Ocean Joint Venture	Singapore	**51%**	51%
Penta-Ocean / Hyundai / Boskalis JV	Singapore	**30%**	30%
Consorcio Boskalis-Dredging International	Uruguay	**50%**	50%
OFFSHORE ENERGY			
Boskalis Offshore AS - Tideway V.O.F.	The Netherlands	**50%**	50%
JV North Sea Link	The Netherlands	**50%**	50%
Nord Stream 2 Rock Joint Venture	The Netherlands	**50%**	50%
Thames JV	The Netherlands	**50%**	50%
Tideway-Boskalis JV	The Netherlands	**50%**	50%
V.O.F. Tideway B.V. - Boskalis Offshore Subsea Contracting B.V	The Netherlands	**50%**	50%
VBNK Borssele V.O.F.	The Netherlands	**50%**	50%
Vulcan & Viking JV	The Netherlands	**50%**	50%

32. SUBSEQUENT EVENTS

ACQUISITION OF HORIZON

In 2019 the Group's share of 62.5% in Horizon was recognized as a joint venture. In January 2020 the Group obtained the remaining 37.5% of the outstanding shares and voting rights in Horizon, expanding its share in Horizon from 62.5% to 100%. This transaction is classified as a business combination. The Group paid an amount of EUR 45 million in cash to Horizon's other shareholder. Following this transaction, Boskalis will be able to optimize its successful and expanding position in the marine geophysical and geotechnical survey market. Horizon will continue to focus on its traditionally strong market position in the Middle East and Northwest Europe with opportunities to expand into the emerging offshore wind market in the Far East making it highly complementary to the position already held by Boskalis through Gardline in Northwest Europe and on the East Coast of the United States. Due to the short time lag between acquisition date and reporting date the fair value of identifiable assets acquired (which include receivables) and liabilities assumed has not yet been determined. This, together with the determination of goodwill, will take place before the next reporting date (interim results 2020).

COMPANY STATEMENT OF PROFIT OR LOSS

(in thousands of EUR)	Note	2019	2018
OPERATING INCOME			
Other operating income	[8]	**6,005**	5,821
		6,005	5,821
OPERATING EXPENSES			
Other operating expenses	[8]	**- 6,005**	- 5,821
		- 6,005	- 5,821
PROFIT/LOSS (-) BEFORE TAXATION		**-**	-
Result of group company	[3]	**74,887**	- 435,850
NET PROFIT/LOSS (-)		**74,887**	- 435,850

COMPANY STATEMENT OF FINANCIAL POSITION

(BEFORE PROFIT APPROPRIATION)

		31 DECEMBER	
(in thousands of EUR)	Note	2019	2018
ASSETS			
Non-current assets			
Investments in group companies	[3]	**2,484,865**	2,544,020
		2,484,865	2,544,020
Current assets			
Amounts due from group companies		**6,487**	306
		6,487	306
Total assets		**2,491,352**	2,544,326
EQUITY AND LIABILITIES			
Shareholders' equity			
Issued capital	[4]	**1,354**	1,354
Share premium	[4]	**636,968**	636,968
Other legal reserves	[5]	**131,351**	132,781
Hedging reserve	[5]	**- 521**	- 11,192
Revaluation reserve	[5]	**80,604**	101,996
Currency translation reserve	[5]	**213,166**	231,909
Other reserves	[5]	**- 20,483**	- 25,762
Retained earnings		**1,374,026**	1,912,122
Profit/loss (-) for the year	[6]	**74,887**	- 435,850
		2,491,352	2,544,326
Total equity and liabilities		**2,491,352**	2,544,326

STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY

(in thousands of EUR)	Note	Balance as at 1 January 2019	Repurchase own ordinary shares	Cash dividend	Stock dividend	Movement retained earnings	Other movements	Total recognized income and expenses	Balance as at 31 December 2019
Issued capital	[4]	1,354			-				1,354
Share premium	[4]	636,968			-				636,968
		638,322			-				638,322
Other legal reserves	[5]	132,781					- 1,430	-	131,351
Hedging reserve	[5]	- 11,192					-	10,671	- 521
Revaluation reserve	[5]	101,996					- 21,392	-	80,604
Currency translation reserve	[5]	231,909					-	- 18,743	213,166
Other reserves	[5]	- 25,762					11,249	- 5,970	- 20,483
Retained earnings		1,912,122	- 46,820			- 502,849	11,573	-	1,374,026
		2,341,854	- 46,820			- 502,849	-	- 14,042	1,778,143
Profit/loss (-) appropriation 2018		- 435,850		- 66,999	-	502,849		-	-
Net profit/loss (-) 2019		-		-	-	-		74,887	74,887
Profit/loss (-) for the year	[6]	- 435,850		- 66,999	-	502,849		74,887	74,887
Shareholders' equity		2,544,326	- 46,820	- 66,999	-	-	-	60,845	2,491,352

(in thousands of EUR)	Note	Balance as at 1 January 2018	Repurchase own ordinary shares	Cash dividend	Stock dividend	Movement retained earnings	Other movements	Total recognized income and expenses	Balance as at 31 December 2018
Issued capital	[4]	1,334			20				1,354
Share premium	[4]	636,988			- 20				636,968
		638,322			-				638,322
Other legal reserves	[5]	221,970					- 89,189	-	132,781
Hedging reserve	[5]	5,466					-	- 16,658	- 11,192
Revaluation reserve	[5]	101,996					-	-	101,996
Currency translation reserve	[5]	199,777					-	32,132	231,909
Other reserves	[5]	- 21,856					-	- 3,906	- 25,762
Retained earnings		1,725,386	- 16,633			114,180	89,189	-	1,912,122
		2,232,739	- 16,633			114,180	-	11,568	2,341,854
Profit/loss (-) appropriation 2017		150,469		- 36,289	-	- 114,180		-	-
Net profit/loss (-) 2018		-		-	-	-		- 435,850	- 435,850
Profit/loss (-) for the year	[6]	150,469		- 36,289	-	- 114,180		- 435,850	- 435,850
Shareholders' equity		3,021,530	- 16,633	- 36,289	-	-	-	- 424,282	2,544,326

EXPLANATORY NOTES TO THE COMPANY FINANCIAL STATEMENTS

1. GENERAL

The company financial statements of Royal Boskalis Westminster N.V. (the 'Company') are included in the Consolidated Financial Statements 2019 of Royal Boskalis Westminster N.V.

2. PRINCIPLES OF FINANCIAL REPORTING

2.1 ACCOUNTING POLICIES

The company financial statements have been drawn up using the reporting standards applied for preparing the consolidated financial statements, in accordance with Section 362(8), Part 9 of Book 2 of the Dutch Civil Code except for the investment in its subsidiary. Based on Section 362(1), Part 9 of Book 2 of the Dutch Civil Code, the consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union. These accounting principles are disclosed in note 3 of the consolidated financial statements, unless stated otherwise below.

2.2 FORMAT

Unless stated otherwise, all amounts in these explanatory notes are stated in thousands of euros. The company statement of financial position is drawn up before profit appropriation.

2.3 INVESTMENTS IN GROUP COMPANIES

Investments in Group companies are accounted for using the accounting policies for assets, liabilities, provisions and profit or loss, as described in the principles of financial reporting and applied in the consolidated financial statements of Royal Boskalis Westminster N.V.

2.4 AMOUNTS DUE FROM GROUP COMPANIES

Amounts due from Group companies are stated initially at fair value and subsequently at amortized cost, using the effective interest rate, less impairments.

2.5 AMOUNTS DUE TO GROUP COMPANIES

Amounts due to Group companies are recognized initially at fair value and subsequently at amortized cost, using the effective interest rate.

2.6 RESULT OF GROUP COMPANY

Result of Group company consists of the share of the Company in the result after taxation of its Group company. Results on transactions, where the transfer of assets and liabilities between the Company and its participating interests, and mutually between participating interests themselves, are not incorporated as far as they can be deemed to be unrealized.

3. INVESTMENTS IN GROUP COMPANIES

Investments in Group companies solely consist of the 100% investment in Boskalis Westminster Dredging B.V., Papendrecht. The table below shows the movements in this investment:

	2019	2018
Balance as at 1 January	**2,544,020**	3,020,710
Adjustment to first-time application of IFRS 9	**-**	- 1,408
Dividend received	**- 120,000**	- 51,000
Profit/loss (-) for the year	**74,887**	- 435,850
Movements directly recognized in equity of group company	**- 14,042**	11,568
Balance as at 31 December	**2,484,865**	2,544,020

See notes 17 and 31.1 of the Consolidated Financial Statements 2019 for an overview of the most important directly and indirectly held Group companies.

4. ISSUED CAPITAL AND OPTIONAL DIVIDEND

The authorized share capital of EUR 4.8 million (2018: EUR 4.8 million) is divided into 240,000,000 (2018: 240,000,000) ordinary shares with a par value of EUR 0.01 (2018: EUR 0.01) each and 80,000,000 (2018: 80,000,000) cumulative protective preference shares with a par value of EUR 0.03 (2018: EUR 0.03) each.

In 2019 a dividend of EUR 0,50 per share was distributed relating to the 2018 financial year for a total amount of EUR 67,0 million. Dividend to all shareholders was in cash. As a result no new ordinary shares were issued related to distributed dividend. A total of 2,341,189 shares were repurchased through the share buyback program (2018: 600,441).

(in number of ordinary shares)	**2019**	2018
Issued and fully paid shares entitled to dividend as at 1 January	**134,067,826**	130,677,293
Repurchased shares	**- 2,341,189**	- 600,441
Stock dividend	**-**	3,990,974
Issued and fully paid shares entitled to dividend as at 31 December	**131,726,637**	134,067,826
Treasury stock	**3,651,701**	1,310,512
Issued and fully paid shares as at 31 December	**135,378,338**	135,378,338

The issued capital as at 31 December 2019 consisted of 135,378,338 ordinary shares with a par value of EUR 0.01 each (2018: EUR 0.01) for a total amount of EUR 1.4 million (2018: EUR 1.4 million). On 15 March 2019 the Group announced a share buyback program, to reduce the capital outstanding. A total of 2,341,189 million shares representing an amount of EUR 46.8 million (including EUR 0.1 million dividend tax) were repurchased in 2019 as part of this program. The Stichting Continuïteit KBW received an option right to acquire cumulative protective preference shares in Royal Boskalis Westminster N.V. This option has not been exercised yet. Share premium comprises additional paid-in capital exceeding the par value of outstanding shares. Share premium is distributable free of tax.

5. OTHER RESERVES

With regard to the difference between the cost price and equity value of joint ventures and associates recognized in accordance with the equity method, a legally required reserve is recognized due to a lack of control over the distribution of profits, only to the extent that these differences are not included in the accumulated currency translation differences on foreign operations. The legal reserve for non-distributed profits of group and/or joint ventures and associates amounted to EUR 131.4 million at the end of 2019 (2018: EUR 132.8 million). The legal reserve for joint ventures and associates is determined on an individual basis.

The other reserves recognized in the company balance sheet are disclosed in the notes to the consolidated financial statements (note 23.6).

6. PROFIT OR LOSS FOR THE YEAR

An amount of EUR 9.2 million will be added to the retained earnings. The proposal to the Annual General Meeting will be to appropriate the remainder, EUR 65.7 million for a dividend payment to the shareholders of EUR 0.50 per ordinary share. The proposed dividend will be made payable in cash.

7. FINANCIAL INSTRUMENTS

General
Pursuant to its use of financial instruments, the Group is exposed to credit risk, liquidity risk and market risk. The notes to the consolidated financial statements provide information on the Group's exposure to each of these risks, its objectives, principles and procedures for managing and measuring these risks, as well as group capital management. These risks, objectives, principles and procedures for managing and measuring these risks as well as capital management apply mutatis mutandis to the company financial statements of Royal Boskalis Westminster N.V.

Fair value
The fair value of the majority of the financial instruments presented in the balance sheet, including receivables, securities, cash and cash equivalents and current liabilities are close to their carrying value.

8. OPERATING INCOME AND EXPENSES

Other operation expenses comprise the remuneration of the members of the Board of Management and members of the Supervisory Board for a total amount of EUR 5.7 million (2018: EUR 5.1 million) (see note 31.2) as well as other third party expenses of EUR 0.3 million (2018: EUR 0.7 million). Other operating expenses are borne by Group companies and these are reported as Other operating income.

9. REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT AND MEMBERS OF THE SUPERVISORY BOARD

The remuneration of members of the Board of Management and members of the Supervisory Board is disclosed in the consolidated financial statements under Related party transactions (note 31.2).

10. AUDITOR REMUNERATION

Ernst & Young Accountants LLP and its entire network charged the following fees to the Company and its subsidiaries:

	2019			2018		
	Ernst & Young Accountants LLP	**Other EY network**	**Total**	Ernst & Young Accountants LLP	Other EY network	Total
Audit of the financial statements	**2,158**	**458**	**2,616**	2,338	458	2,796
Other audit engagements	**53**	**15**	**68**	51	8	59
Tax advisory services	**-**	**490**	**490**	-	259	259
Other non-audit services	**-**	**-**	**-**	-	-	-
	2,211	**963**	**3,174**	2,389	725	3,114

In addition to the statutory audit of the financial statements, Ernst & Young Accountants LLP provided the following services:

- Audits of financial statements of group entities;
- Services in accordance with ISA 800 'Audits of financial statements prepared in accordance with special purpose framework';
- Services in accordance with ISA 2400 'Engagements to review historical financial statements';
- Services in accordance with ISA 3000 'Assurance engagements other than audits or reviews of historical financial information';
- Services in accordance with ISA 4400 'Engagements to perform agreed upon procedures'.

11. COMMITMENTS AND CONTINGENT LIABILITIES

Royal Boskalis Westminster N.V. heads a fiscal unity. The Company is therefore liable for the tax obligations of the fiscal unity as a whole.

The Company has arrangements with third parties, amongst which banks and pension funds. These arrangements are on behalf of Group companies. Because the risks and rewards are with these Group companies, the costs are charged to these companies and the liabilities are recognized by these companies. The Company is jointly and severally liable for the fulfillment of obligations.

Certain recourse obligations exist in respect of project financing. Where necessary, provisions are deemed to have been made.

Some legal proceedings and investigations are ongoing with respect to entities of Royal Boskalis Westminster N.V. Where necessary, provisions are deemed to have been made.

Papendrecht / Sliedrecht, 4 March 2020

Supervisory Board
J. van der Veer, chairman
H.J. Hazewinkel, deputy chairman
Ms. I. Haaijer
J.P. de Kreij
D.A. Sperling
Ms. J.A. Tammenoms Bakker
J.N. van Wiechen

Board of Management
dr. P.A.M. Berdowski, chairman
T.L. Baartmans
B.H. Heijermans
C. van Noort, CFO

PROVISIONS IN THE ARTICLES OF ASSOCIATION RELATING TO PROFIT APPROPRIATION

ARTICLE 27.

1. If possible, from the profits gained in any financial year shall first be paid on the cumulative protective preference shares the percentage, defined below, of the amount that was required to be paid on those shares at the start of the financial year to which the distribution pertains. The percentage meant above is equal to the average of the Euribor interest, calculated for loans with a term of one year – pro rata the number of days to which such percentage applied – during the financial year for which the distribution is made, plus a maximum of four percentage points; the lastly mentioned increase shall be determined by the board of directors, subject to the approval of the supervisory board. If, in the financial year for which the abovementioned distribution is made, the amount that was required to be paid on the cumulative protective preference shares has been decreased or – as a result of a resolution to require additional payments – raised, the distribution will be decreased or – if possible – increased, respectively, by an amount that is equal to the aforementioned percentage of the amount of the decrease or increase, respectively, calculated from the time of the decrease or the time the additional payment became obligatory, respectively. If, in the course of any financial year, cumulative protective preference shares have been issued, the dividend on those cumulative protective preference shares will be decreased pro rata until the day of issue, counting part of a month as a whole month.
2. If and to the extent the profits are not sufficient to allow for the distribution referred to in paragraph 1 in full, any shortfall shall be paid out of the reserves with due observance of the provisions of the law.
3. In case in any financial year the profits referred to in paragraph 1 are not sufficient to allow for the distributions referred to in this article above, and no distributions or only partial distributions are made from the reserves as referred to in paragraph 2, as a result of which the shortfall is not or not fully paid out, the conditions in this article above and in the following paragraphs will only apply in the following financial years after the shortfall will have been settled. After application of paragraphs 1, 2 and 3, no further distributions shall be made on the cumulative protective preference shares.
4. The board of directors shall decide, subject to the approval of the supervisory board, which part of the profits remaining will be reserved. What remains of the profits after reserving as referred to in the preceding sentence, shall be at the disposal of the general meeting of shareholders and, when distributed, shall be paid to the holders of ordinary shares pro rata the number of ordinary shares they hold.

ARTICLE 28.

1. Dividends will be paid out thirty days after adoption of the relevant resolution or as soon as the board of directors decides.
2. Dividends which remain unclaimed for five years from the day they become due and payable, shall accrue to the company.
3. In case the board of directors, subject to the approval of the supervisory board, adopts a resolution to that effect, interim dividends shall be paid out, with due observance of the preference of the cumulative protective preference shares and the provisions of Section 2:105 of the Dutch Civil Code.
4. The general meeting of shareholders may resolve to pay out dividends in the form of shares in the company or depository receipts for those shares, in full or in part, provided that it does so pursuant to a proposal of the board of directors.
5. The company can only make distributions to the shareholders insofar as its equity capital exceeds the amount of the issued capital, plus the reserves that must be maintained by law or in accordance with the articles of association.
6. A shortfall may only be paid from a statutory reserve to the extent permitted by law.

PROPOSED PROFIT APPROPRIATION

An amount of EUR 9.2 million will be added to the retained earnings. The proposal to the Annual General Meeting will be to appropriate the remainder, EUR 65.7 million, for a dividend payment to the shareholders of EUR 0.50 per ordinary share.

The proposed dividend will be made payable in cash.

INDEPENDENT AUDITOR'S REPORT

To: the Shareholders and the Supervisory Board of Royal Boskalis Westminster N.V.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS 2019 INCLUDED IN THE ANNUAL REPORT

OUR OPINION

We have audited the financial statements for the year 2019 of Royal Boskalis Westminster N.V., based in Sliedrecht, The Netherlands. 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 Royal Boskalis Westminster N.V. as at 31 December 2019, and of its result and its cash flows for 2019 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 Royal Boskalis Westminster N.V. as at 31 December 2019, and of its result for 2019 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 2019
- The following statements for 2019: the consolidated statement of profit or loss, the consolidated statement of other comprehensive income, the consolidated statement of cash flows and the consolidated statement of changes in equity
- 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 2019
- The company profit and loss account for 2019
- 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 Royal Boskalis Westminster N.V. in accordance with the EU Regulation on specific requirements regarding statutory audit of public-interest entities, the "Wet toezicht accountantsorganisaties" (Wta, Audit firms supervision act), the "Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten" (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore we have complied with the "Verordening gedrags- en beroepsregels accountants" (VGBA, Dutch Code of Ethics).

We believe the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

OUR AUDIT APPROACH

Our understanding of the business
Royal Boskalis Westminster N.V. is a global services provider operating in the dredging, dry and maritime infrastructure and maritime services sectors. The group activities are organized in three operating segments and we tailored our group audit approach accordingly.

We start by determining materiality and identifying and assessing the risks of material misstatement of the financial statements, whether due to fraud, non-compliance with laws and regulations or error in order to design audit procedures responsive to those risks, and to obtain 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.

MATERIALITY

MATERIALITY	EUR 19.5 million (2018: EUR 18.0 million)
BENCHMARK APPLIED	0.75% of revenue
EXPLANATION	Based on our professional judgment we consider an activity based measure as the most appropriate basis to determine materiality. Given the current market conditions we consider revenue a stable and appropriate measure to determine materiality. We applied a percentage of 0.75% of revenue, which is the mid-end of an acceptable range and in line with prior year.

We have also taken into account misstatements 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 EUR 975 thousand, 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.

OUR FOCUS ON FRAUD AND NON-COMPLIANCE WITH LAWS AND REGULATIONS

Our responsibility
Although we are not responsible for preventing fraud or non-compliance with laws and regulations and cannot be expected to detect non-compliance with all laws and regulations, it is our responsibility to obtain reasonable assurance that the financial statements, taken as a whole, are free from material misstatement, whether caused by fraud or error.
Non-compliance with laws and regulations may result in fines, litigation or other consequences for the company that may have a material effect on the financial statements.

Our audit response related to fraud risks
In order to identify and assess the risks of material misstatements of the financial statements due to fraud, we obtained an understanding of the entity and its environment, including the entity's internal control relevant to the audit and in order to design audit procedures that are appropriate in the circumstances. As in all of our audits, we addressed the risk of management override of internal control. We do not audit internal control per se for the purpose of expressing an opinion on the effectiveness of the company's internal control.

We considered available information and made enquiries of relevant executives, directors (including internal audit and legal department) and the Supervisory Board. As part of our process of identifying fraud risks, we evaluated fraud risk factors with respect to financial reporting fraud, misappropriation of assets and bribery and corruption.
In our risk assessment we considered the fact that Royal Boskalis Westminster N.V. is a global company, operating in multiple jurisdictions, and the inherent potential risk of bribery and corruption.

We evaluated the design and the implementation of internal controls that mitigate fraud risks. In addition, we performed procedures to evaluate key accounting estimates for management bias in particular relating to important judgment areas and significant accounting estimates as disclosed in Note 6 and 20 to the financial statements. We have also used data analysis to identify and address high-risk journal entries.

We incorporated elements of unpredictability in our audit. We considered the outcome of our other audit procedures and evaluated whether any findings were indicative of fraud or non-compliance. If so, we reevaluate our assessment of fraud risk and its resulting impact on our audit procedures.

Our audit response related to risks of non-compliance with laws and regulations
We assessed factors related to the risks of non-compliance with laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general industry experience, through discussions with the management board, reading minutes, inspection of internal audit and compliance reports and performing substantive tests of details of classes of transactions, account balances or disclosures.

Where applicable, we also inspected lawyers' letters and correspondence with regulatory authorities and remained alert to any indication of (suspected) non-compliance throughout the audit. Finally we obtained written representations that all known instances of non-compliance with laws and regulations have been disclosed to us.

GOING CONCERN

In order to identify and assess the risks of going concern and to conclude on the appropriateness of management's use of the going concern basis of accounting, we consider 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 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 auditor's report. However, future events or conditions may cause a company to cease to continue as a going concern.

SCOPE OF THE GROUP AUDIT

Royal Boskalis Westminster N.V. is at the head of a group of entities. The financial information of this group is included in the consolidated financial statements of Royal Boskalis Westminster N.V.

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 specific items.

Our group audit mainly focused on significant group entities and joint ventures in terms of size and/or risk, within the operating segments Dredging & Inland Infra, Offshore Energy and Towage & Salvage. We have performed most of the audit procedures at those segments ourselves. For the audit work in amongst others Australia, Singapore, Germany and Finland we used other EY network firms. We have used the work of other non-EY firms when auditing a group entity, especially in the Middle East, which represented approximately 7% of the net turnover. Also some joint ventures were audited by non-EY firms.

In total these procedures represent approximately 81% of the group's revenue.

We performed audit procedures on certain accounting areas at group level, such as impairment tests of goodwill, property, plant and equipment and other areas such as uncertain tax positions and pension accounting. We also visited project sites in Singapore, Bangladesh, Canada, Oman, Russia and the Netherlands where we had meetings with local project management to discuss and to obtain a better understanding of the progress and risks of the related projects and we performed substantive procedures such as test of details and inspection of supporting documents.

Based on our risk assessment, we visited component locations in Singapore and the Netherlands. We had meetings with the component auditors and local management on the audit findings and financial reporting. We interacted with all component teams where appropriate during various stages of the audit and were responsible for the scope and direction of the audit process.

By performing the procedures mentioned above at 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.

Teaming, use of specialists

We ensured that the audit teams both at group and at component levels included the appropriate skills and competences which are needed for the audit of Royal Boskalis Westminster N.V. We included specialists in the areas of IT audit, treasury, income tax and have made use of our own experts in the areas of valuations of goodwill and actuaries.

GENERAL AUDIT PROCEDURES

Our audit further included among others:

- Performing audit procedures responsive to the risks identified, and obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion
- Evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management
- 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

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.

The key audit matters "Valuation of Harbor Towage joint ventures" and "Valuation of goodwill of the Offshore Energy division" which were included in our last year's auditor's report, are not considered as key audit matters for this year, since both matters no longer materially impact the group financial statements.

KEY AUDIT MATTER	OUR AUDIT APPROACH	KEY OBSERVATIONS
RECOGNITION OF CONTRACT REVENUE AND VALUATION OF UNBILLED AND DEFERRED REVENUE (SEE NOTE 3.12, 3.22, 3.24, 6, 20, 26 AND 29)		
The contracting industry is characterised by contract risk with significant judgments involved in the assessment of contract financial performance. Market conditions especially in the Offshore Energy Contracting markets remain challenging and cause pressure on project margins. As a result significant project losses in this market segment were recognized, both on projects in execution and projects that are still part of the orderbook. Revenue and positive margin from contracting activities are recognised based on the stage of completion of individual contracts. Negative margins are recognized immediately when they are foreseen. The status of contracts is updated on a regular basis. In doing so, management is required to exercise significant judgment in their assessment of the valuation of contract variations, claims and liquidated damages; the completeness and accuracy of forecasts regarding costs to complete; and the ability to deliver contracts within forecast timescales. The potential final contract outcomes can cover a wide range. Changes in these judgments, and the related estimates, as contracts progress can result in material adjustments to revenue and margin, which can be both positive and negative. We therefore identified correct and complete recognition of contract revenue and (negative) margin as significant to our audit. We also considered the risk of non-compliance with relevant law and regulations related to the acquisition of projects.	Our audit procedures on contract revenue included an assessment of the company's project control, substantive audit procedures and testing of management's positions against underlying documentation. In the planning and execution of our audit we considered the impact of challenging market conditions on project results, both for on-going projects and projects in the orderbook. We tested the adequacy and support for cost-to-complete estimates and also tested management review for potential losses in projects in the orderbook for adequacy and completeness. We herewith considered developments noted at ongoing projects and assessed updated tender- and work budgets. Other substantive procedures comprised of testing contractual terms and conditions, including performance obligations, disputes, claims and variation orders, costs incurred, including local representatives' fees, and forecasted cost to complete including progress measurement. We challenged management's assumptions at the project and group management level. We discussed, also during site visits, a range of financial and other risks, disputes and related estimation uncertainties with management and project staff, assessing whether these have been adequately addressed in the financial statements.	We assessed that the Company's revenue recognition accounting policies were appropriately applied and disclosed in accordance with the revenue recognition accounting standard (IFRS 15). We verified that contract revenues, including claims and variation orders, meet the recognition criteria and are valued accurately and complete. Where applicable, losses were completely and accurately accounted for. Furthermore, we have assessed that management assumptions and estimates are within an acceptable range and that the disclosure notes are appropriate. As part of our audit procedures with respect to compliance with laws and regulations related to acquisition of projects and local representatives' fees, we assessed the adequacy of the Company's policies and that these are adhered to.
VALUATION FLOATING AND OTHER CONSTRUCTION EQUIPMENT (SEE NOTE 3.5, 3.7, 10 AND 16)		
Property, plant and equipment includes floating and other construction equipment amounting to EUR 2.4 billion as at 31 December 2019, which represent 52% of the balance sheet total. The assessment of the valuation of floating and other construction equipment is significant to our audit because this process is complex and requires significant management judgments, such as of future market and economic conditions, in particular in Offshore Energy. No material impairment charges were recognized in the profit and loss account of 2019 (2018: EUR 136.9 million).	In our audit approach we evaluated management's assessment of impairment indications and we assessed the historical accuracy of management's estimates. Furthermore, we evaluated the adequacy of the company's disclosures regarding the valuation of these floating and other construction equipment.	We consider management's assessment of impairment indicators as appropriate and the key assumptions and estimates to be within an acceptable range. We agree with management's conclusion that no impairment is required in 2019. We further assessed that the required disclosures were appropriate.
RECOGNITION AND VALUATION OF UNCERTAIN TAX POSITIONS (SEE NOTE 3.28 AND 12, 13, 14)		
As a result of the OECD BEPS project, Boskalis aligned its Transfer Pricing model with its current and future business operations. Boskalis operates in a range of jurisdictions subject to different tax regimes. The cross-border operations may result in estimation differences or disputes with national tax authorities. If management considers it probable that such disputes will lead to an outflow of resources, accruals have been formed accordingly. Based on the above, we identified correct and complete recognition of accruals for uncertain tax positions and adequate disclosure of uncertain tax positions as significant to our audit.	In our audit approach, we tested the acceptability of the accruals formed in this estimation process. In doing so, we used tax specialists in reviewing the assumptions underlying the estimates and discussing them with management in the light of (local) tax rules & regulations and revisions to the transfer pricing policy. In connection with this, we also devoted attention to the substantiation of the estimated probability of the positions taken and details provided thereon by management and we assessed the historical accuracy of management's assumptions.	We assessed that the Company's accounting policies were appropriately applied. Furthermore, we have assessed that management assumptions and estimates are within an acceptable range. We further assessed that the disclosure notes relating to uncertain tax positions are appropriate.

REPORT ON OTHER INFORMATION INCLUDED IN THE ANNUAL REPORT

In addition to the financial statements and our auditor's report thereon, the annual report contains other information that consists of:

- The Report of the Board of Management and the Report of the Supervisory Board (including the remuneration report)
- The Chairman's Statement, Boskalis at a Glance and Other Information
- Other information required by 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 and Section 2:135b 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 and Section 2:135b sub-Section 7 of the Dutch Civil Code and the Dutch Standard 720. The scope of the procedures performed is substantially 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 board report in accordance with Part 9 of Book 2 of the Dutch Civil Code, other information required by Part 9 of Book 2 of the Dutch Civil Code and the remuneration report in accordance with Section 2:135b of the Dutch Civil Code.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

ENGAGEMENT

We were engaged by the Annual General Meeting as auditor of Royal Boskalis Westminster N.V. on 13 May 2014, as of the audit for the year 2014 and have operated as statutory auditor ever since that date.

NO PROHIBITED NON-AUDIT SERVICES

We have not provided prohibited non-audit services as referred to in Article 5(1) of the EU Regulation on specific requirements regarding statutory audit of public-interest entities.

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 engagement 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 detect all material errors and fraud during our audit.

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. The Our audit approach section above includes an informative summary of our responsibilities and the work performed as the basis for our opinion.

Communication
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.
In this respect we also submit an additional report to the audit committee in accordance with Article 11 of the EU Regulation on specific requirements regarding statutory audit of public-interest entities. The information included in this additional report is consistent with our audit opinion in this auditor's report.

We provide the Supervisory Board with a statement that we have complied with relevant ethical requirements regarding independence, and 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 the key audit matters: those matters that were of most significance in the audit of the financial statements. We describe these matters in our 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.

Rotterdam, 4 March 2020

Ernst & Young Accountants LLP

J. Hetebrij

OTHER INFORMATION

Strengthening of the 25-kilometer-long Houtrib dike between Enkhuizen and Lelystad in the Netherlands and construction of the nature reserve Trintelzand

HISTORIC OVERVIEW (1) (15)

(in EUR million, unless stated otherwise)		2019 (17)	2018 (16)	2017 (16)	2016	2015	2014 (11)	2013 (11)
Revenue		**2,645**	2,570	2,343	2,596	3,240	3,167	3,144
Order book		**4,722**	4,292	3,495	2,924	2,490	3,286	3,323
EBITDA	(3)	**375.8**	353.6*	436.6	660.5*	884.7	945.9	757.2
Depreciation and amortization		**265.1**	234.6	251.6	277.2	278.6	261.9	254.4
Operating result	(12)	**28.5**	119.0	185.0	384.6	577.3	684.0	502.8
Extraordinary items		**82.3**	-519.5	0.0	-842.6	-14.5	-31.6	-39.4
EBIT	(2)	**110.7**	-400.5	185.0	-458.1	562.8	652.3	463.4
Net profit	(14)	**74.9**	82.8*	150.5	276.4*	440.2	490.3	365.7
Net group profit/loss		**74.9**	-433.7	150.4	-561.8	443.5	492.2	365.3
Cash flow		**340.0**	319.5*	402.0	464.0	765.4	785.7	659.1
Shareholders' equity		**2,491**	2,544	3,023	3,121	3,714	3,152	2,525
Average number of outstanding shares (x 1,000)	(4)	**133,248**	132,492	131,097	128,205	124,182	121,606	118,445
Number of outstanding shares (x 1,000)	(5)	**131,727**	134,068	130,677	130,077	125,627	122,309	120,265
Personnel (headcount)	(13)	**7,133**	7,078	6,410	6,960	8,268	8,446	8,459
Ratios (in percentages)								
EBIT as % of the revenue		**4.2**	4.6*	7.9	14.8*	17.4	20.6	14.7
Return on capital employed	(6)	**2.9**	2.9*	4.8	9.1*	10.8	13.8	13.0
Return on equity	(7)	**3.0**	3.0*	4.9	8.1*	12.8	17.3	16.5
Solvency	(8)	**54.3**	56.1	62.6	56.1	56.3	53.4	47.6
Figures per share (in EUR)								
Profit	(5) (9)	**0.56**	0.63*	1.15	2.16*	3.54	4.03	3.09
Cash flow	(5)	**2.55**	2.41*	3.07	3.62*	6.16	6.46	5.56
Dividend		**0.50**	0.50	1.00	1.00	1.60	1.60	1.24
Share price range (in EUR)								
Low		**16.48**	20.10	27.08	27.89	35.70	33.71	26.92
High		**25.42**	32.58	35.51	37.60	49.21	47.18	38.58

* Excluding extraordinary charges/impairments

(1) Figures taken from the respective financial statements.
(2) EBIT as reported in the consolidated statement of profit or loss.
(3) EBIT before depreciation, amortization and impairment losses.
(4) Weighted average number of outstanding shares less the number of shares owned by the company.
(5) Number of outstanding ordinary shares less the number of shares owned by the company as at 31 December.
(6) Net profit + interest expenses regarding long term loans (non-current interest bearing borrowings, excluding lease liabilities) as % of the average capital employed (2016 average capital includes adjustment for debt to be repaid early).
(7) Net profit as % of the average shareholders' equity.
(8) Group equity as % of balance sheet total (non-current assets + current assets).
(9) The dilution effect was practically nil up to and including the financial year 2019.
(10) Adjusted for changes in the IFRS standards (IAS19R).
(11) As of 1 January 2014 Boskalis applies IFRS11 which impacts the way joint ventures and associated companies are recognized. The full year 2013 comparative figures have been adjusted accordingly.
(12) EBIT - extraordinary charges/impairments.
(13) Employees employed by majority owned entities including employees Anglo Eastern, crew of the heavy transport vessels.
(14) The net loss in 2018 and 2016 have been adjusted for post tax extraordinary charges/impairments.
(15) On 21 May 2007 a share split on a three-for-one basis was effected. For comparative purposes the data regarding the number of shares and figures per share of all the periods preceding the share split have been recalculated.
(16) As of 1 January 2018 Boskalis applies IFRS15. The full year 2017 comparative figures have been adjusted accordingly.
(17) As of 1 January 2019 Boskalis applies IFRS16. The full year 2018 comparative figures have not been adjusted accordingly.

2012 (10)	2011	2010	2009	2008	2007	2006	2005	2004
3,081	2,801	2,674	2,175	2,094	1,869	1,354	1,156	1,020
4,106	3,489	3,248	2,875	3,354	3,562	2,543	2,427	1,244
567.1	590.5	621.5	444.9	454.6	348.1	236.8	162.5	136.5
227.2	230.0	210.9	147.0	110.2	102.5	86.6	80.2	89.0
339.9	360.5	410.6	297.9	344.3				
-4.1	-6.4	-8.7	-48.6	-5.2				
335.8	354.1	401.9	249.3	339.1	245.5	150.3	82.3	47.5
249.0	254.3	310.5	227.9	249.1	204.4	116.6	62.7	33.9
252.0	261.0	312.9	229.2	250.1	207.1	117.0	63.3	34.1
483.3	497.4	532.5	424.8	365.6	309.6	203.6	143.5	123.1
1,898	1,733	1,565	1,296	860.1	768.1	618.6	542.9	467.9
105,644	102,391	99,962	88,372	85,799	85,799	85,799	85,254	83,307
107,284	103,472	100,974	98,651	85,799	85,799	85,799	85,800	84,522
15,653	13,935	13,832	10,514	10,201	8,577	8,151	7,029	7,033
10.9	12.6	15.0	11.5	16.2	13.1	11.1	7.1	4.7
11.1	12.1	18.1	20.2	29.1	27.7	19.1	12.0	7.0
13.8	15.4	21.7	21.1	30.6	29.5	20.1	12.4	7.2
39.2	37.4	37.1	46.5	34.0	35.3	39.4	41.3	38.1
2.36	2.48	3.11	2.58	2.90	2.38	1.36	0.74	0.41
4.58	4.86	5.33	4.81	4.26	3.61	2.37	1.68	1.48
1.24	1.24	1.24	1.19	1.19	1.19	0.68	0.37	0.25
23.26	20.67	23.16	13.25	15.30	21.06	14.67	8.58	6.02
34.50	38.46	36.58	28.45	42.45	46.25	25.48	18.75	8.33

Cable-laying vessel Ndurance installing power cables as part of the Borssele Alpha project

STICHTING CONTINUÏTEIT KBW

REPORT

By decision of the General Meeting of Shareholders held on 9 May 2001 the foundation Stichting Continuïteit KBW was granted the right to acquire cumulative protective preference shares in Royal Boskalis Westminster N.V. for a nominal amount equal to the nominal amount of ordinary shares outstanding at the time of issue of the shares concerned, minus the nominal value of one ordinary share. The option of issuing such cumulative protective preference shares was not exercised during the period under review.

The Board of Stichting Continuïteit KBW consists of three members:

C.J.A. van Lede, chairman
J.S.T. Tiemstra
P.N. Wakkie

The articles of association of the Stichting Continuïteit KBW are to be found at www.boskalis.com/corporategovernance.

DECLARATION OF INDEPENDENCE

The Board of Stichting Continuïteit KBW and the Board of Management of Royal Boskalis Westminster N.V. hereby declare that, in their opinion, Stichting Continuïteit KBW is an independent legal entity, separate from Royal Boskalis Westminster N.V., as defined in Section 5:71, first paragraph, under c, of the Dutch Financial Supervision Act.

Papendrecht / Sliedrecht, 4 March 2020
Royal Boskalis Westminster N.V.
Board of Management

Hilversum, 4 March 2020
Stichting Continuïteit KBW
The Board

SUPERVISION, BOARD AND MANAGEMENT

MEMBERS OF THE SUPERVISORY BOARD

MR. J. VAN DER VEER (1947)

- date of first appointment 12 May 2015, current terms ends AGM 2023
- former CEO of Royal Dutch Shell plc
- chairman of the Supervisory Board of Koninklijke Philips N.V.
- vice-chariman of the Board of Directors of Equinor ASA
- chairman of Het Concertgebouw Fonds
- chairman of the Supervisory Committee of the Delft University of Technology

MR. H.J. HAZEWINKEL (1949), DEPUTY CHAIRMAN

- date of first appointment 27 March 2010, current term ends AGM 2020
- former chairman of the Board of Directors of Royal Volker Wessels Stevin N.V.
- chairman of the Supervisory Board of SOWECO N.V.
- non-executive partner Quadrum Capital B.V.
- chairman of the Board of Stichting Continuïteit ASR Nederland
- member of the Board of Stichting Administratiekantoor Slagheek
- member of the Board of the Stichting Continuïteit ForFarmers
- member of the Board of Stichting Administratiekantoor V.o.Zee

MS. I. HAAIJER (1969)

- date of first appointment 10 November 2016, current term ends AGM 2020
- advisor to the Supervisory Board of Corbion N.V.
- former CEO of Bugaboo International B.V.
- former president & CEO of DSM Food Specialties and member of the Leadership Team of Royal DSM N.V.

MR. J.P. DE KREIJ (1959)

- date of first appointment 9 May 2018, current term ends AGM 2022
- former deputy chairman of the Executive Board and former Chief Financial Officer of Royal Vopak N.V.
- member of the Supervisory Board of TomTom N.V.
- member of the Supervisory Board of Corbion N.V.
- member of the Advisory Board of YGroup Companies
- non-executive director Oranjefonds

MR. D.A. SPERLING (1955)

- date of first appointment 8 May 2019, current terms ends AGM 2023
- former chairman of the Board of TBI Holdings B.V.
- member of the Supervisory Boards of Royal HaskoningDHV Groep B.V. and GMB Holding B.V.
- member of the supervisory council of the Stichting Albert Schweitzer Ziekenhuis
- member of the Board of Stichting TBI
- chairman of the Supervisory Board of Stadsherstel Historisch Rotterdam N.V.

MS. J.A. TAMMENOMS BAKKER (1953)

- date of first appointment 8 May 2019, current term ends AGM 2023
- former advisor of the Dutch Council for the Environment and Infrastructure
- former Director-General of the Dutch Ministry of Transport and Water Management
- chairman of the Van Leer Group Foundation
- member of the Supervisory Boards of Groupe Wendel, Unibail-Rodamco SE and TomTom N.V.
- non-executive director of CNH Industrial N.V.

MR. J.N. VAN WIECHEN (1972)

- date of first appointment 12 May 2011, current term ends AGM 2023
- member of the Executive Board of HAL Holding N.V./director HAL Investments B.V.
- Chairman of the Supervisory Board of Mondhoekie B.V. (Coolblue)
- member of the Supervisory Board of Atlas Services Group Holding B.V.

All the members of the Supervisory Board have the Dutch nationality.

Company secretary: Ms. F.E. Buijs (1969)

MEMBERS OF THE BOARD OF MANAGEMENT

From left to right: B.H. Heijermans, C. van Noort, P.A.M. Berdowski, T.L. Baartmans

DR. P.A.M. BERDOWSKI (1957), CHAIRMAN

- chairman of the Board of Management since 2006, current term ends AGM 2023
- member of the Board of Management since 1997
- member of the Supervisory Board of Amega Groep B.V.

MR T.L. BAARTMANS (1960)

- member of the Board of Management since 2007, current term ends AGM 2023
- chairman of the Executive Board of the Netherlands Association of International Contractors (NABU)
- member of the board of the International Association of Dredging Companies (IADC)
- member of the Supervisory Committee of the Stichting Prosea marine education

MR B.H. HEIJERMANS (1966)

- member of the Board of Management since 2018, current term ends AGM 2022
- member of the Advisory Board of Bold Capital Management

MR C. VAN NOORT (1975), CHIEF FINANCIAL OFFICER

- member of the Board of Management since 2019, current term ends AGM 2023

All the members of the Board of Management have the Dutch nationality.

Company secretary: Ms. F.E. Buijs (1969)

GROUP MANAGEMENT

dr. P.A.M. Berdowski	chairman Board of Management
T.L. Baartmans	member Board of Management
B.H. Heijermans	member Board of Management
C. van Noort	member Board of Management, Chief Financial Officer
P. van der Knaap	group director

CORPORATE SUPPORT

Company secretary & Corporate Legal	F.E. Buijs
Treasury	F.A.J. Rousseau
IR & Corporate Communications	M.L.D. Schuttevâer
Group Controlling	E.C.P. Verstraete
Fiscal Affairs	J. Jager
Insurance	A.J. Huiskes
Corporate Development	C.A. Visser

CENTRAL BUSINESS SUPPORT

Personnel & Organization	J. den Hartog
ICT	M.J. Krijger
SHE-Q	J.M. van Vugt
Research & Development	dr. A.C. Steenbrink
Central Fleet Support	P.E. van Eerten
Procurement & Logistics	J.E. Rijnsdorp

DREDGING & INLAND INFRA

Area Europe
W.B. Vogelaar
Area Middle
M. Siebinga
Area Middle East
P.G.R. Devinck
Area East
S.G.M. van Bemmelen
Area West
P. Klip
The Netherlands
P. van der Linde

Design, Tendering & Engineering
J.S.M. van Thiel de Vries
Fleet Management
J.T. van Leeuwen
Personnel & Organization
L. Wijngaard

OFFSHORE ENERGY

Marine Installation
S. Maas
Seabed Intervention
J.M.L.D. Dieteren
Offshore Wind Foundations
M.R.J. van Bergen
Heavy Marine Transport
W.Q. Nelemans
Marine Services
S.R.L. van Hulle
Subsea Services
S.I. Cameron
Subsea Cables
R.P. Rijper
Survey
C.A. Vermeijden

Finance
J.J.J. Mulder
Fleet Management
E.B. van Dodeweerd
Personnel & Organization
M.C. Verhage

TOWAGE & SALVAGE

Towage
T.R. Bennema
Salvage
R.L.C. Janssen

WORKS COUNCIL

D.A. van Uitert (chairman), M.A. Koerts (vice-chairman), L. Wubben (secretary), P. Baars, D. van Beek, K. de Bruijn, J.G. Bruinekreeft, K. van Dam, L. Hubers, R. Roos, S. de Ruijter, T. van Schooten, T. Swalen, W. van Wijngaarden, R. Wisse, A. Zwart.

DISCLOSURES REQUIRED BY THE DECREE ARTICLE 10 OF THE EU DIRECTIVE ON TAKEOVER BIDS

Under the Decree article 10 of the EU Directive on takeover bids, companies whose securities are admitted to trading on a regulated market must disclose information in their annual reports on matters including their capital structure and the existence of any shareholders with special rights. Furthermore, the Code requires Boskalis to give an overview of all existing and potential antitakeover measures indicating the circumstances whereunder and by whom these measures may likely be used. In accordance with these requirements, Boskalis hereby makes the following disclosures:

a. For information on the capital structure of the company, the capital and the existence of various types of shares, please refer to page 109 of the notes to the consolidated financial statements in this annual report. For information on the rights attached to these shares, please refer to the company's Articles of Association which can be found on the company website. To summarize, the rights attached to ordinary shares comprise pre-emptive subscription rights upon the issue of ordinary shares, the entitlement to attend the General Meeting of Shareholders, and to speak and vote at that meeting, and the right to distribution of such amount of the company's profit as remains after allocation to reserves. As at December 31, 2019, the issued capital consisted exclusively of ordinary shares (partly registered and partly bearer shares (aandelen aan toonder)). These are only issued against payment in full.

b. The company has imposed no limitations on the transfer of ordinary shares. The Articles of Association have stipulated a blocking procedure for protective preference shares. The company is not aware of any shares having been exchanged for depositary receipts.

c. For information on equity stakes in the company to which a notification requirement applies (pursuant to Sections 5:34, 5:35 and 5:43 of the Financial Supervision Act), please refer to the section 'Shareholder information' on page 19 of this annual report. Under the heading 'Major shareholders' you can find a list of shareholders who are known to the company to have holdings of 3% or more at the stated date.

d. There are no special control rights or other rights associated with shares in the company.

e. The company does not operate a scheme granting employees rights to acquire or obtain shares in the capital of the company or any of its subsidiaries.

f. No restrictions apply to voting rights associated with the company's shares, nor are there any deadlines for exercising voting rights.

g. No agreements with shareholders exist which may result in restrictions on the transfer of shares or limitation of voting rights.

h. The thresholds for shareholders to exercise the right of inquiry (het enquêterecht) are based on article 346 sub clause 1 under c of the Dutch Civil Code, regardless of the current nominal share capital of the company.

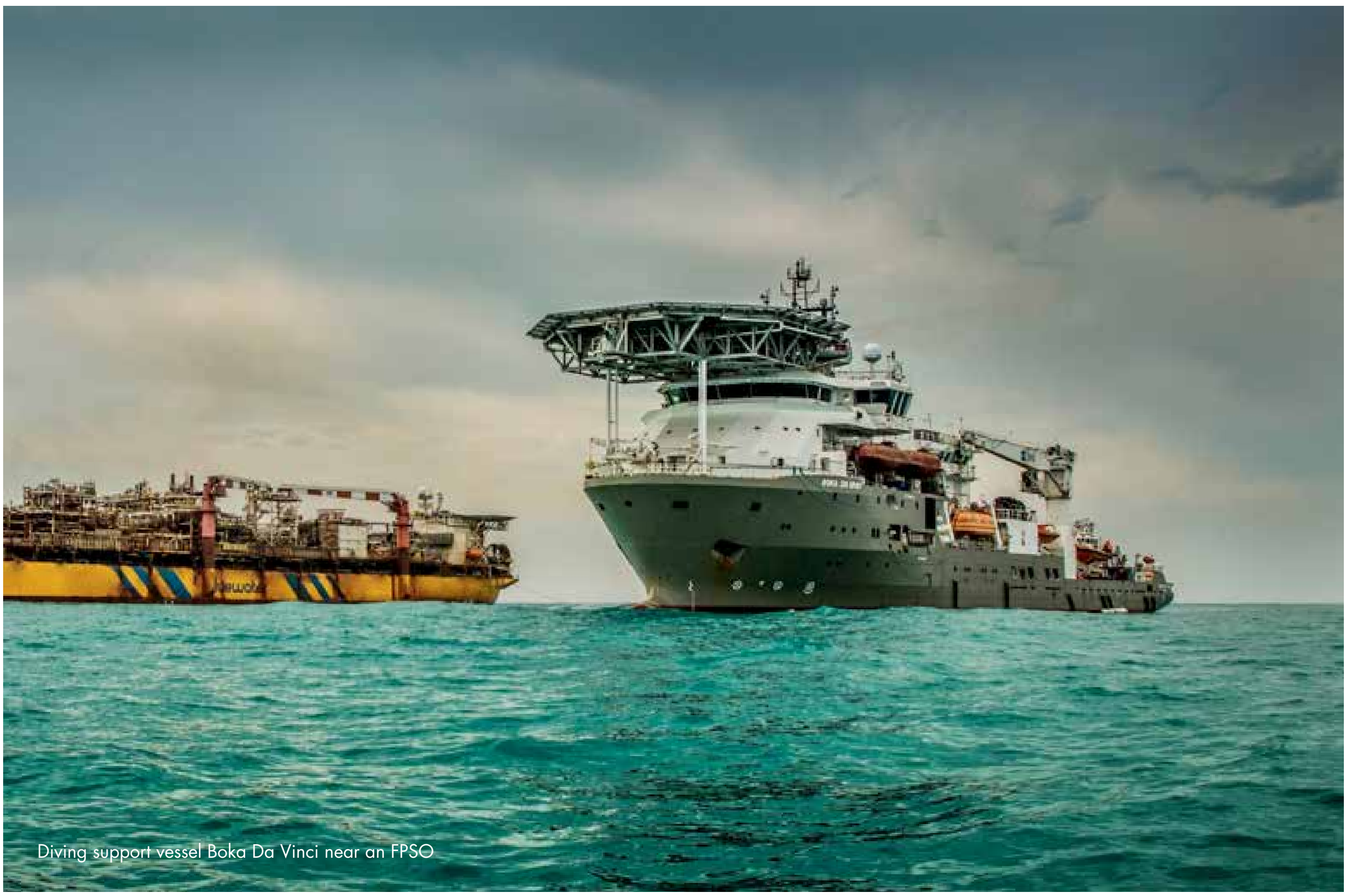
i. The rules governing the appointment and dismissal of members of the Board of Management and the Supervisory Board and amendment of the Articles of Association are stated in the company's Articles of Association. Members of the Board of Management and Supervisory Board are appointed and dismissed by the General Meeting of Shareholders on binding nomination of the Supervisory Board.
The General Meeting of Shareholders may pass a resolution to deprive the binding nature of the nomination for the appointment or dismissal of any member of the Board of Management or the Supervisory Board by at least a majority of two/thirds of the votes cast, representing more than one-half of the company's issued share capital. An amendment of the company's Articles of Association requires a decision by the General Meeting of Shareholders in response to a proposal made by the Board of Management with the approval of the Supervisory Board.

j. The general powers of the Board of Management are set out in the Articles of Association of the company. The powers of the Board of Management in respect of the issuance of shares in the company are set out in article 4 of the company's Articles of Association. To summarize, the General Meeting of Shareholders – or the Board of Management if so authorized by the General Meeting of Shareholders – takes the decision, subject to prior approval by the Supervisory Board, to issue shares, whereby the issue price and other conditions relating to the issue are determined by the General Meeting – or the Board of Management if so authorized by the General Meeting of Shareholders. In the event the Board of Management is authorized to take decisions with respect to the issue of shares, the number of shares that may be issued as well as the term of the authorization must also be determined. Procedures governing the acquisition and disposal by the company of shares in its own capital are set out in article 7 of the Articles of Association. To summarize, the Board of

Management may decide, subject to authorization by the General Meeting of Shareholders and prior approval by the Supervisory Board, for the company to buy back fully paid-up shares up to a statutory maximum of 50% of issued capital. Decisions regarding the disposal of shares acquired by the company are taken by the Board of Management, subject to prior approval by the Supervisory Board.

k. With the exception of the option agreement with Stichting Continuïteit KBW concerning the placement of cumulative protective preference shares as set out in section 28.4 of the financial statements, the company is not a party to any significant agreements which take effect or are altered or terminated upon a change of control of the company as a result of a public offer within the meaning of Section 5:70 of the Financial Supervision Act. The General Meeting of Shareholders of May 9, 2001 decided to grant Stichting Continuïteit KBW the right to acquire cumulative protective preference shares as a preventive measure against an unsolicited offer for the shares of the company. These shares may be issued in the event that (significant) influence is obtained or is threatened to be obtained by (legal) persons, who, without the involvement of the Board of Management, intend to acquire control over the company, without safeguards being in place for the independence and continuity of the company and its enterprise and without ensuring the interests of employees, other shareholders and other stakeholders of the company and its enterprise.

l. The company has not entered into any agreements with either members of the Board of Management or employees, which provide for a pay-out on termination of their employment as a result of a public offer within the meaning of Section 5:70 of the Financial Supervision Act.


Diving support vessel Boka Da Vinci near an FPSO

GLOSSARY

Acquired orders Contract value of acquired assignments.

Average capital employed Shareholders' equity + long term loans (non-current interest bearing borrowings).

Backhoe dredger A large hydraulic excavating machine positioned on the end of a pontoon. The pontoon is held firmly in place using spuds. Backhoes can dredge in a range of soil types with extreme precision.

Bunker fuel Type of fuel used by oceangoing and other vessels. Bunkering refers to the act or process of supplying a ship with this type of fuel.

Cash flow Group net profit + depreciation + amortization + impairment losses.

Cost leadership Achieving lowest cost price.

Cutter suction dredger (CSD) A vessel that dredges while being held into place using spuds and anchors. This technique combines powerful cutting with suction dredging. Cutter suction dredgers are mainly used where the sea- and riverbed is hard and compact. The dredged material is sometimes loaded into hoppers but is generally pumped to land through a pressure pipeline.

Decommission To dismantle and/or remove an object.

EBIT Earnings before interest and tax.

EBITDA EBIT before depreciation, amortization and impairment losses.

CO_2 Emissions Carbon dioxide released into the environment.

EPC contract EPC stands for Engineering, Procurement, Construction and is a type of contracting agreement in the construction industry. The contractor is responsible for carrying out the detailed engineering design of the project, procure all the equipment and materials required, and then construct to deliver a functioning facility or asset to the client.

ESG Environmental, Social and Governance.

EU-IFRS IFRS stands for International Financial Reporting Standards. EU-IFRS are financial reporting rules drawn up and issued by the IASB (International Accounting Standards Board) and adopted within the European Union. Since 2005 all publicly listed companies within the European Union have been obliged to comply with these standards in their external financial accounting/reporting.

Fallpipe vessel Vessel that moves over the area to be covered, while dumping rock through a fallpipe. The vessel is kept in place by a dynamic positioning system in which the propellers and rudders are controlled by an automatic system. The end of the pipe is located just a few meters above the level of the surface to be covered. The fallpipe is controlled using a precise positioning system. The fallpipe vessel Seahorse can also be equipped with an A-frame on the aftship and a grab controlled by an ROV (Remotely Operated Vehicle). This makes it possible to dredge down to depths of 1,000 meters.

Float-over installation Installation of a topside (for an offshore oil or gas platform production unit) on a subsea structure such as a jacket. A semi-submersible heavy transport vessel is used to convey the topside to the site and position it precisely in relation to the subsea structure piles. The ship is then partially submerged, allowing the support points of the topside to be lowered precisely onto the jacket connectors.

Floating sheerleg crane Floating cranes for heavy lifting.

FPSO Floating Production Storage and Offloading unit. Floating production, storage and transshipment systems that often operate a long way offshore. The systems separate the incoming liquids into oil, gas and water and temporarily store the crude oil. Tankers are used to transport the oil.

Futures A future (derivative) is a so-called forward contract; an agreement between traders to purchase or sell certain financial products on a specified future date at a previously agreed fixed price.

Global Reporting Initiative International organization that develops global standards for sustainability reporting.

Hazardous substances Liquid or solid substances which present a health hazard and/or are damaging to the environment.

Heavy lift vessel *See HTV.*

Home market Boskalis distinguishes itself from its competitors in the Dredging segment by the use of a home market strategy. The home market organizations have local marketing profiles, as well as their own fleets and infrastructures. They can rely on the support of the financial and technical resources of the global Boskalis organization. Home markets provide a stable flow of assignments and opportunities to generate additional margins through associated activities.

Hopper/hopper dredger *See trailing suction hopper dredger.*

HTV A (semi-submersible) heavy transport vessel. At 275 meters long and 70 meters wide the BOKA Vanguard is the biggest semi-submersible heavy transport vessel in the world and is capable of conveying objects weighing up to 110,000 tons.

International projects market Market that focuses primarily on larger capital expenditure projects for new buildings and/or extensions. In addition, there are projects that regularly involve cooperation with third parties. This makes it possible to provide clients with optimal services and to share risks.

Jack-up platform An offshore platform that can either float or have its legs lowered to stand on the seabed. Jack-up rigs are generally used by oil and gas companies for exploration and production purposes. Platforms of this type can be transported either by semi-submersible heavy transport vessel or by oceangoing tug.

LNG Liquefied Natural Gas.

LTI Lost Time Injury. Expresses the number of workplace accidents serious enough to result in absence from work.

LTIF Lost Time Injury Frequency. Expresses the number of workplace accidents serious enough to result in absence from work, per 200,000 hours worked.

Net Group profit Net profit + net profit attributable to non-controlling interests.

NINA No Injuries No Accidents. To achieve an incident and accident-free working environment Boskalis applies the NINA safety program. NINA sets out Boskalis' vision on safety and describes the safety conduct the company expects from its staff and subcontractors. The program makes people aware of their own responsibility and encourages them to take action in situations which are unsafe.

Operating result EBIT - impairments including joint ventures.

Order book Contract revenue as yet uncompleted.

Return on capital employed Net profit + interest expenses regarding long term loans (non-current interest bearing borrowings) as % of the average capital employed.

Return on equity Net profit as % of the average shareholders' equity.

Roll-on/roll-off vessel (ro-ro) Vessels designed to carry wheeled cargo such as automobiles, trucks, semi-trailer trucks, trailers or railroad cars that are driven on and off the ship on their own wheels.

Rock fragmentation under water Drilling and blasting hard materials such as rock and granite, often to deepen ports and clear navigational channels.

ROV Remotely Operated Vehicle. An unmanned robotic subsea vehicle that is remotely controlled (often from a ship or platform).

SHE-Q Safety, Health, Environment & Quality.

Solvency Group equity as % of balance sheet total (non-current assets + current assets).

Topside The upper section of an offshore oil production platform.

Trailing suction hopper dredger (TSHD) A self-propelled unit that loads its well or hopper using centrifugal pumps and pipes that trail over the bed as the ship sails. Trailing suction hopper dredgers can operate independently of other equipment and can transport material over long distances. The dredged material is dumped through flaps or bottom doors, by rainbowing, or pumped onto land using a pipeline.

TRIR Total Recordable Injury Rate. Number of LTIs, restricted work cases and medical treatment cases per 200,000 hours worked.


Boskalis

The decommissioning of an old oil rig by the Bokalift 1

EQUIPMENT

DREDGERS

Trailing suction hopper dredgers	**20**
Capacity > 6,000 m³	9
Capacity ≤ 6,000 m³	11
Cutter suction dredgers	**11**
Capacity > 12,000 kW	4
Capacity ≤ 12,000 kW	7
Backhoes	**19**
Bucket capacity from 1.4 to 33 m³	
Floating grab cranes	**12**
Grab capacity from 1.2 to 9.2 m³	
Other dredging equipment	**24**
bucket dredger, environmental disc cutter, barge unloading dredgers, suction dredgers, stone placing vessels	

OFFSHORE VESSELS

Heavy transport vessels (semi-submersible)	**11**
Capacity up to 110,000 tons	
Heavy lift vessels	**4**
Capacity from 500 to 3,000 tons	
Fallpipe vessels	**3**
Capacity from 17,000 to 24,000 tons	
Diving support vessels	**5**
Air and saturation diving support, ROV services	
Cable-laying vessels	**3**
Floating sheerlegs cranes	**5**
Capacity from 400 to 5,000 tons	
Survey vessels	**16**

OCEANGOING TUGS AND ANCHOR HANDLING TUGS

Oceangoing tugs	**8**
Anchor Handling Tugs	**17**
From 70 to 205 ton bollard pull	

BARGES AND PONTOONS

Hopper barges	**66**
Capacity from 50 to 3,800 m³	
Oceangoing flat top barges (semi-submersible)	**3**
Capacity 21,000 tons	
Oceangoing flat top barges/pontoons	**39**
Capacity from 1,000 to 14,000 tons	
Inland barges	**37**
Capacity from 100 to 2,000 tons	

VESSELS TOWAGE JOINT VENTURES — 221

LAUNCHES, WORK/SUPPLY VESSELS — 97

VARIOUS/OTHER FLOATING EQUIPMENT — 84

The numbers listed above include the vessels under construction and vessels and floating equipment of the (non-controlled) associated companies.
In addition to the equipment shown here, the group also owns a range of auxiliary equipment such as floating pipelines, winches, pumps, draglines, hydraulic excavators, wheel loaders, dumpers, bulldozers, mobile cranes, crawler drill rigs, sand pillers, filling installations for shore protection, mattresses, fixed land pipelines and a wide variety of salvage equipment, such as fire-fighting, diving and anti-pollution equipment.

COLOPHON

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