4. Marine divisional plan

By Mark Heine
We have a path to profitable growth in Marine

1. Capture the upturn in offshore Oil & Gas and Wind
2. Differentiate by integrated digital solutions
3. Leverage core expertise in new growth markets
4. Back to ROCE of >10% by 2021-2023
Marine key financials

### Marine financials

**Revenue (X EUR million)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1,431</td>
</tr>
<tr>
<td>2016</td>
<td>1,096</td>
</tr>
<tr>
<td>2017</td>
<td>947</td>
</tr>
<tr>
<td>2018</td>
<td>YTD Sep</td>
</tr>
</tbody>
</table>

**EBIT (excl. exceptional items X EUR million)**

<table>
<thead>
<tr>
<th>Year</th>
<th>EBIT</th>
</tr>
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<tbody>
<tr>
<td>2015</td>
<td>78.7</td>
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<tr>
<td>2016</td>
<td>-18.8</td>
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<td>2017</td>
<td>-43.3</td>
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<td>2018</td>
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</tbody>
</table>

**EBIT margin (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>EBIT margin</th>
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</thead>
<tbody>
<tr>
<td>2015</td>
<td>6%</td>
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<tr>
<td>2016</td>
<td>-2%</td>
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<td>2017</td>
<td>-5%</td>
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<td>2018</td>
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</tbody>
</table>

### Marine revenue split (2017)

- **Europe**: 35%
- **Americas**: 23%
- **APAC**: 26%
- **Africa**: 4%
- **O&G**: 77%
- **Renewables**: 9%
- **Infrastructure**: 11%
- **Other**: 3%
- **MEI**: 12%
Marine activities across the life cycle for Oil & Gas and Wind

- **Exploration & Appraisal**
  - Seep hunting & Geochemical
  - Geotechnical investigation
  - Geophysical survey

- **Development planning**
  - Construction support
  - Positioning
  - Monitoring & forecasting
  - Geoconsulting

- **Field development**
  - Construction support

- **Production & Maintenance**
  - Construction support

- **Decommissioning**
  - Construction support

- **Site Characterisation**
  - Final investment decision
  - Drill support

- **Asset Integrity**
  - ROV & Tooling Services
  - IRM services
Seep hunting & geochemical analysis – Carson basin 2018

Gas and feature detection

On board Geochemical Analysis

Project details

▪ Client: Nalcor Energy
▪ Location: Carson Basin (offshore Newfoundland)
▪ Waterdepths: 250–3,708 m
▪ Survey area: 18,880 km²
▪ 99 cores and 27 heat flows
▪ 447 on board geochemical analysis
UXO identification and clearance – Borssele windfarm project

Anomaly detection

UXO Identification

Project details

- Client: Tenet
- Location: Offshore Vlissingen, NL
- Services: UXO survey, identification and clearance, debris removal
- >1,650 potential UXO targets found, identified and cleared

Note: UXO – Unexploded ordnance
Field development – Life of field support for Total Moho Nord

**ROV operations**

**Bespoke tooling**

**Project details**

- Client: Total
- Location: Offshore Congo
- Waterdepths: 450–1,200 m
- Services: Survey, positioning, intervention, testing, and installation support
- >97% ROV uptime
- >500,000 offshore labour hours
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Our key markets are expected to grow in the near-term

Offshore OFS\(^1\) spend (X USD billion)

- 2014: 357
- 2015: 303
- 2016: 240
- 2017: 212
- 2018: 200
- 2019: 216
- 2020: 241
- 2021: 271
- 2022: 296

\(+10\%\) CAGR

<table>
<thead>
<tr>
<th>Year</th>
<th>Exploration</th>
<th>Greenfield</th>
<th>Brownfield</th>
<th>Decommissioning</th>
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<tbody>
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<td>2014</td>
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<td>2022</td>
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Offshore Wind spend\(^2,3\) (X EUR billion)

- 2014: 5
- 2015: 8
- 2016: 10
- 2017: 11
- 2018: 16
- 2019: 20
- 2020: 26
- 2021: 21
- 2022: 26

\(+14\%\) CAGR

<table>
<thead>
<tr>
<th>Year</th>
<th>Europe</th>
<th>North America</th>
<th>Asia(^3)</th>
<th>Middle East &amp; India</th>
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<tbody>
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<td>2014</td>
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<td>2021</td>
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<tr>
<td>2022</td>
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1. OFS is Oil Field Services
2. CAPEX and OPEX
3. Excluding China
Source: Rystad Sep 2018 ($60-$65/bbl scenario); 4C offshore Sep 2018
Well positioned to capture upturn in offshore Oil & Gas and Wind

1 Build on market leading positions
2 Leverage best people, technology and assets
3 Deliver operational excellence
We maintained market leading positions

Maintained strong market leadership in MSC

- Chapter 11 / Financial distress
- Business relaunch / acquisition

Many of our MAI competitors did not survive

- Chapter 11 / Financial distress
- Business relaunch / acquisition

Note: Bubble size represents revenue in addressable market for Fugro
Source: Company websites, Fugro analysis
Price realisation by building on our market leading positions

Price recovery is clearly visible in MSC

Actions to capture price realisation

1. Differentiate with integrated AAA solutions
2. Extend smart pricing and value based bidding
3. Strengthen account management
Leverage combination of best people, technology and assets

**People**
- Create best development opportunity for experienced geo-engineers
- Grow workforce selectively with focus on tech-savvy talent
- Optimise staff deployment by flexibility and multiskilling

**Technology**
- Continue focus on differentiating and integrated digital solutions
- Focus innovation portfolio towards digital building blocks
- Shorten time to market of new technologies

**Assets**
- Maximise reliability and uptime of vessels and ROVs
- Focus investments on asset light and modular solutions
- Improve off-season utilisation
Room to grow with our own fleet

Utilisation is improving, still room to grow

**Utilisation** (long term / owned vessels)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>76%</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>65%</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>69%</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>72%</td>
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</tr>
</tbody>
</table>

Future proof asset mix

1. Utilisation can still grow by >5 percentage points
2. Complemented with attractive short-term charters
3. In future, ~20–30% of offshore operations can be done by lightly manned / unmanned platforms
Operational excellence to drive client satisfaction and cost efficiency

Fugro UPTIME Dashboard

Continuous improvement

1. Maximise reliability and uptime of equipment
2. Reduce project mobilisation time
3. Strengthen project management function
4. Procure with rigorous cost discipline
We have a path to profitable growth in Marine

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2. Differentiate by integrated digital solutions

3. Leverage core expertise in new growth markets

4. Back to ROCE of >10% in by 2021-2023
Differentiate by integrated digital solutions

**Integrated** - Only global player that collects data during all phases of asset life cycle

**Digital** - Well advanced in modernising our services
Integrated digital solution for IRM

Collect high quality data with fast ROV
Integrated digital solution for IRM

Efficient remote operations
Integrated digital solution for IRM

Automated cloud-based processing
Integrated digital solution for IRM

Integrity analysis leveraging all relevant Geo-data expertise
Integrated digital solution for IRM

3D virtual world providing decision support

- **Freespans**
  - | ID | Start Time | End Time | End Easting | End Northing |
  - | 3033.413m | 10/10/2015 10:37:16 AM | None |
  - | 6952.185m | 10/10/2015 10:37:15 PM | None |
  - | 5946.159m | 10/10/2015 10:37:16 PM | None |

- **Burials**
  - | ID | Start Easting | Start Northing | End Easting | End Northing | End Height | Location |
  - | 3033.413m | 503.053m | 1853.053m | 503.053m | 1853.053m | None |

Pipeline Integrity Solution
Integrated digital solution for IRM

- SAFER
- FASTER
- MORE EFFICIENT
- HIGHER QUALITY
- SUSTAINABLE

3D virtual world providing decision support

Pipeline Integrity Solution
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4. Back to ROCE of >10% in by 2021-2023
Global trends provide opportunities in new growth markets

1. Asset Integrity for offshore wind
2. Hydrographic services
3. Secure positioning solutions
Amount of wind turbines installed drives demand for Asset Integrity

Leverage our existing expertise

1. Fugro is market leader in Site Characterisation

2. Expand relevant MAI expertise & services:
   - UXO ID & clearance
   - Export / Array cable IRM
   - Foundation IRM
   - Scour & structural monitoring
   - SCADA & condition monitoring
   - Weather forecasting

Estimated addressable market: EUR 100-180 million

1. Excluding China
Source: 4C offshore Sep 2018
Grow along with the expanding market for hydrography services

Increased need for mapping the coastal area and the rest of the seabed

Fugro is well positioned

1. Market leader in hydrography
2. Leverage our dedicated coastal survey vessels
3. Leverage new technology

Estimated addressable market: EUR 300-400 million
Roll-out secure positioning solutions

Position integrity is becoming increasingly important

Leverage our existing network and knowledge

1. Market leader in offshore positioning services
2. Developed patented technology based on proprietary reference receiver network
3. Easy to implement software-based solution
The plan - Summary

1. Capture the upturn in Energy and Infrastructure
   1. Build on market leading positions
   2. Leverage the combination of best people, technology and assets
   3. Deliver operational excellence

2. Differentiate by integrated digital solutions
   1. Effective acquisition by expanding remote operations and introducing USV’s
   2. Automate Geo-data processing
   3. Build insightful client interfaces, enhanced by advice from our experts

3. Leverage core expertise in new growth markets
   1. Strengthen position in Asset Integrity for Offshore Wind
   2. Grow hydrography services
   3. Roll-out secure positioning solutions
Marine division – financial outlook for 2021-2023

Key drivers for margin improvement to achieve low-end of EBIT range

<table>
<thead>
<tr>
<th>Driver</th>
<th>EBIT margin impact (percentage points)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Annually</td>
</tr>
<tr>
<td>Volume</td>
<td>+1-2</td>
</tr>
<tr>
<td>Price</td>
<td>+1-2</td>
</tr>
<tr>
<td>Productivity</td>
<td>+1</td>
</tr>
<tr>
<td>Cost inflation</td>
<td>-1</td>
</tr>
</tbody>
</table>

Mid-term target 2021–2023

- ROCE >10%
- EBIT margin of 10-13%

1. Comparable revenue growth
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