WÄRTSILÄ SERVICES: FOCUSING ON GROWTH AND DIGITALISATION

Pierpaolo Barbone, President Services & Executive Vice President
<table>
<thead>
<tr>
<th><strong>In one year:</strong></th>
<th><strong>115,000</strong> deliveries, constituting more than <strong>900,000</strong> line items, packed in <strong>134,000</strong> packages</th>
<th><strong>117,000</strong> unique materials stored</th>
<th><strong>16,300,000 kg</strong> of parts, with a total volume of <strong>46,700 m³</strong></th>
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<tbody>
<tr>
<td><strong>We serve</strong></td>
<td><strong>12,000</strong> customers</td>
<td></td>
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<td></td>
<td><strong>66,700</strong> export declarations</td>
<td><strong>Around 106,000</strong> transportations making use of roughly <strong>150</strong> carrier modalities</td>
<td>**We maintain knowledge and skills for <strong>350</strong> different product types</td>
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<td></td>
<td><strong>Our 3,600</strong> field service professionals perform <strong>100,000</strong> field services jobs</td>
<td><strong>We provide 20,000</strong> technical answers</td>
<td><strong>We maintain 450</strong> installations under long-term contract</td>
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<td><strong>...One promise to the customer:</strong></td>
<td></td>
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<td><strong>We offer expertise, proximity, reliability and responsiveness for our customers in the most sustainable way</strong></td>
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We operate in two strategic markets

**Marine & Power Plants**

**Demand drivers:**
- Focus on efficiency of operations
- Strong demand for power generation in developing countries

**Growth through:**
- Capturing further opportunities within our installed engine base
- Exploring opportunities in the installed base of multiple brands and equipment

**Oil & Gas**

**Demand drivers**
- Solid demand for energy
- Pressure to keep production up

**Growth through:**
- Building on our installed base in power generation, pumping, and offshore propulsion
- Leveraging existing capabilities

**Increasingly shaped by:**
- Complexity, uncertainty and volatility in global economy and politics
- Trade sanctions and trade barriers
- Digital disruption
- Growing importance of gas as a fuel
- New and stricter regulations regarding emissions, safety, and asset efficiency
Changing competitive landscape requires adapting the way we operate

<table>
<thead>
<tr>
<th>OEM</th>
<th>Non-OEM</th>
<th>New entrants</th>
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<tbody>
<tr>
<td>Total service providers</td>
<td>Technology / spare part manufacturers</td>
<td>Spare parts distributors &amp; field service</td>
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</table>

- Increasing our market share through **superior customer service**, improved quality and products that offer **clear customer benefits**
- Changes in customer behaviour and more advanced technology drive **demand for premium services**
- **Digitalisation** is **crucial** for staying competitive and enabling growth
- Extending current products and competences into new markets and making acquisitions require **adapting operating models**
Managing the lifecycle of our installations

- **Introduction**
  - Knowledge transfer from R&D to Services

- **Focus**
  - Implementation of new technical solutions

- **Support**
  - Responsive & preventive solutions
  - Solutions & products for operational optimisation
  - Lifetime extension packages, obsolescence management

- **Maintain**
  - Controlled phase out of product lines

- **New products**
  - Growth

- **Mature products**
  - Maturity
  - Decline
  - Maintain
  - Phase-out
Managing the lifecycle: A closer look at our business

4-stroke sales distribution by age of installation

We manage long relationships with our customers
Understanding our 181 GW engine installed base

Wärtsilä’s engine installed base

- 38% 4-st marine
- 36% 4-st power
- 26% 2-st* marine

Engine installed base: MW distribution by commissioning year

- <85
- 85-87
- 88-90
- 91-93
- 94-96
- 97-99
- 00-02
- 03-05
- 06-08
- 09-11
- 12-15

* 2-stroke now Winterthur Gas and Diesel Ltd. (WinGD), a joint venture between Wärtsilä and CSSC
We are where our customers need us to be

11,000 service professionals in 70 countries, 160 locations…
Business per industry segment and region

Net sales split – H1 2015

- Power
- Offshore
- Merchant
- Cruise & Ferry
- Special Vessels & Navy

- Middle-East and Asia
- Americas
- Northern Europe
- Southern Europe and Africa
A solid business in a challenging environment

Net sales development

MEUR

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<th>Year</th>
<th>Sales (MEUR)</th>
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<tr>
<td>96</td>
<td>200</td>
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<tr>
<td>97</td>
<td>250</td>
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<tr>
<td>98</td>
<td>350</td>
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<tr>
<td>99</td>
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<td>13</td>
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<td>14</td>
<td>2250</td>
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<tr>
<td>15</td>
<td>2350</td>
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H1
The only way forward is growth

We will grow by
• Doing more business with existing customers
• Exploring opportunities within new customer segments by leveraging current competences
• Acquiring businesses in growing markets

Customer first
Go digital
Asset & lifecycle management
New customer access
Customer focus is key

Customer first
We will nourish our partnerships with the existing customer base by focusing on improved:
• Time to quote
• Delivery accuracy
• Quality of field service

Access to new customers
We will seek to grow our customer base organically and through acquisitions by leveraging our existing competences.
• Exploring opportunities in the installed base of multiple brands and equipment
We will continue to develop and commercialise our portfolio of value-adding services:

- Asset performance management agreements
- Retrofits
- Upgrading of installed base

Focus areas for agreements:

- Marine: LNG carriers, cruise
- Oil and gas: offshore drilling and production, OSV’s
- Power Plants
Installed base under agreements

- Americas: 2,693 MW (Marine 7,964 MW, Plants 13,035 MW, Total 20,999 MW)
- North Europe: 2,956 MW (Marine 224 MW, Plants 5,093 MW)
- South Europe & Africa: 1,878 MW (Marine 437 MW, Plants 5,093 MW)
- Middle East & Asia: 437 MW (Marine 5,093 MW)

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Digitalisation: leading the industry in the digital fields
Megatrends that drive digitalisation

- Growing amount of data
- Universal connectivity
- Globalisation of value chains
- Growing focus on the environment
- Intelligent solutions and services
- Exploratory analytics and visualisation
Digitalisation in industrial services

• Through partnerships with common business goals, digitalisation can help our customers’ business top line growth.
• New opportunities emerge at all stages from design to operations support, creating new business models and making old ones more efficient.
• Digitalisation enhances customer engagement, enabling a seamless and rewarding customer experience.
• Digitalised services can improve performance throughout the installation lifecycle.
Creating customer value through digitalised services

Improving customers’ business top line with a co-growth approach
Customer value creation is a partnership in which digital technology and analytical skills of human experts are combined to achieve a common goal.
Wärtsilä’s focus areas for digital value creation

1. Customer engagement
2. Intelligent engines and components
3. Digital maintenance services
4. Virtual concepts
5. Asset performance optimisation
## Wärtsilä’s focus areas for digital value creation

1. **Customer engagement**
   - Digitalisation enables new forms of customer engagement.
   - Increasingly sophisticated digital services offer value and empowerment.
   - User experience is expected to be seamless and intuitive.

2. **Intelligent engines and components**
   - Breakthrough innovations emerge from exploiting intelligent technologies.
   - Key components will be equipped with track and trace features enabling them to alert when issues arise.
   - In intelligent engines, components communicate with each other and self-optimise based on this communication.
Interactive and real-time data helps secure and optimise the operation of power plants and vessels.

Utilising this data can help predict maintenance and competence needs well in advance, enabling better planning.

Transparency of real-time data from order to invoicing.

Solutions based on 3D design can offer new ways to benefit from real-time information and knowledge to:

- Enhance technical assistance
- Support maintenance and servicing
- Enable new types of virtual training concepts from video training to holograms and augmented reality.
- Increase the availability of selected components through 3D printing.
Wärtsilä’s focus areas for digital value creation

5.
Asset Performance Optimization

- Focus shifting from maintenance and servicing to more comprehensive optimisation of customer business.
- Wärtsilä’s asset performance optimisation concepts are designed to optimise e.g. an installation’s energy efficiency, or even the management of an entire fleet.
- This will be done by integrating advanced dynamic voyage planning, ship efficiency advisory services and energy analysis, as well as extensive condition monitoring of the main equipment into one consolidated solution.

The technical enabler behind Wärtsilä’s performance optimisation concepts is a single ecosystem.
Summary

- We will seek business growth within our installed base and explore opportunities in new markets where we can leverage our existing competences
- Our focus is on strengthening our leadership in lifecycle services
- We will continue investing in the development of new digital solutions and services that create value for our customers and enable us to grow together with them
Thank You

www.wartsila.com