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Wärtsilä’s Corporate Governance Statement, prepared in accordance with the recommendations of the Code, is published as a separate statement on Wärtsilä’s website as well as in this Annual Report. The content of this Corporate Governance section corresponds fully to Wärtsilä’s Corporate Governance Statement. Wärtsilä’s Audit Committee has reviewed the Corporate Governance Statement. The Company’s external auditor has monitored the issuing of the statement, and has verified that the description of the main features of the internal control and risk management section, as related to the financial reporting process included in the statement, matches the Financial Statements.

Governing bodies

Wärtsilä implements a single-tier governance model, by which management of the Wärtsilä Group is the responsibility of the General Meeting of shareholders, the Board of Directors, and the President & CEO. Their duties are for the most part defined by the Finnish Companies Act. The General Meeting of shareholders elects the Board of Directors and auditor. The Board of Directors is responsible for the strategic management of the company, and is assisted in its work by the Board Committees. The Board appoints the President & CEO who is in charge of the operative, day-to-day management of the company, with support from the Board of Management.

Wärtsilä’s governance model

External Audit
Elected by the AGM to audit the consolidated and parent company financial statements and accounting records, and the administration of the parent company.

Internal Audit
Analyses the company's operations and processes, as well as the effectiveness and quality of its supervision mechanisms. The function reports at regular intervals to the Audit Committee.

ANNUAL GENERAL MEETING
Wärtsilä’s ultimate decision-making body.

BOARD OF DIRECTORS
The Board of Directors consists of eight members elected by the AGM. They are responsible for the strategic management of the company.

PRESIDENT & CEO
The Board of Directors appoints the President & CEO, who is in charge of the operative, day-to-day management of the company.

BOARD OF MANAGEMENT
The Board of Management supports the President & CEO in his duties.

Audit Committee
Responsibilities include monitoring the reporting process of financial statements and supervising the financial reporting process.

Nomination Committee
Responsibilities include preparing the proposal for the General Meeting regarding the election of the directors for the Board.

Remuneration Committee
Responsibilities include preparing matters concerning the nomination of the President & CEO and Board of Management members and their remuneration.

This pdf is composed of selected elements from Wärtsilä’s Annual Report and may deviate from other generated documents. To view the report in full, please visit www.wartsila.com/ar2018.
Annual General Meeting

Wärtsilä’s ultimate decision-making body is the General Meeting of shareholders. It resolves issues as defined for General Meetings in the Finnish Companies Act and the company’s Articles of Association. Agenda items for the General Meeting of shareholders include the following:

- approving the financial statements
- deciding on the distribution of dividends
- discharging the company’s Board of Directors and President & CEO from liability for the financial year, and
- electing the company’s Board of Directors and auditor and deciding on their remuneration.

A General Meeting of Wärtsilä Corporation shareholders is held at least once a year, at a time no later than the end of June. If needed, the company may also hold Extraordinary General Meetings. An invitation to the General Meeting is published on the Company’s website or in not less than two daily newspapers, which are commonly distributed in Finland, as decided by the Board of Directors. The invitation shall be published no earlier than two months, and no later than three weeks, prior to the General Meeting. It shall, however, be published at least nine days prior to the shareholders’ record date. Wärtsilä also publishes invitations to its General Meetings as stock exchange releases. The documents and draft resolutions to be submitted to the General Meeting can be found on Wärtsilä’s website.

Shareholders have the right to add items falling within the competence of the Annual General Meeting to the meeting’s agenda. The request must be submitted to the Board of Directors in writing sufficiently in advance of the meeting so that the item can be added to the Notice of the General Meeting. Wärtsilä publishes on its website the date by which a shareholder must notify the company’s Board of Directors of an issue that he or she demands to be addressed at the General Meeting. This information is given no later than by the end of the financial period preceding the General Meeting, and includes the postal or email address to which the demand shall be sent. The demand is always deemed to have arrived in sufficient time if the Board has been notified of the demand at the latest four weeks before the delivery of the Notice of the General Meeting.

All shareholders registered by the record date in the company’s list of shareholders maintained by Euroclear Finland Ltd have the right to attend the Annual General Meeting. Each share entitles the holder to one vote. The General Meeting is organised in such a manner that shareholders can participate in the meeting as extensively as possible. The Chairman of the Board of Directors, the members of the Board of Directors, and the President & CEO are present at the General Meeting. The auditor-in-charge also attends the Annual General Meeting. Director candidates shall also be present at the General Meeting that decides upon their election.

Annual General Meeting 2018

Wärtsilä’s Annual General Meeting was held on 8 March 2018. A total of 1,795 shareholders representing 112,402,425 votes participated in person or by proxy.

The Annual General Meeting approved the financial statements and discharged the members of the Board of Directors and the company’s President & CEO from liability for the financial year 2017. The audit firm PricewaterhouseCoopers Oy was elected as the auditor of the Company for the year 2018. The Meeting approved the Board of Directors’ proposal to pay a dividend of EUR 1.38 per share in two instalments. The first instalment of EUR 0.69 per share was paid on 19 March 2018. In accordance with the approved share issue without payment (share split), the second instalment was divided between one old and two new shares so that EUR 0.23 was paid on each share. The second dividend instalment was paid on 27 September 2018. Adjusted to reflect the increased number of shares resulting from the share issue, the dividend amounted to EUR 0.46 per share. The Annual General Meeting approved the Board of Directors’ proposal to issue new shares to the shareholders without payment in proportion to their holdings so that two new shares are issued for each share. Thereby, a total of 394,482,260 new shares were issued. The new shares were registered in the trade register on 12 March 2018. The Annual General Meeting authorised the Board of Directors to repurchase and/or distribute a maximum of 57,000,000 shares.
All resolutions were taken without voting. The minutes of the meeting and other related documents can be found on Wärtsilä’s website: www.wartsila.com/investors/governance.

Board of Directors

**Mikael Lilius**
Independent of the company and significant shareholders. Chairman of the Board of Wärtsilä Corporation. Born 1949, B.Sc. (Econ.). Member of the Board of Wärtsilä Corporation since 2010, Chairman of the Board since 2011.

**Primary working experience**

**Other positions of trust**
Arilström Capital Oy and Metso Corporation, Chairman of the Board; Evil Bank Ltd., Member of the Board, AB Kelonia Oy, Member of the Supervisory Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 61,260 shares

**Tom Johnstone CBE**
Independent of the company, dependent of significant shareholders. Born 1955, Master of Arts, Honorary Doctorate in Business Administration and Honorary Doctorate in Science. Member of the Board of Wärtsilä Corporation since 2015, Deputy Chairman of the Board since 2017.

**Primary working experience**
Several management posts within the SKF Group, the latest as President and CEO of AB SKF, 2003-2014.

**Other positions of trust**
British Swedish Chamber of Commerce, Combient AB and Husqvarna AB, Chairman of the Board; Investor AB, Northvolt AB and Volvo Cars, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 8,594 shares

**Maarit Aarni-Sirviö**
Independent of the company and significant shareholders. Born 1953, M.Sc. (Tech.), eMBA. Secretary General of Directors’ Institute Finland – Hallitusammattilaiset ry; Managing Director of Boardview Oy. Member of the Board of Wärtsilä Corporation since 2007.

**Primary working experience**
Mint of Finland Ltd., President and CEO, 2008-2010; Borealis Group, 1994-2008, several senior positions of which the most recent was Vice President BU Phenol, 2001-2006, Vice President BU Olefins, 1997-2001 in Copenhagen, Denmark and Neste Oyj 1977-1994.

**Other positions of trust**
Directors’ Institute Finland – Hallitusammattilaiset ry and ecoDa (The European Confederation of Directors’ Associations), Member of the Board. Finland National Committee for UN Women, Chairman of the Board.

**Relevant prior positions of trust**

Holdings in Wärtsilä Corporation on 31.12.2018: 32,437 shares
Kaj-Gustaf Bergh

Independent of the company and significant shareholders. Born 1955, B.Sc., LL.M. Member of the Board of Wärtsilä Corporation since 2008.

Primary working experience

Other positions of trust
Julius Tallberg Oy Ab, Chairman of the Board; Stockmann plc, Ramirent Group and JM AB, Member of the Board.

Relevant prior positions of trust

Holdings in Wärtsilä Corporation on 31.12.2018: 30,103 shares

Karin Falk

Independent of the company and significant shareholders. Born 1965, B.Sc. (Econ.). Senior Vice President Volvo Trucks Services & Customer Quality. Member of the Board of Wärtsilä Corporation since 2017.

Primary working experience

Other positions of trust
Volvo Group Venture Capital, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 3,007 shares

Johan Forssell


Primary working experience

Other positions of trust
Atlas Copco, Epiroc AB, EQT AB and Patricia Industries, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 3,007 shares
**Risto Murto**

Independent of the company and significant shareholders. Born 1963, Ph.D. (Econ.). President & CEO of Varma Mutual Pension Insurance Company. Member of the Board of Wärtsilä Corporation since 2014.

**Primary working experience**


**Other positions of trust**

University of Oulu and The Finnish Pension Alliance TELA, Chairman of the Board; Finance Finland (FFI) and Sampo plc, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 8,947 shares

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**Markus Rauramo**

Independent of the company and significant shareholders. Born 1968, M.Sc. (Econ. and Pol. Hist.). Chief Financial Officer and Member of the Fortum Executive Management Team. Member of the Board of Wärtsilä Corporation since 2011.

**Primary working experience**


**Other positions of trust**

Teollisuuden Voima Oyj, Member of the Board; Uniper SE, Vice Chairman of the Supervisory Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 16,609 shares
Operations of the Board of Directors

Responsibility for the management of the company and the proper organisation of its operations is invested in the company’s Board of Directors, which is composed of five to ten members. Board members serve for one year at a time and are elected by the General Meeting.

According to the Corporate Governance Code’s recommendation 10, the majority of Board members shall be independent of the company and at least two of the members representing this majority shall be independent of significant shareholders of the company. The Board evaluates the independence of its members annually and re-evaluates as necessary.

The Nomination Committee prepares the proposal for the General Meeting regarding the election of directors to the Board, and communicates with significant shareholders, when required, on matters pertaining to the proposal. The proposal for the composition of the Board is included in the Notice of the General Meeting. The same applies to a proposal for the composition of the Board made by shareholders with at least 10% of the votes carried by the company shares, provided that the candidates have given their consent to the election, and the company has received information on the proposal sufficiently in advance as to be included in the Notice of the General Meeting. The candidates proposed shall be disclosed separately. Wärtsilä publishes the biographical details of the candidates for the Board on its website in connection with publication of the Notice of the General Meeting.

The Board elects a chairman and a deputy chairman from among its members. The Board steers and supervises the company’s operations, and decides on policies, goals, and strategies of major importance. The principles applied by the Board to its regular work are set out in the Board Charter. The Board also approves the rules of procedure applied by the Board’s committees setting out their main tasks and working principles. In addition to matters requiring its decision, the Board is also given updates at its meetings on the Group’s operations, financial position and risks.

The Board conducts an annual self-evaluation of its operations and working methods. The purpose of this evaluation is to assess how the Board has executed its tasks during the year and to act as a basis for developing Board functions.

The Board of Directors convenes 8-11 times a year following a pre-determined schedule. In addition to these meetings, the Board convenes as necessary. All board meetings are documented.

Diversity principles

In order for the Board of Directors to discharge its duties in the most effective manner, the Board must be highly qualified and sufficiently diverse. When preparing its proposal for the Board’s composition, the Nomination Committee takes into account the educational and professional background of the individual candidates, as well as their international experience so that the composition of the Board represents a wide variety of competencies and qualifications. The Nomination Committee also takes into account the candidates’ age, as having different seniority levels on the Board is considered beneficial in terms of ensuring mutually complementing experience.

Wärtsilä’s principle with regard to gender is to have both genders represented on the Board. In December 2018, Wärtsilä had two female board members out of eight members in total. The objective of the Company is to achieve over time a more balanced representation of both genders on the Wärtsilä Board. The Nomination Committee assesses the potential candidates, not only in terms of their individual qualifications and characteristics, but also in terms of their ability to effectively work together and jointly support and challenge the company management in a proactive and constructive way.

Board of Directors in 2018

As of 8 March 2018, the Board consisted of the following eight members: Ms Maarit Aarni-Sirviö, Mr Kaj-Gustaf Bergh, Ms Karin Falk, Mr Johan Forssell, Mr Tom Johnstone (Deputy Chairman), Mr Mikael Liljus (Chairman), Mr Risto Murto, and Mr Markus Rauramo.
All eight Board members were determined to be independent of the company and six members were determined to be independent of significant shareholders. Mr Tom Johnstone was determined to be dependent of significant shareholders, due to his position on the board of Investor AB. Mr Johan Forssell was determined to be dependent of significant shareholders, due to his position as the President and CEO of Investor AB.

Until 8 March 2018, the Board consisted of the following eight members: Ms Maarit Aarni-Sirviö, Mr Kaj-Gustaf Bergh, Ms Karin Falk, Mr Johan Forssell, Mr Tom Johnstone (deputy chairman), Mr Mikael Lilis (chairman), Mr Risto Murto and Mr Markus Rauramo.

During 2018, Wärtsilä’s Board of Directors held 11 meetings. The average attendance of all directors was 100%. The financial and strategic development of Wärtsilä and its position in the markets, its growth opportunities, and the general further development of the Company have been, among others, the major items on the Board’s agenda. People matters are also an important and continuous part of the Board’s work, as they contribute to Wärtsilä’s long-term success. During 2018, areas of particular focus included implications of escalating trade tensions, the organisational design of the Group, Wärtsilä’s digital strategy, business development in the USA, as well as the acquisition of Transas.

<table>
<thead>
<tr>
<th>Board member meeting participation in 2018</th>
<th>Number of meetings</th>
<th>% of meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mikael Lilis, Chairman</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Tom Johnstone, Deputy Chairman</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Maarit Aarni-Sirviö</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Kaj-Gustaf Bergh</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Karin Falk</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Johan Forssell</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Risto Murto</td>
<td>11/11</td>
<td>100</td>
</tr>
<tr>
<td>Markus Rauramo</td>
<td>11/11</td>
<td>100</td>
</tr>
</tbody>
</table>

Responsibilities of the Board of Directors

The Board considers all matters stipulated to be the responsibility of a board of directors by legislation, other regulations, and the company’s Articles of Association. The most important of these are:

- the annual and interim financial statements
- matters to be put before the General Meetings of shareholders
- the appointment of the President & CEO, the Executive Vice Presidents and the CEO’s deputy, if any
- the organisation of financial supervision within the company

The Board is also responsible for considering any matters that are so far-reaching with respect to the area of the Group’s operations, that they cannot be considered to fall within the scope of the Group’s day-to-day administration. Examples of such matters include:

- approval of the long-term goals of the Group and its businesses, as well as the strategies to achieve them
- monitoring the developments, opportunities and threats in the external environment, and their impact on goals and strategy
- approval of the annual business plan and target setting for the Group
- approval of risk management principles
- monitoring and assessing the performance of the President & CEO
- approval of the remuneration and pension benefits of the President & CEO, the Executive Vice Presidents and the CEO’s deputy
- approval of the corporate governance principles
• overseeing that the Company complies with legal and regulatory requirements and its Code of Conduct and other established values and ethical principles in its operations
• discussing and monitoring the R&D and product development plans of the Company
• the appointing of the Board committees
• the granting of charitable donations
• approval of other matters that are strategically or financially important, such as significant investments, acquisitions or divestments.

The Boards' committees

The Board of Directors appoints annually an Audit Committee, a Nomination Committee, and a Remuneration Committee, and may also nominate other committees if considered necessary in its constitutive meeting following the Annual General Meeting. The Board appoints the members of these committees, and their chairmen, taking into consideration the expertise and experience required for the duties of the committee. The Board also has the right to remove a member from a committee. The members of each committee are appointed for the same term of office as the Board itself. In addition to the committee members, other Board members may participate in committee meetings, if they so wish. The purpose of the Board's committees is to prepare matters to be put before the Board for its decision. The committees have no decision-making authority of their own.

The Audit Committee

The Board of Directors appoints an Audit Committee to assist it in the performance of its supervisory duties. The Board appoints from among its members at least three members to the Committee. These members shall have the qualifications necessary to perform the responsibilities of the Audit Committee. The majority of the members of the Audit Committee shall be independent of the company and at least one member shall be independent of the company’s significant shareholders.

The Board defines the duties of the Audit Committee in the charter confirmed for the Committee. The Audit Committee monitors the reporting process of financial statements, supervises the financial reporting process, and monitors the efficiency of the internal control, internal audit and risk management systems. Furthermore, the Committee reviews the description of the main features of the internal control and risk management systems pertaining to the financial reporting process, monitors the statutory audit of the financial statements and consolidated financial statements, evaluates the independence of the statutory audit firm, and prepares the proposal for resolution on the election of the auditor. Other duties of the Audit Committee include reviewing the accounting principles of the company and approving any amendments to them, reviewing the interim and financial statements of the company and the reports prepared by the auditor for the Audit Committee, as well as evaluating the processes aimed at ensuring compliance with laws and regulations and monitoring the company's credit position and taxation. The Audit Committee also reviews the company’s Corporate Governance Statements and reviews and resolves any special issues raised by the Board of Directors that fall within the competence of the Audit Committee.

The Chairman of the Audit Committee convenes the Committee as required. The Chairman also reports the Committee’s proposals to the Board of Directors and regularly reports to the Board on the Committee's meetings.

Audit Committee in 2018
Chairman Markus Rauramo, members Maarit Aarni-Sirviö and Risto Murto. All members are independent of the company and significant shareholders. The Audit Committee met five times in 2018. The average attendance of all Committee members was 100%.

The Nomination Committee

The Board of Directors appoints a Nomination Committee to assist it in its work. The Board appoints at least three of its members to serve on the Committee. The majority of the members of the Committee shall be independent of the company.
The Board defines the duties of the Nomination Committee in the charter confirmed for the Committee. The Nomination Committee prepares the proposal to be put before the General Meeting regarding the election of the directors to the Board. The Committee communicates, when required, with major shareholders on matters pertaining to the election of the directors for the Board. The Nomination Committee prepares matters concerning the remuneration applying to Board members. The Nomination Committee monitors and reports to the Board of Directors the achievement related to the Board’s diversity objectives on a yearly basis, and, if needed, the Committee proposes adjustments to the Diversity Policy for the Board of Directors.

The Chairman of the Nomination Committee convenes the Committee as required. He also reports the Committee’s proposals to the Board of Directors and regularly reports to the Board on the Committee’s meetings.

Nomination Committee in 2018
Chairman Mikael Lilius, members Kaj-Gustaf Bergh, Johan Forssell and Risto Murto. All members are independent of the company and three are independent of significant shareholders. In addition to several discussions, the Nomination Committee held one formal meeting in 2018. The average attendance of all Committee members was 100%.

The Remuneration Committee
The Board appoints a Remuneration Committee to assist it in its work. The Board appoints at least three of its members to sit on the Committee. The majority of the members of the Committee shall be independent of the company.

The Board defines the duties of the Remuneration Committee in the charter confirmed for the Committee. The Remuneration Committee prepares, as necessary, matters concerning the appointment of the President & CEO, the CEO’s deputy and other Board of Management members for the Board of Directors. The Committee prepares proposals for the Board of Directors concerning the remuneration principles, incentive schemes and remuneration that apply to the President & CEO and the Board of Management members. External consultants used by the committee are independent of the company and management.

The Chairman of the Remuneration Committee convenes the Committee as required. He also reports the Committee’s proposals to the Board of Directors and regularly reports to the Board on the Committee’s meetings.

Remuneration Committee in 2018
Chairman Mikael Lilius, members Maarit Aarni-Sirviö and Tom Johnstone. All members are independent of the company and two are independent of significant shareholders. The Remuneration Committee met three times in 2018. The average attendance of all Committee members was 100%.

Board member committee meeting participation in 2018

<table>
<thead>
<tr>
<th>Member</th>
<th>Audit Committee</th>
<th>Nomination Committee</th>
<th>Remuneration Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mikael Lilius</td>
<td>-</td>
<td>1/1</td>
<td>3/3</td>
</tr>
<tr>
<td>Tom Johnstone</td>
<td>-</td>
<td>-</td>
<td>3/3</td>
</tr>
<tr>
<td>Maarit Aarni-Sirviö</td>
<td>5/5</td>
<td>-</td>
<td>3/3</td>
</tr>
<tr>
<td>Kaj-Gustaf Bergh</td>
<td>-</td>
<td>1/1</td>
<td>-</td>
</tr>
<tr>
<td>Karin Falk</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Johan Forssell</td>
<td>-</td>
<td>1/1</td>
<td>-</td>
</tr>
<tr>
<td>Risto Murto</td>
<td>5/5</td>
<td>1/1</td>
<td>-</td>
</tr>
<tr>
<td>Markus Rauramo</td>
<td>5/5</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Board of Management

Jaakko Eskola

Primary working experience

Positions of trust
The Federation of Finnish Technology Industries and The Finnish Foundation for Share Promotion, Member of the Board.

Relevant prior positions of trust
European Marine Equipment Council (EMEC), President, 2008-2011.

Holdings in Wärtsilä Corporation on 31.12.2018: 41,739 shares

Arjen Berends
Executive Vice President and Chief Financial Officer since 1 October 2018. Born 1968, MBA. Joined the company in 1988.

Primary working experience

Holdings in Wärtsilä Corporation on 31.12.2018: no shares

Päivi Castrén

Primary working experience

Positions of trust
The Federation of Finnish Technology Industries, Chairman of the Committee of Education and Employment; Wilhelm Wahlforss Foundation, Chairman of the Board; Member of the IMD Executive Education Advisory Council.

Holdings in Wärtsilä Corporation on 31.12.2018: 14,799 shares
Kari Hietanen
Executive Vice President, Corporate Relations and Legal Affairs since 2012, Company Secretary since 2002. Born 1963, LL.M. Joined the company in 1989.

Primary working experience

Positions of trust
European Engine Power Plants Association, EUGINE, Vice President; German-Finnish Chamber of Commerce, Member of the Board; Finnish-Russian Intergovernmental Economic Commission, Deputy Chairman; Finnish-Korean Trade Association, Deputy Chairman of the Board; East Office of Finnish Industries Ltd, Member of the Board; Confederation of Finnish Industries (EK), Member of the Trade Policy Committee; International Trade Committee, Finland Chamber of Commerce / ICC Advisory Board, ICC Finland, member.

Holdings in Wärtsilä Corporation on 31.12.2018: 15,633 shares

Roger Holm

Primary working experience
Wärtsilä Corporation: Senior Vice President, Engines, 2013-2015; Vice President Seals & Bearings, 2011-2013; Vice President Solutions Management, Services, 2010-2011; Vice President Business Development, Services, 2008-2010; Chief Information Officer, 2006-2008; Program Director, Global ERP Program, 2002-2006; Corporate Controller, 2001-2002; Wärtsilä Finland Oy & Wärtsilä NSD Finland Oy: various managerial positions, 1997-2001.

Positions of trust
Hanken School of Economics, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 11,796 shares

Atte Palomäki

Primary working experience

Positions of trust
European Association of Communication Directors (EACD) and Management Group of the Finland Promotion Board, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 14,493 shares
Marco Ryan

Primary working experience

Holdings in Wärtsilä Corporation on 31.12.2018: no shares

Marco Wirén

Primary working experience

Positions of trust
Neste Corporation, Member of the Board.

Holdings in Wärtsilä Corporation on 31.12.2018: 20,184 shares

Pierpaolo Barbone acted as Deputy to the CEO since 2015 and President, Services & Executive Vice President, Wärtsilä Corporation, until 31 December 2018.

Javier Cavada Camino acted as President, Energy Solutions & Executive Vice President, Wärtsilä Corporation, until 30 September 2018.
The President & CEO and the Deputy CEO

The Board of Directors appoints a President for the Group who is also its Chief Executive Officer. The President & CEO is in charge of the day-to-day management of the company and its administration, in accordance with the company’s Articles of Association, the Finnish Companies Act, and the instructions of the Board of Directors. He is assisted in this work by the Board of Management. The President & CEO’s service terms and conditions are specified in writing in his service contract. The President & CEO of the company is Mr Jaakko Eskola. Mr Pierpaolo Barbone served as the deputy to the President & CEO until the end of 2018.

Operations of the Board of Management

Following the organisational redesign into two business areas on 1 January 2019, the company’s Board of Management comprises eight members: the President & CEO, the Chief Financial Officer, the Executive Vice Presidents heading the Wärtsilä Energy Business and Wärtsilä Marine Business, the Chief Digital Officer, and the Executive Vice Presidents heading the Communications & Branding, the Corporate Relations & Legal Affairs, and the Human Resources functions. Board of Management members are appointed by the company’s Board of Directors, which also approves their remuneration and other terms of employment.

The Board of Management is chaired by the President & CEO. It considers strategic issues related to the Group and its businesses, as well as investments, product policy, and the Group’s structure and corporate steering systems. It also supervises the company’s operations.

The Chief Financial Officer’s main areas of responsibility include group accounting and control, treasury (including project and customer financing), taxation, process development, corporate planning, and investor relations. The Executive Vice Presidents heading the businesses are each responsible for the sales volumes and profitability of their respective global businesses, deploying the capabilities of the Group’s worldwide subsidiaries. The Chief Digital Officer leads the Information Management organisation and is responsible for developing and executing Wärtsilä’s digital strategy, and related digital governance. The main areas of responsibility of the Executive Vice President, Corporate Relations & Legal are corporate relations and legal affairs, intellectual asset management and sustainability, as well as environmental and occupational health and safety, and quality. The Executive Vice President, Human Resources is responsible for people related processes. The main areas of responsibility of the Executive Vice President, Communications & Branding are external and internal communications, as well as branding. Information on the members of the Board of Management and their areas of responsibility and holdings can be found in the Board of Management CVs.

The Board of Management in 2018

The Board of Management met 13 times during 2018. The main issues addressed by the Board of Management included market development and business strategy, new growth areas, the profitability of the company, as well as issues relating to developments regarding competitiveness, costs, and Wärtsilä’s organisational structure. Areas of special focus included the decision to build the Smart Technology Hub, a new centre for research, development and production, in Vaasa, Finland; as well as the decision to redesign the Wärtsilä organisation into two business areas covering both new sales and services for the marine and energy markets respectively. Digitalisation and security, in particular cybersecurity, were also high on the agenda, as were occupational health and safety, and operational excellence. Carrying out the acquisition of Transas, and planning and implementing the integration process was another important area of focus. Furthermore, the Board of Management continuously addresses the development of the regulatory operating environment, order intake and production capacity, as well as supplier and other stakeholder relationships.
Corporate management

The company’s Corporate Management includes, in addition to the Board of Management, the following directors responsible for corporate functions:

**Juha Hiekkanen**  
Vice President, Financial Controlling  
Born 1978, M.Sc. (Econ.)

**Riitta Hovi**  
Deputy General Counsel, Corporate Legal Affairs  
Born 1960, LL.M., MBA

**Anu Hämäläinen**  
Vice President, Group Treasury and Financial Services & Support  
Born 1965, M.Sc. (Econ.)

**Sari Kolu**  
Director, Compliance  
Born 1967, Master of Laws, Executive MBA

**Jukka Kumpulainen**  
Vice President, Chief Information Officer (CIO)  
Born 1968, M.Sc. (Eng.)

**Antti Kuokkanen**  
Vice President, Group Business Control, Development and M&A  
Born 1977, M.Sc. (Econ.), M.Sc. (Eng.)

**Vesa Riihimäki**  
Vice President, Quality  
Born 1966, M.Sc. (Eng.)

**Tom Unnérus**  
Vice President, Corporate Internal Audit  
Born 1972, M.Sc. (Eng.)

**Marko Vainikka**  
Director, Corporate Relations and Sustainability  
Born 1970, M.Sc. (Eng.)

**Natalia Valtasaari**  
Director, Investor Relations  
Born 1984, M.Sc. (Econ.)

Business Management teams

Each business head is supported by a Business Management team. The Business Management teams are comprised of the heads of the business units and business lines, as well as business specific support function heads. They are responsible for executing the respective business strategies and ensuring that the Businesses’ performance is in line with agreed targets.

Managing Directors of the subsidiaries

The Managing Directors of the Group’s subsidiaries are responsible for ensuring that local resources are correctly dimensioned to meet the needs of the businesses, and that the subsidiary’s personnel development needs are met.
The Managing Directors are also responsible for ensuring that the subsidiary's operations fulfill the requirements stipulated in the Group processes, including the quality system, that these operations comply with the respective country’s legal requirements and with good business practices, and that communication within the subsidiary is conducted according to the targets of the Group.

**Internal control**

Wärtsilä has defined its objectives for internal control according to the international COSO framework. Wärtsilä defines internal control as a process implemented by Wärtsilä’s Board of Directors, the Management, the Boards of Directors of Group companies, and other personnel, which is designed to provide reasonable assurance regarding the achievement of objectives.

Internal control covers all the policies, processes, procedures and organisational structures within Wärtsilä that help management, and ultimately the Board, to ensure that Wärtsilä is achieving its objectives, that the business conduct is ethical and in compliance with all applicable laws and regulations, that the company’s assets, including its brand, are safeguarded, and that its financial reporting is correct. Internal control is not a separate process or set of activities, but is embedded within Wärtsilä’s operations.

The system of internal control operates at all levels of Wärtsilä. Wärtsilä maintains and develops its internal control system with the ultimate aim of improving its business performance and, at the same time, of complying with laws and regulations in countries where it operates.

**Performance management**

Planning and target setting, an integral part of performance management in Wärtsilä, is a regular management activity and not part of Wärtsilä’s internal control system. The establishment of objectives, however, is an important pre-requisite for internal control. Through the performance management process, financial and non-financial targets are set for Wärtsilä annually at the Group level. These Group level targets are then translated into targets for the Businesses, Group companies, and eventually for individuals.

The achievement of the annual targets is monitored through monthly management reporting. The performance of the Businesses and the achievement of the annual targets are reviewed on a monthly basis in the respective Management team meetings. The performance relating to the targets set by the Group and the different Businesses are reviewed on a monthly basis by the Board of Management. The respective management teams and the Board of Management also address the reliability of Wärtsilä’s financial reporting.

Wärtsilä’s financial reporting is carried out in a harmonised way in all major Group companies, using a single instance ERP system and a common chart of accounts. The International Financial Reporting Standards (IFRS) are applied throughout the entire Group. Wärtsilä’s finance and control process is essential for the functioning of internal control. Adequate controls in the financial management and accounting processes are needed to ensure the reliability of financial reporting.

The Board of Directors regularly assesses the adequacy and effectiveness of Wärtsilä’s internal controls and risk management. It is also responsible for ensuring that the internal control of accounting and financial administration is arranged appropriately. The Audit Committee of Wärtsilä’s Board of Directors is responsible for overseeing the financial reporting process. The Group Business Control function, together with the Business Control functions in the Business areas, are responsible for notifying relevant levels of management regarding deviations from plans, analysing the underlying reasons, and suggesting corrective actions. These functions support the Businesses in decision-making and analyses to ensure the attainment of financial targets. They maintain and develop the company’s performance management processes, so that the management at different levels of the organisation is able to receive timely, reliable, and adequate information regarding the achievement of the organisation’s objectives. In addition, they are responsible for developing the financial reporting processes and respective controls.
Legal and compliance management

Legal and compliance management practices and processes occupy a central role in Wärtsilä’s system of internal control. Wärtsilä’s policy is to act in accordance with the applicable laws and regulations in all countries where it operates.

Legal and compliance management acts predominantly in a proactive manner. Legal Affairs supports the President & CEO and the businesses in analysing and making decisions on matters involving contract policy, risk management, and regulatory considerations. Other key activities are to lead compliance management, and to strengthen and ensure the culture of appropriate conduct and behaviour, both internally and in external business transactions. Compliance management is based on the Code of Conduct and relevant group level policies and directives. Company-wide control mechanisms and processes are a part of the overall internal control system.

HR management

Human resource management practices and processes play an active role in Wärtsilä’s system of internal control. Wärtsilä’s main human resource management processes with respect to internal control are; compensation and benefits, HR development, recruitment and resourcing management, individual performance management, as well as processes for collecting employee feedback. The HR function is responsible for maintaining and developing Wärtsilä’s people related processes to enable effective internal control, also at the individual level.

Other management systems

The Board of Management is responsible for developing and implementing Wärtsilä’s management system, continuously improving its performance, and ensuring that it operates effectively. The Wärtsilä management system covers all global processes and management procedures within Wärtsilä related to fulfilling customer requirements. The proper functioning of the management systems highlighted below ensures, for their part, the attainment of Wärtsilä’s internal control objectives.

Quality

The quality of Wärtsilä’s solutions, and thus quality management, is a top priority for Wärtsilä. Compliance with Wärtsilä’s Quality Management System ISO 9001:2000 is compulsory throughout the Group, and compliance with the system is rigorously monitored.

Sustainability

Wärtsilä is strongly committed to sustainability. Wärtsilä’s purpose and values, together with a solid financial performance, form the basis for sustainable development within Wärtsilä. Wärtsilä applies global guiding principles, such as the Quality, Environmental, Health & Safety policy (QEHS policy) and the Code of Conduct, which, together with the company’s values, ensure a harmonised way of working towards sustainable development. In addition to the aforementioned, the Corporate Manual includes other policies and directives, a description of the company’s operating procedures, responsibilities, and the management system structure.

Wärtsilä’s Board of Management has overall responsibility for sustainability performance. The Board of Management approves the guiding principles and reviews the content on a regular basis. The Board of Management defines sustainability targets and monitors performance against these set targets. Performance is reviewed in connection with the management reviews at both Wärtsilä’s Board of Management and Business Management Team levels.

The Board of Directors reviews major sustainability issues on an annual basis. In addition, the Board of Management identifies major critical concerns and, when necessary, communicates such concerns to the Board of Directors.

Wärtsilä’s sustainability function is responsible for providing the necessary information to management, identifying development needs, as well as for coordinating sustainability programmes and preparing instructions. The function cooperates closely with the Businesses and the supporting functions, such as Human Resources, Legal Affairs, Compliance and Quality. It also collects and consolidates sustainability data from the subsidiaries.
Wärtsilä has clearly defined responsibilities, which are supported by necessary instructions and training. This training covers, for example, the Code of Conduct, anti-corruption, as well as environmental and occupational health and safety issues. Wärtsilä monitors its sustainability performance by utilising the information provided by various sustainability tools and activities, such as internal audits and compliance processes.

Risk management

Internal control within Wärtsilä is designed to support the company in achieving its targets. The risks related to the achievement of targets need to be identified and evaluated in order for them to be managed. Thus, the identification and assessment of risks is a pre-requisite for internal control within Wärtsilä. Wärtsilä’s internal control mechanisms and procedures provide management assurance that risk management actions are carried out as planned.

Wärtsilä has defined and implemented entity level and process level control activities, as well as information system controls. Control activities at different levels are needed to directly mitigate risks at the respective levels. Wärtsilä’s risk management processes consist of Group-wide risk assessment and management processes, as well as project-specific risk assessments and project risk management. The Group-wide risk assessment process results in the creation of action plans for the identified and prioritised risks.

Each Business reports its main risks to Wärtsilä’s Board of Management, which reviews on a regular basis the execution of the defined risk management action plans. Wärtsilä’s Board of Directors is responsible for defining the Group’s overall level of risk tolerance, and for ensuring that Wärtsilä has adequate tools and resources for managing risks. The Board reviews the risk profile regularly. The President & CEO, with the assistance of the Board of Management, is responsible for organising and ensuring risk management in all of Wärtsilä’s operations. Business management is responsible for defining action plans for managing the most important risks.

Wärtsilä’s most important strategic, operational and financial risks can be found in the Risks and risk management section of this report.

Information management

Information management plays a key role in Wärtsilä’s internal control system. Information systems are critical for effective internal control as many of the control activities are programmed controls.
Values and the control environment

The foundation of Wärtsilä’s internal control system lies its values: Energy, Excellence and Excitement. Wärtsilä’s values are reflected in its day-to-day relations with its suppliers, customers and investors, and in internal guidelines, policies, manuals, processes and practices. The control environment sets the tone for internal control within Wärtsilä and influences the control awareness of its people. It provides discipline and structure for all the other components of internal control. The elements of Wärtsilä’s control environment are included in the corporate culture, the integrity, ethical values and competence of Wärtsilä’s personnel, as well as in the attention and direction provided to the personnel by the Board of Directors of Wärtsilä. Wärtsilä’s values and control environment provide Wärtsilä’s Board of Directors and Management with the basis for reasonable assurance regarding the achievement of the objectives for internal control. The President & CEO and the Board of Management define Wärtsilä’s values and ethical principles, which are reflected in the Code of Conduct, and set an example for the corporate culture, which in combination create the basis for the control environment. They, together with Business management, are responsible for communicating Wärtsilä’s values to the organisation.

Business processes

The controls embedded in Wärtsilä’s business processes play a key role in ensuring effective internal control within the company. Controls in the business processes help ensure the achievement of all the objectives of internal control within Wärtsilä, especially those related to the efficiency of operations and the safeguarding of the company’s profitability and reputation. Business management is responsible for ensuring that within its area of responsibility, the defined Group level processes and controls are implemented and complied with. Where no Group level processes and controls exist, Business management is responsible for ensuring that efficient Business level processes with adequate controls have been described and implemented.

Guidelines and communication

Guidelines and manuals

The components of Wärtsilä’s internal control system, including for example, corporate governance, the management system, the performance management process, as well as the business and other processes, are described in various guidelines and manuals. The essential Group level policies and guidelines are compiled in Wärtsilä’s Corporate Manual. Wärtsilä’s Group level Accounting Manual contains instructions and guidance on accounting and financial reporting to be applied in all Wärtsilä Group companies. The manual supports the achievement of the objectives regarding the reliability of Wärtsilä’s financial reporting. Wärtsilä’s Group level policies, and any changes to them, shall be approved by a member of the Board of Management. In addition to the Group level guidelines and manuals, the Businesses have issued related guidelines and instructions for their own, specific purposes. The Business level guidelines and manuals are aligned with, and do not contradict, the Group level guidelines and manuals.

Information and communication

An effective internal control system needs sufficient, timely and reliable information to enable the management to assess the achievement of the company’s objectives. Both financial and non-financial information is needed, relating to both internal and external events and activities. Employees can provide feedback to management and communicate suspected misconduct via a whistle blower channel that secures anonymous reporting or directly to the Compliance, Legal Affairs or Internal Audit function. All external communications are carried out in accordance with the Group Communications Policy.
Monitoring

Monitoring is a process that assesses the quality of Wärtsilä’s system of internal control and its performance over time. Monitoring within Wärtsilä is performed both on an ongoing basis, and through separate evaluations that include internal, external and quality audits.

Business management is responsible for ensuring that all relevant laws and regulations are complied with in their respective responsibility areas. Wärtsilä’s management in turn performs monitoring as part of its regular supervisory activities. The Audit Committee of the Board of Directors assesses and assures the adequacy and effectiveness of Wärtsilä’s internal controls and risk management.

The Internal Audit function assists the Audit Committee in assessing and assuring the adequacy and effectiveness of Wärtsilä’s internal controls and risk management by performing regular audits of Group legal entities and support functions according to its annual plan. Wärtsilä’s external auditor and other assurance providers, such as quality auditors, conduct evaluations of Wärtsilä’s internal controls. The Group Finance & Control function oversees the financial reporting processes and controls to ensure that they are being followed. It also monitors the correctness of all external and internal financial reporting. The Legal and Compliance function monitors adherence to the compliance policies of the Group. The external auditors verify the correctness of the external annual financial reports.

Audit

Internal

The Group’s internal audit is handled by its Internal Audit unit, which reports to the Audit Committee and to the President & CEO. The purpose of the Internal Audit is to analyse the company’s operations and processes, as well as the effectiveness and quality of its supervision mechanisms. The internal auditor also participates, if necessary, in audits undertaken in conjunction with acquisitions and carries out special tasks when needed. The Internal Audit function covers all of the company’s organisational levels and subsidiaries. An internal audit is undertaken in the subsidiaries and network companies at regular intervals, ranging from one to four years, based on a systematic evaluation.

The Internal Audit function prepares an annual plan under which they independently audit different parts of the company, but it is also empowered to carry out special audits. The annual plan is approved by the Audit Committee, to which the Internal Audit function reports at regular intervals. If required, the auditors also have the possibility to take direct contact with the Audit Committee or members of the Board of Directors.

External

The company has one auditor, which shall be an audit firm. The auditor is elected by the Annual General Meeting to audit the accounts for the ongoing financial year, and its duties cease at the close of the subsequent Annual General Meeting. The auditor is responsible for auditing the consolidated and parent company financial statements and accounting records, and the administration of the parent company.

Following the closing of the annual accounts, the external auditor submits the statutory auditor’s report to the company’s shareholders and reports regularly also its findings to the Board of Directors’ Audit Committee. The auditor, in addition to fulfilling general competency requirements, must also comply with certain legal independence requirements guaranteeing the execution of an independent and reliable audit.

Auditor in 2018

The Annual General Meeting appointed the audit firm PricewaterhouseCoopers Oy (PwC) as Wärtsilä Corporation’s auditor for the year 2018. The auditor-in-charge was Ms Merja Lindh. Auditing fees paid to PwC amounted to EUR
3.7 million in 2018. Consultancy fees unrelated to auditing duties totalled EUR 0.3 million. These latter fees mainly concerned consultation on taxation matters.

Related party transactions

Wärtsilä’s related parties comprise the Board of Directors, the President & CEO, the Board of Management, as well as the associated companies and joint ventures. The Group Finance and Control function evaluates and monitors transactions concluded between the company and its related parties to ensure that any conflicts of interest are taken into account appropriately in Wärtsilä’s decision-making process.

Insider management

Wärtsilä manages inside information and insiders in accordance with all applicable laws and regulations regarding insiders and insider trading.

The most important statutory provisions are contained in the Market Abuse Regulation (EU) 596/2014 (“MAR”). Wärtsilä also follows the Insider Guidelines of Nasdaq Helsinki Ltd., and Wärtsilä’s Insider Policy.

The company draws up insider lists for projects containing inside information. Insiders are given written notification of their status as insiders and instructions on the obligations that apply to insiders.

Members of Wärtsilä’s Board of Directors and Board of Management and certain other Wärtsilä personnel are prohibited from trading of the Wärtsilä financial instruments during the 30 days prior to publication of the financial statements bulletin or interim report.

Wärtsilä publishes notifications on transactions conducted by persons discharging managerial responsibilities, and persons closely associated with them in accordance with the provisions of the MAR. The term ‘persons discharging managerial responsibilities’ refers exclusively to the members of the Board of Directors and the Board of Management of Wärtsilä. These notifications are available on Wärtsilä’s webpages.
Remuneration report 2018

Dear Shareholders

This report sets out the Wärtsilä remuneration policy and report for the Board of Directors and Board of Management for 2018, and enumerates the same for the two previous years. With this policy and report, we aim to increase transparency regarding Wärtsilä’s remuneration practices, and how they contribute to the business strategy and long-term interests.

Wärtsilä strives for high performance, and strong achievements are recognised and rewarded. Remuneration at Wärtsilä is guided by our ‘Pay for Performance’ principles. These principles are used to structure the reward approach throughout the organisation, and are designed to align employee rewards with the interests of the company and its shareholders. The remuneration policy for the President & CEO and other members of the Board of Management has been developed taking these principles into account.

We believe in a consistent approach to performance rewarding at Wärtsilä. The remuneration arrangements for the Board of Management, which also cascade down to other members of the senior management team, have operated broadly unchanged for some years.

The short-term incentive awards for the Board of Management have been consistently based on profitability (EBIT%) and cash flow targets over the past years. The expected performance criteria for profitability were set at highly ambitious levels for 2018, and increased from the previous year, while the criteria for the cash flow target was lowered. Wärtsilä’s financial performance in 2018 resulted in neither the profitability nor the cash flow target thresholds being met. Therefore, no short-term incentives were awarded for the year.

Wärtsilä’s long-term incentive scheme is based on share price development, and its realisation is paid as a cash award. The 2015 scheme came to a close at the end of 2018. Due to share price performance during the performance period, there will be no pay-out for the 2015 scheme. As of 2019, the structure of the program is renewed, so that realisation is paid out in shares. With this change, our aim is to promote shareholder value creation by strengthening the alignment of senior management interests with those of Wärtsilä’s shareholders.

Mikael Lilius
Chairman of the Remuneration Committee
Remuneration principles and policy for the Board of Management

Wärtsilä’s rewarding principles are designed to attract, retain and motivate executives by providing compensation solutions that reward them for their performance in delivering business results.

The remuneration mix for the Board of Management consists of fixed and variable, performance related, pay. The objective is to have a good balance of rewarding elements. These comprise a fixed pay level guaranteed to be market competitive, supported by short- and long-term incentive schemes to drive company performance and to reward accordingly.

Fixed pay

The fixed remuneration paid to the President & CEO and to the other members of the Board of Management consists of a monthly base salary and fringe benefits. Base salaries are reviewed annually taking into account the company’s and the individual's performance, and the market conditions.

The members of the Board of Management are provided private medical insurance and life insurance. They are also offered a company car benefit. Taking into consideration Wärtsilä’s emphasis on environmental responsibility, hybrid or low emission cars are recommended.

The President & CEO and members of the Board of Management participate in company specific pension schemes, in addition to any statutory requirements. The nature of the supplementary pension schemes and retirement ages vary. They are generally based on the retirement scheme of the national social security system to which the person in question belongs, and are either defined benefit or defined contribution based.

Variable pay

Short-term incentive schemes

The Group operates a bonus scheme, which is implemented globally and is designed to provide incentives for achievement of and reward for delivery of the short-term business plan. The bonus is based on the Group’s financial targets, business specific targets, as well as agreed team and personal targets. Around 3,000 directors and managers are covered by this scheme.

For the President & CEO and the Board of Management, the payment is based on the achievement of the company’s profitability and other financial targets for the financial year, as set by the Board of Directors. The short-term incentive opportunity is capped at 100% of the annual base salary for the President & CEO, and 65% of the
annual base salary for the other members of the Board of Management. Bonuses are paid in cash shortly following
the year-end.

Wärtsilä’s employees also participate in bonus or profit-based incentive schemes. These are applied in the majority
of countries where Wärtsilä operates according to each country’s legislation. Alternatively, they take the form of
local bonus or profit-sharing schemes. All in all, 80% of the company’s employees are covered by the Group’s
bonus schemes and various other performance-related incentive schemes.

**Long-term incentive scheme**

Around 100 senior managers, including the President & CEO and the Board of Management, participate in
Wärtsilä’s long-term incentive scheme.

The objective of the long-term incentive scheme is to align the interests of senior management with those of
Wärtsilä’s shareholders by creating a long-term equity-related interest for the participants. In so doing, this promotes
shareholder value creation and drives a long-term performance culture within Wärtsilä.

The long-term incentive scheme has a three year performance period. Under the scheme, participants are awarded
incentive rights. The value of an incentive right at the end of the performance period is based on the growth in value
of the share price between the three month period immediately preceding the performance period and the last three
months of the performance period. The end share price may include a value for part or all of the normal and
extraordinary dividends paid by Wärtsilä Corporation during the performance period.

**Valuation of the incentive rights:**

\[
\text{VALUE OF LONG-TERM INCENTIVE} = \left( \frac{\text{COMPARISON SHARE PRICE}}{\text{STARTING SHARE PRICE}} \right) \times \text{NUMBER OF INCENTIVE RIGHTS}
\]

To ensure an appropriate level of reward, an upper limit is set for each award cycle, capping the maximum value for
each incentive right. The incentive rights are paid-out in cash, but the President & CEO and the Board of
Management members are expected to acquire Wärtsilä shares with 50% of the net value received until they have
achieved their required share ownership level. The schemes launched as of 2019 will be paid out in shares to
promote shareholder value creation by strengthening the alignment of senior management interests with those of
Wärtsilä’s shareholders.

**Share ownership policy**

Each Board of Management member is expected to accumulate and, once achieved, maintain a share ownership in
Wärtsilä that at least corresponds to the individual's annual gross base salary.

**Governance**

The Board of Directors determines the levels and underlying principles of the fixed pay, as well as the incentive
schemes for the President & CEO and other Board of Management members. The Board of Directors also decides
on other possible long-term incentive schemes for senior management, unless they are by law determined by the
Annual General Meeting. The Board of Management decides on bonus schemes for other directors and managers.
Remuneration of the Board of Management

Contractual terms for the President & CEO

The base salary of the President & CEO is EUR 862,200 p.a. He is entitled to participate in the short- and long-term incentives schemes according to the terms and conditions described above. The President & CEO is eligible to take retirement upon reaching the age of sixty-three (63). His pension scheme is determined according to a defined contribution based system. The retirement pension contribution is equivalent to 20% of the annual salary. Remuneration paid to the President & CEO if dismissed by the company corresponds to 18 months’ salary plus a six months’ period of notice salary.

Board of Management’s total remuneration in 2018

<table>
<thead>
<tr>
<th>Board of Management</th>
<th>Salary and short-term benefits</th>
<th>Supplementary pension contributions</th>
<th>Short-term incentives¹</th>
<th>Long-term incentives²</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaakko Eskola, President &amp; CEO</td>
<td>862 (785)</td>
<td>170 (158)</td>
<td>239 (296)</td>
<td>1 696 (410)</td>
<td>2 967 (1 645)</td>
</tr>
<tr>
<td>Pierpaolo Barbone, President, Services and Deputy to the CEO</td>
<td>384 (425)</td>
<td>107 (88)</td>
<td>56 (105)</td>
<td>848 (410)</td>
<td>1 396 (1 028)</td>
</tr>
<tr>
<td>Other members of the Board of Management</td>
<td>2 263 (2 162)</td>
<td>368 (493)</td>
<td>480 (441)</td>
<td>4 452 (1 587)</td>
<td>7 563 (4 863)</td>
</tr>
</tbody>
</table>

¹ Relates to the annual bonus for 2017 performance, which was paid in 2018.
² Relates to the 2015-2017 long-term incentive cycle, which was paid in 2018.

Short-term incentive schemes

The Board of Management’s performance target structure for the short-term incentives is described in the table below. A sliding scale of targets was set for each measure.

<table>
<thead>
<tr>
<th>PRESIDENT &amp; CEO</th>
<th>Business Roles</th>
<th>OTHER CORPORATE ROLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group EBIT % (2/3)</td>
<td>Group EBIT % (1/3)</td>
<td>Group EBIT % (2/3)</td>
</tr>
<tr>
<td></td>
<td>Respective business targets (1/3)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Group Cash Flow from operating activities (1/3)</td>
<td></td>
</tr>
</tbody>
</table>

Short-term incentive for 2018 performance

The above performance measures and weightings apply to the annual bonus for 2018 performance.
Performance against the group targets was as follows:

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>PERFORMANCE OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group EBIT %</td>
<td>Below threshold</td>
</tr>
<tr>
<td>Group Cash Flow from operating activities</td>
<td>Below threshold</td>
</tr>
</tbody>
</table>

As the performance outcomes were below the target thresholds, no bonuses were paid out.

**Short-term incentive for 2019 performance**

There are no proposed changes to the operation of the short-term incentive plan for 2019. The performance measures, weightings, and maximum limits will be the same as those applying in 2018.

**Historical development of performance outcome**

The performance measures and weightings have remained consistent during the past years. Actual performance against the group targets during 2016-2017 is shown below.

<table>
<thead>
<tr>
<th>MEASURE</th>
<th>PERFORMANCE OUTCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group EBIT %</td>
<td>Between threshold and target</td>
</tr>
<tr>
<td>Group Cash Flow from operating activities</td>
<td>Between target and maximum</td>
</tr>
<tr>
<td>The bonus paid out on average (of the maximum)</td>
<td>President &amp; CEO: 50% Board of Management: 50%</td>
</tr>
</tbody>
</table>

**Long-term incentive schemes**

The table below sets out details of the realised and outstanding awards under Wärtsilä’s long-term incentive scheme. The scheme applies to Wärtsilä’s senior management, consisting of approximately 100 directors, including the Board of Management. The value delivered is based on the share price development during the three-year performance period. The values reflect the share split effective March 2018.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of incentive rights granted (on 31.12.2018)</td>
<td>4 857 000</td>
<td>5 490 000</td>
<td>4 845 000</td>
</tr>
<tr>
<td>Starting share price, EUR</td>
<td>15.82</td>
<td>16.19</td>
<td>22.58</td>
</tr>
<tr>
<td>Measurement period for comparison share price</td>
<td>Q4 2018 + 100% of dividends paid</td>
<td>Q4 2019 + 100% of dividends paid</td>
<td>Q4 2020 + 100% of dividends paid</td>
</tr>
<tr>
<td>Maximum value per incentive right, EUR</td>
<td>4.61</td>
<td>6.07</td>
<td>8.47</td>
</tr>
<tr>
<td>Final comparison share price, EUR</td>
<td>15.79</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Final value per incentive right, EUR</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Scheme payment date</td>
<td>February 2019</td>
<td>February 2020</td>
<td>February 2021</td>
</tr>
</tbody>
</table>

* The share issue without payment (share split) approved by Wärtsilä Corporation’s Annual General Meeting on 8 March 2018 increased the total number of Wärtsilä shares to 591 723 390. The figures in the above table have been restated accordingly.
The incentive rights are paid-out in cash, but the President & CEO and the Board of Management members are expected to acquire Wärtsilä shares with 50% of the net value received until they have achieved their required share ownership level.

In January 2019, the Board of Directors decided on the long-term incentive plan for 2019-2021. The structure was renewed so that reward will be paid out in shares, in order to better promote shareholder value creation by strengthening the alignment of senior management interests with those of Wärtsilä’s shareholders. The incentive scheme 2019 comprises 6,542,000 incentive rights. It is based on the share price development during a three-year period, with a starting share price of EUR 16.76. The reward cannot exceed EUR 6.56 per incentive right and it takes into account 100% of dividends paid out during the performance period and reinvested in the Company’s shares. The 2019 scheme will be due for payment in February 2022.

Share ownership

Board of Management’s share ownership in Wärtsilä on 31 December 2018

<table>
<thead>
<tr>
<th>Board of Management</th>
<th>No. of shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jaakko Eskola</td>
<td>41 739</td>
</tr>
<tr>
<td>Change in 2018</td>
<td>33 258</td>
</tr>
<tr>
<td>Pierpaolo Barbone</td>
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<td>Change in 2018</td>
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<tr>
<td>Arjen Berends</td>
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<tr>
<td>Päivi Castrén</td>
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<tr>
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<tr>
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<tr>
<td>Roger Holm</td>
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<tr>
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<td>Atte Palomäki</td>
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<tr>
<td>Marco Ryan</td>
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<tr>
<td>Marco Wirén</td>
<td>20 184</td>
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<tr>
<td>Change in 2018</td>
<td>15 279</td>
</tr>
</tbody>
</table>

* The changes in holdings reflect the increased number of shares resulting from the share issue without payment (share split), which was approved by the Annual General Meeting on 8 March 2018.
Evaluation
The Board of Directors monitors the Group’s short- and long-term incentive schemes and evaluates the achievement of the targets on which they are based. The incentive schemes for 2018 were found to be well balanced and in accordance with market practices. The Board of Directors was satisfied that the payout outcome was appropriate given the company’s performance.

Remuneration of the Board of Directors
The Annual General Meeting decides annually on the fees to be paid to the members of the Board of Directors for one term of office at a time.

The Annual General Meeting approved the following fees to the members of the Board of Directors for 2018:

- to the ordinary members EUR 70,000/year
- to the deputy chairman EUR 105,000/year
- to the chairman EUR 140,000/year

Approximately 40% of the annual fee is paid in Wärtsilä shares. In addition, each member will be paid EUR 750 per board meeting attended, the chairman’s meeting fee being double this amount. Further, the Chairman of the Audit Committee will receive a fixed fee of EUR 20,000 and each member of the Committee a fixed fee of EUR 10,000 for the term; the Chairman of the Remuneration Committee will receive a fixed fee of EUR 10,000 and each member of the Committee a fixed fee of EUR 5,000 for the term; and the Chairman of the Nomination Committee will receive a fixed fee of EUR 8,000 and each member of the Committee a fixed fee of EUR 4,000 for the term. The members of Wärtsilä’s Board of Directors were paid altogether EUR 718 thousand for the financial period that ended on 31 December 2018. The Board’s members were not covered by the company’s incentive schemes.

Fees paid to the Board of Directors

<table>
<thead>
<tr>
<th>Attendance fees</th>
<th>Yearly fees</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Board of Directors</td>
<td></td>
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<tr>
<td>Mikael Lilius, Chairman</td>
<td>35</td>
<td>21</td>
</tr>
<tr>
<td>Tom Johnstone, Deputy Chairman</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Maarit Aarni-Sirviö</td>
<td>26</td>
<td>12</td>
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<tr>
<td>Kaj-Gustaf Bergh</td>
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<tr>
<td>Karin Falk</td>
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<td>5</td>
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<tr>
<td>Johan Forssell</td>
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<td>6</td>
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<tr>
<td>Risto Murto</td>
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<td>13</td>
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<tr>
<td>Markus Rauramo</td>
<td>33</td>
<td>15</td>
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</table>

Fees paid in Wärtsilä shares in 2018

<table>
<thead>
<tr>
<th>Board of Directors</th>
<th>No. of shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mikael Lilius, Chairman</td>
<td>3 183</td>
</tr>
<tr>
<td>Tom Johnstone, Deputy Chairman</td>
<td>2 387</td>
</tr>
<tr>
<td>Maarit Aarni-Sirviö</td>
<td>1 591</td>
</tr>
<tr>
<td>Kaj-Gustaf Bergh</td>
<td>1 591</td>
</tr>
<tr>
<td>Karin Falk</td>
<td>1 591</td>
</tr>
<tr>
<td>Johan Forssell</td>
<td>1 591</td>
</tr>
<tr>
<td>Risto Murto</td>
<td>1 591</td>
</tr>
<tr>
<td>Markus Rauramo</td>
<td>1 591</td>
</tr>
</tbody>
</table>
## Board of Directors’ share ownership in Wärtsilä on 31 December 2018

<table>
<thead>
<tr>
<th>Board of Directors</th>
<th>No. of shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mikael Lilius, Chairman</td>
<td>61,260</td>
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<tr>
<td>Change in 2018</td>
<td>41,901</td>
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<tr>
<td>Tom Johnstone, Deputy Chairman</td>
<td>8,594</td>
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<tr>
<td>Maarit Aarni-Sirviö</td>
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<td>Kaj-Gustaf Bergh</td>
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<td>Change in 2018</td>
<td>20,599</td>
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<tr>
<td>Karin Falk</td>
<td>3,007</td>
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<tr>
<td>Change in 2018</td>
<td>2,535</td>
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<tr>
<td>Johan Forssell</td>
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<tr>
<td>Change in 2018</td>
<td>2,535</td>
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<td>Risto Murto</td>
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<td>Markus Rauramo</td>
<td>16,609</td>
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<td>Change in 2018</td>
<td>11,603</td>
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</tbody>
</table>

* The changes in holdings reflect the increased number of shares resulting from the share issue without payment (share split), which was approved by the Annual General Meeting on 8 March 2018.
Risks and risk management

The aim and principles of risk management

Wärtsilä, like any other company, is exposed to various risks through the normal course of its activities. No business can be conducted without accepting a certain level of risk, and any expected gains from business activities are to be assessed against the involved risks.

The purpose of risk management is to ensure that Wärtsilä is able to effectively execute its strategies and to reach its targets, in the short term as well as over the long run. The key is to identify those risks that have the potential to restrain the company from reaching its goals, and to determine whether such risks are at an acceptable level.

By definition, risk is the effect of uncertainty on objectives. An effect is a deviation from the expected — positive or negative; in other words, either a threat or an opportunity. Actions need to be taken to avoid, mitigate, transfer, or monitor identified risks, or to capture and utilise the opportunities. Wärtsilä’s structured risk management process offers a set of reactive, proactive, protective, and preventive tools that are used not only to protect it against threats, but also to turn some of the risks into opportunities.

Risks can only be managed if they are identified and understood in advance, if risk treatment plans for managing them are made, and if a process of continuous follow-up is in place for the related controls. Therefore, risk management is a central part of Wärtsilä’s strategic and operational management.

Risk management at Wärtsilä is a continuous process of analysing and managing all the opportunities and threats faced by the company in its efforts to achieve its goals, and to ensure the continuity of the business.

The basis for risk management is the lifecycle quality of Wärtsilä’s operations and products, and the continuous, systematic loss prevention efforts at all levels of the Group, not only as an integrated part of management systems, but as part of every employee’s daily work. In the long-term, this is the only means for reducing the overall risk related costs.

The risk management policy and process

Wärtsilä has a corporate level risk management policy which defines and formalises the Businesses’ risk management and reporting procedures. The document acts as a risk management guideline generating a common understanding over risk related concepts. It harmonises and structures the way of working with respect to risk management within the group in order to achieve a process whereby the risks identified are measurable and possible to consolidate. The policy brings consistency to risk management practice, and provides a structure for the organisation and Businesses to handle day-to-day risk management tasks in accordance with the agreed processes. It also provides a unified vocabulary to provide further guidance with respect to generic terms and definitions relating to risk management.

The Businesses are responsible for the risks and rewards, and thus managing risks is in the responsibility of Business Management teams and individual managers. The risk management process controls exposures to risk by using systematic mapping, assessment, treatment, reporting, monitoring and control of risks, including the reporting of residual risks. Wärtsilä’s risk management process is based upon the ISO 31000 Risk Management Guidelines and Principles, and the vocabulary of ISO 31000 has been adopted in order to streamline risk related communication within the Group.

The risk management process at Wärtsilä is embedded in Wärtsilä’s culture and practices, and has been tailored to fit the business functions and processes of the organisation. The process can be seen as a continuous loop consisting of the repetitive steps of context establishment, risk assessment, risk treatment, communication and consultation, and finally monitoring and review.
Implementation

The Board of Directors and the Board of Management decide and set the guidelines on strategic matters. The Businesses are responsible for achieving their set strategic goals, and for mitigating and managing their risks. The Corporate Risk Management function is part of Group Treasury, which reports to the Chief Financial Officer. The function is responsible for the risk reporting process, and for conducting risk assessments with the Businesses and their underlying organisations. It co-ordinates all risk management activities within the Group, reviews the business risk profile, and cooperates with the Businesses in the implementation of risk mitigation work. It is also responsible for maintaining the Group risk management policy, and for describing the current way of working in relation to risk reporting. Furthermore, the Risk Management function develops and manages global and local insurance schemes for insurable risks. The Audit Committee reviews and assesses the adequacy of risk management, while the Internal Audit function is responsible for reviewing the risk management process on an annual basis.

Risk reporting

This pdf is composed of selected elements from Wärtsilä’s Annual Report and may deviate from other generated documents. To view the report in full, please visit www.wartsila.com/ar2018.
Risk mitigation actions are decided in the normal course of business. At its meetings, the Board of Management conducts annual management reviews for each Business and certain main support functions, addressing also their risks and risk mitigation. The identified risks are labelled as either internal or external; they are quantified in euro, and their probabilities are estimated. The Group risk report is then prepared and presented to the Board of Directors.

Risk management is part of the Businesses’ management process and has been integrated into the Business Management teams’ agenda. The Businesses are accountable for organising and reporting on risk management from their underlying geographical business areas, business lines, organisations, and product centres. All follow-up actions are also the Businesses’ responsibility.

Risk categories

The relevant risks for Wärtsilä have been classified under four categories; strategic, operational, hazard, and financial risks. The potential loss expectancy is highest with strategic and operational risks and lowest with hazard and financial risks. The risks in most of the categories can have both upside and downside impacts. In this regard, hazard risks are an exception, since for them only a negative effect is possible.

Risk radars are used to map the main risks within the risk categories in the annual risk assessment workshops between the Businesses and the Corporate Risk Management function. During recent years, a similar risk mapping process has also been adopted by certain main support functions, such as HR and the Group Treasury. Business or function specific risk radars are generated for the use and evaluation of the Business Management teams, and are reviewed and updated by them on a regular basis. The Business specific radars are consolidated into a single Group Risk Radar, which is presented to the Board of Directors and the Audit Committee once a year. The purpose is to facilitate the discussion on risk and to give a quick overview of where priorities should lie in terms of risk management.

Strategic risks

Strategic risk assessment is part of the strategic planning process within the Group. At Wärtsilä, a risk is defined as strategic if it has the potential for imposing a long-term impact on the business.

Business environment risks

Business cycles in the global economy, and in customer industries, influence the demand for Wärtsilä’s products, as well as its financial condition and operating result. The flexible manufacturing model based on capacity outsourcing, together with a stable business mix and a large share of sales deriving from service activities, provides Wärtsilä with a certain level of stability in a cyclical market. Important economic matters that indirectly affect Wärtsilä, its clients, and suppliers include inter alia, the liquidity and solvency of financial institutions, and thus not only their capability but also their willingness to extend credit, the counter cyclical stimulus programmes adopted by governments – especially in the power and infrastructure sectors, the enhanced activities of multilateral institutions,
such as the International Finance Corporation, the availability of export credit schemes and guarantees, and other such factors. Wärtsilä’s relatively large order book gives the company time to adapt to changes in market conditions.

The implementation of more stringent environmental regulations is important for Wärtsilä’s future growth potential, since the company’s comprehensive portfolio of products and services allows customers to meet such stricter requirements. A delay in legislation implementation may present a risk to Wärtsilä, and possible changes in the legislation timeline and scope are, therefore, actively monitored.

Energy storage is emerging as a disruptive technology that changes the paradigm of power systems, and Wärtsilä is strongly participating in these new market developments. Rapid deployment of new technologies can create new risks related to managing complex hybrid installations in an optimal way. Wärtsilä’s Greensmith Energy Management System (GEMS) is proven to be an efficient and stable software to control and operate complex systems, which gives Wärtsilä a competitive advantage in managing the related risks.

**Market and customer risks**

Wärtsilä’s mid- and long-term service activities are expected to grow in line with the development of the existing installed base and general global economic developments. Therefore, a slowdown in global growth represents the primary risk for the development of service demand. Wärtsilä has more than 12,000 individual customers engaging in service and spare part sales annually, and the current active base of installed Wärtsilä engines has a combined output of approximately 180,000 MW. Thus, dependency on any single customer or customer segment is limited.

In the energy markets, there is a global shift towards more sustainable energy sources. The rapidly changing market environment has impacted the speed of customers’ decision-making, as the changes require the updating of their future portfolio strategies. Electricity demand is increasing in emerging markets, while fragile economic growth in developed countries represents a risk for demand development. Geopolitical tensions and significant currency fluctuations can result in investment decisions being postponed in certain countries. Low oil prices have a similar impact in the oil and gas producing countries. Price pressure resulting from the challenging competitive environment remains a risk. Orders have been received from all geographic regions, thus limiting the risk of dependence on one particular market. Wärtsilä’s three customer segments, namely industrial customers, IPPs (independent power producers) and utilities, were also all represented in the order intake.

Wärtsilä is well represented in all the major shipbuilding markets, and is active in all the main vessel segments. This, along with the large product portfolio, mitigates both geographical and single customer risks. Conditions in the marine markets improved in 2018. However, challenges resulting from the uncertainty in the shipping and shipbuilding business environment continued to affect markets. Consolidation in the market continued during the year, leading to a decreasing number of major shipbuilding customers. The shipbuilding market continued to be dominated by Asian yards, notably China and South Korea, but activity in Europe was also healthy thanks to developments in the cruise and special vessel segments.

Order book levels improved Wärtsilä’s marine business during 2018, supported by the extensive product mix and broad segment exposure which compensated for the slow pace of recovery in worldwide marine order activity. The importance of fuel efficiency and environmental regulations are clearly visible, driving interest in environmental solutions, gas as a marine fuel, as well as electric/hybrid solutions. Contracting activities for exhaust gas cleaning solutions offered by Wärtsilä increased significantly during the year. This created both an opportunity for a steep increase in the volume of delivered exhaust gas cleaning systems, and a recognised risk to manage and deliver the demanded orders on time and with the required quality.

Digitalisation has become increasingly important for the shipping industry’s business and operating models. Wärtsilä, with its Smart Marine strategy, took further steps to become an important and leading player in the digital transformation of future shipping markets with internal digital development programmes, and with the acquisition of Transas.
Competitive situation and price risks

In services, Wärtsilä has no direct competitors capable of offering a similar portfolio of services from a single source. Excluding the networks of other engine manufacturers, there are few global players in the service market. The continued focus of customers on optimising operating expenditures can lead to an increase in competition for services where price is more important than quality. The main action for mitigating this risk is to promote the value-based offering.

In larger gas-fired projects, Wärtsilä faces competition from gas turbine manufacturers, such as GE and Siemens. In smaller gas power plant projects, and in the liquid fuel power plant market, the competitors are mainly other combustion engine suppliers, such as MAN Energy Solutions, INNIO (previously GE Jenbacher), Caterpillar (MAK), and Rolls-Royce. Price pressure resulting from the prevailing competitive environment remains a risk. In Wärtsilä’s addressable market, i.e. the market for installations of up to 500 MW, orders for natural gas and liquid fuel power plants totalled 20.8 GW during the twelve months ending in September. Wärtsilä’s market share was 13%. Wärtsilä’s success in the market can be attributed to its flexible power generation solution, which can be used in a wide range of different applications and power plant sizes.

In the marine equipment markets the competitive landscape remained largely unchanged in 2018. The most significant competitors in the main engine markets are MAN Energy Solutions and Caterpillar (MAK). Wärtsilä has a strong position in medium-speed main engines with a 48% market share in 2018. In auxiliary engines, Wärtsilä’s market share was 14%. In propulsion equipment, the competition is more fragmented and varies by product category. One of the main competitors for these products is Rolls-Royce. In environmental solutions, as well as in gas products, the markets are very fragmented. Alfa Laval and Evac are two of the main competitors in environmental solutions, while in the Electrical and Automation segment Wärtsilä faces competition from companies such as Kongsberg, GE and Siemens. Price competition has continued to be intense in the marine markets. The strategic move of becoming a systems integrator with automation and ship design capability has proven to be an important factor in the competition for new projects with larger and more value-added scopes. The concept of selling packaged solutions reduces price volatility.

Political and legislative risks

Wärtsilä is present in over 200 locations in more than 80 countries and has delivered power plants to 177 countries. Political developments and changes in legislation can have a significant impact on Wärtsilä’s business. Wärtsilä actively monitors political and legal developments in its markets, and engages in dialogue with various official bodies on projects of importance to its operations and intellectual property rights. Much of this engagement takes place through interest groups and trade organisations. The company monitors political and legislative changes at both the corporate and subsidiary levels. Trade related tensions seen during 2018 have not had a significant impact on Wärtsilä.

In recent years, there has been increased regulatory activity by different governments worldwide, which has led to the need for emphasising due internal processes to ensure compliance. As an example, the continuing and changing trade sanctions were complied with and closely monitored during 2018. This has required increased internal efforts to ensure that adequate procedures are in place.

Climate change and sustainability risks

Wärtsilä has assessed its sustainability risks, including climate change risks, in both its strategic and operative risk assessments. However, the risks were not found to be significant. The potential business risks related to sustainability, climate change, and Wärtsilä’s products are in the areas of regulatory emission restrictions and changes in customer attitudes to using combustion engines and fossil fuels. The risks in environmental legislation changes are related to the complexity of the overall field of different emissions, the balance between commercially available fuels and their resulting emissions, available abatement technologies, the impact on overall energy efficiency, and the resulting financial feasibility of the various alternative ways to meet regulatory demands.

Being at the forefront of technological developments mitigates sustainability risks and gives Wärtsilä many opportunities arising from tightening environmental regulations. Over the years, Wärtsilä has worked continuously to improve the efficiency of its products, while at the same time seeking ways to reduce emissions. The fuel flexibility of Wärtsilä’s products enables the utilisation of various fuels, including gas and those from renewable sources, while...
their operational flexibility enables the installation of large capacity based wind and solar energy systems without hampering the reliability of the electricity grid. Wärtsilä has entered both the hybrid energy and energy storage businesses, representing a further step in providing customers with sustainable innovations that reduce carbon emissions. Wärtsilä’s technology also enables energy to be generated with a minimum use of water. The lack of fresh water is expected to be one of the major challenges facing the world in the future. In shipping, Wärtsilä can reduce the carbon footprint of vessels through optimised ship design, and with optimal propulsion solutions. Environmental solutions offer, among others, alternative technologies to reduce sulphur oxide (SO$_x$) emissions and to treat waste and ballast water. In the energy markets, Wärtsilä’s Smart Power Generation concept supports the increase in low carbon power generation, including wind, solar, and natural gas fired plants. Wärtsilä offers several retrofit solutions for the after-sales market to reduce emissions and to increase fuel efficiency.

For more information, please see the Sustainability section in this annual report.

Technology risks

Wärtsilä aims to increase the competitiveness of its solutions and manage technology risks and opportunities through solid R&D efforts and innovation. The development of new products is based on the strategic view of optimising lifecycle value for customers, and on reducing the lifecycle impact of developed technologies and products on the environment. This is achieved with modern and sustainable power solutions through, for example, gas solutions, environmental technologies, ship design, and electrical & automation solutions. As a technology leader, Wärtsilä places strong emphasis on emissions control, enhancing efficiency, and maintaining the cost competitiveness of its products. Connectivity and the utilisation of data to further optimise efficiency and unlock new customer values is becoming an increasingly important element of Wärtsilä’s development roadmap.

Operations, risks and opportunities

Operational risks

Operational risk management is part of the daily work of the Businesses. Opportunities and risks are identified, assessed, and managed on a daily basis and reported to, and managed by, the appropriate management level. The status of these opportunities and threats are reviewed on a periodic basis and appropriate further actions are taken.

Operational risks

Operational risk management is part of the daily work of the Businesses. Opportunities and risks are identified, assessed, and managed on a daily basis and reported to, and managed by, the appropriate management level. The status of these opportunities and threats are reviewed on a periodic basis and appropriate further actions are taken.
Manufacturing risk

Wärtsilä constantly analyses its manufacturing footprint and capacity costs, including costs related to the supply chain. Risk assessments have been made for all the main delivery centres, and significant safety, environmental impact, and risk mitigation investments have been completed. Risk identification, assessment, and mitigation actions are executed on a regular basis as part of operational management. Management systems for quality, environmental, occupational health and safety, and other systems are utilised to improve productivity, while safety and business continuity plans have been implemented for the key delivery centres.

Supplier and sub-contractor risk

Wärtsilä’s supply management is integrated within the business lines. The aim is to work in partnership with the supplier base to create value for Wärtsilä’s customers by ensuring quality, on-time delivery, and the lowest total cost. In order to ensure coordinated interfaces and synergies for the cross-divisional supplier base, a category management structure has been in place since 2007. Indirect Purchasing remains a centralised function responsible for managing strategic sourcing activities for indirect materials and services in all businesses and support functions.

The supply management units have a unified process for managing and controlling Wärtsilä’s supplier network, and for verifying that the suppliers’ performance meets Wärtsilä’s expectations. Supplier performance is, therefore, continuously measured. A key activity in managing business continuity planning is the regular assessment of business interruption risks, which is carried out in cooperation with the company’s suppliers. Several supplier risk audits have been completed jointly with the insurer as one means of mitigating risk. These audits are now one of the regular tasks for the supply category managers and the Risk Management function.

Wärtsilä has developed its supply related activities by creating close collaboration and long-term relationships with its main suppliers. This co-operation creates a common view towards values and goals, which in turn supports the management of Wärtsilä’s strategic risks. To further mitigate supplier and sub-contractor risks, a comprehensive follow-up of suppliers’ credit worthiness has been established. Supplier related risks for key components are mitigated by establishing dual- or multi-sourcing.

During 2018, Wärtsilä first piloted and then took into use an online solution for supply chain risk identification, assessment and monitoring. More than 2,000 suppliers have been, and continue to be, followed through the system since mid-2018. The solution includes a selection of Wärtsilä defined key criteria against which the situation of each supplier is continuously measured. Any discrepancies are automatically reported to the responsible category manager who is responsible for ensuring that the necessary steps, if any, are taken to mitigate the risk. Also the first steps in supply chain cyber security assessment were taken during 2018.
Lifecycle quality of products and product liability risk

The launching of new products always involves risks. In the R&D process, several risk management techniques are applied, including the risk elimination tool FMEA (Failure Modes and Effects Analysis) and in-house validation testing. Wärtsilä seeks to control quality risks by monitoring the incoming quality of the supply chain, and by designing and manufacturing its products with all due care. A non-destructive robotic ultrasonic data analysis procedure, which replaces manual scanning of critical components, enhances the probability of detecting imperfections in components with a complex geometry.

Wärtsilä applies a GATE model in order to control the product development process. Initially, only a limited release of new products is allowed, and via the gate approach, full release authority is given to the sales organisations only after testing and further validation has been completed.

As part of the ongoing digital transformation, a so-called ‘agile’ way of working has been adopted in the Digital organisation, which allows Wärtsilä to test new ideas and business models quickly in order to promptly adapt to changing market needs. This approach is used for conceptualisation to avoid the risk of losing business opportunities, while products continue to go through the established GATE procedure. Thus, the two models complement each other and are used in different contexts within the organisation.

Wärtsilä seeks to control its manufacturing quality risks by applying several assurance and quality control principles. The level of quality assurance and control requirements are determined based on component criticality, and they are applied throughout the delivery chain.

Requirement management is used to assess components systematically, enabling the allocation of resources and efforts according to the component criticality. The ranking criteria indicates the consequence if a component fails. The objective is to improve quality proactively within product development, supply management, and the entire delivery process from order intake to commissioning.

Nonconformity management at Wärtsilä focuses on developing and improving operations by registering and handling detected nonconformities. This ensures that customers receive products and services according to the agreed scope and specifications. Efficient handling, monitoring, and review of nonconformities is crucial for proper risk management and mitigation.

Product improvement management (issue resolution) projects are prioritised based on risk and importance. This happens when Wärtsilä identifies a technical issue according to claim statistics, customer feedback, or internal analysis and the case fulfils the risk categorisation for a non-isolated case.

The business lines are responsible for supporting customers in all warranty issues. This offers a feedback loop from the field to production and R&D, while taking care of the customers’ installations throughout their lifecycle. The company makes warranty provisions to cover any costs that may arise after product delivery. The company’s product liability insurance covers unexpected damages.

Wärtsilä seeks to continuously improve the quality of its products and services through the adoption of best industry practices and good governance. Management at all levels is responsible for the quality of output from their organisations, and is accountable for ensuring that appropriate review and feedback mechanisms are in place. The centralised Wärtsilä Quality function is responsible for coordinating quality activities across the businesses, and for ensuring that senior governance mechanisms are in place and effective. Wärtsilä’s Business level management systems are certified according to 2015 standard revisions (ISO 9001:2015 and ISO 14001:2015) with an emphasis on a risk based approach and proactive risk and opportunity management.

Contractual risks

Wärtsilä’s non-service sales include projects and equipment supply deliveries of various sizes. The most substantial orders concern power plants delivered on a complete EPC (engineering, procurement, and construction) basis. However, in relation to the total volume of business, the risks from individual projects do not reach significant levels. The risk of product liability claims is reduced through the lifecycle quality of the products and work, starting from the
initial design, through all stages of the production process, to the eventual field service activities, and the use of standard sales contracts, including the establishment of a contract review process.

In service activities, contractual risk is related mainly to long-term agreements and service projects, such as engine upgrades, retrofits or modifications. These offerings represent approximately 25% of all service activities, but the risks connected to individual contracts do not reach significant levels since the business between the various customers and countries is broadly spread. In addition, both offerings follow a well-defined sales process, thereby bringing multiple control points to observe embedded risks and to plan their control, both in contractual measures as well as in execution.

Risk of non-compliance, corruption and fraud
Wärtsilä complies with the law and its own internal policies and procedures everywhere the company does business. Wärtsilä’s Code of Conduct is the key guideline for all employees globally. Wärtsilä is committed to high ethical standards and integrity, and to preventing corruption and violations of the principles set forth in the Code of Conduct, as well as in Wärtsilä’s Anti-Corruption and Compliance Reporting policies. Compliance processes are embedded in all of the Businesses, and the responsibility for compliance and awareness of ethics and integrity is that of all Wärtsilä employees. Wärtsilä is fully committed to compliance with anti-corruption laws and statutes. Wärtsilä’s Anti-Corruption Policy absolutely forbids any kind of corruption and bribery, and the top management of the company has a zero-tolerance policy regarding corruption and fraud.

The Compliance function promotes Group wide compliance and continuously strives to raise awareness of the risk of corruption and bribery and other misconduct. It is primarily responsible for creating and enforcing Group level policies and procedures, training programmes, internal compliance investigations, managing the consequences of misconduct, and reporting. The continuous development of Wärtsilä’s compliance programme and nurturing the company’s commendable ethical culture are pivotal tasks for the Compliance function. Moreover, Compliance supports and co-operates with the Businesses and other corporate functions in their risk management efforts. Wärtsilä has a Group-wide programme for strengthening its Code of Conduct which aims to increase employees’ understanding on how the Code of Conduct impacts the everyday work at all Wärtsilä locations, wherever Wärtsilä operates. In 2018, Wärtsilä took into use an externally hosted new channel for reporting potential misconducts.

While Wärtsilä is aware of the risk of being subject to fraud by external business parties, and that the risk of corruption and fraud is heightened in many markets where the company operates, Wärtsilä maintains its highly ethical practices at all times. Full compliance with its stringent anti-corruption regime, including policies to prevent the corruption and bribery risk of third parties, is demanded by Wärtsilä.

Cyber & information security related risks
Wärtsilä has an experienced and professional internal organisation dedicated to the effective management of cyber security risks across Wärtsilä’s portfolio. This organisation, in co-operation with Wärtsilä’s Business Management teams, delivers cyber security operational support. It also provides the associated governance, risk management, and assurance required to support and enable both safe and secure internal operations, while ensuring that customer offerings by the Businessess are compliant with the relevant regulations and applicable standards, both now and in the future.

The Wärtsilä cyber security governance model aligns closely with wider business risk management and supports the Businesses in identifying and prioritising their respective cyber security risks. The cyber security team works seamlessly with physical security colleagues across Wärtsilä to ensure the effective and coordinated delivery of holistic security solutions for both the cyber and physical domains.

Information security risks related to Wärtsilä’s internal operations are continually identified, analysed and evaluated. The attendant mitigation activities are executed across Wärtsilä’s networks, endpoints, systems and services. The 24/7 Wärtsilä Security Operations Centre continually monitors the perimeter to internal systems and closely observes the external threat exposure level, whilst providing a coordinated response to identified information security incidents, as and when they may occur.
The effective mitigation of the risks associated with cyber security hygiene throughout Wärtsilä are continually and progressively being reinforced through coordinated and complementary cyber security training, awareness initiatives and extensive communications. This involves all Wärtsilä corporate functions and the Businesses.

Recognising the ever-present and increasing cyber security risks to our customers in the maritime industry, Wärtsilä has developed, in close partnership with a leading cyber security provider, a world-leading maritime cyber emergency response capability based in Singapore. This service puts thought leadership into tangible action, and places Wärtsilä at the forefront in mitigating the cyber security risks to its customers.

**Commodity price risk**

**Oil**

The direct effect of oil price changes on Wärtsilä’s production is limited, with their impact being mainly demand related. Higher oil prices represent a risk for global economic growth and increase operating costs, especially in the shipping markets. However, they also stimulate investments in exploration and production for oil and gas, both on land and offshore. Furthermore, high oil prices increase investments in gas carriers, gas-based power plants and, increasingly, also in gas-fuelled vessels. Low oil prices can delay investment decisions in oil producing countries and regions, as well as in the offshore industry. Wärtsilä is a global company involved in different shipping and power plant segments where oil price changes can have an opposing impact on demand drivers. This position is further diversified by the increasing importance of natural gas in Wärtsilä’s business.

**Metals**

Metal prices have an indirect effect on the component costs of Wärtsilä’s products. Furthermore, some key components are sourced with long-term contracts, and thus raw material price volatility is limited.

**Electricity**

Electricity prices have no substantial impact on Wärtsilä’s production costs. In the energy markets, high electricity prices support investments in new capacity by utility customers. Lower grid electricity prices do not favour investments in their own generating capacity by industrial customers.

**Hazard risks**

Occupational health and safety systems, travel safety instructions, and crisis management guidelines are aimed at protecting Wärtsilä employees. Appropriate insurances are in place for the personnel, and to emphasise the importance of employee safety, the Board of Management has decided on a corporate level target of zero lost-time injuries. A specific Zero Injury project exists for this purpose, and the target is included in the company’s sustainability programme. During 2018, the near-miss reporting system, WeCare, was actively used worldwide in order to manage information related to incidents that can threaten the safety, health and security of the company’s employees and operations, as well as the environment. This IT solution provides a guide for identifying the causes of incidents, and for taking all appropriate actions in a systematic way.

Environmental management systems are in place to mitigate environmental hazard risks. Wärtsilä maintains a register of all properties used and gives guidelines for the purchase, sale, rental and security of premises, and uses external advisors for environmental audits.

None of Wärtsilä’s major facilities are located in natural disaster areas. Catastrophic peril related scenarios are identified and, where necessary, exposures are mitigated by, for example, elevating sites above the flood risk level or by constructing flood dikes. For Wärtsilä’s main sites, business impact analyses have been conducted and continuity plans created to cover both property and business interruption risks.

The risks that Wärtsilä is unable to influence through its own efforts are transferred whenever possible to insurance companies. Wärtsilä uses appropriate insurance policies to cover indemnity risks related to its personnel, assets, and business interruptions; including supplier triggered interruptions, as well as third-party and product liability. Wärtsilä has established its own captive insurance company, Vulcan Insurance PCC Ltd. This risk management tool only insures Wärtsilä’s own risks. For insurance technical reasons the company is located on the island of Guernsey.
Vulcan Insurance PCC Ltd’s results are consolidated into the corporation’s books and are subject to normal taxation in Finland.

### Which insurances cover our business?

<table>
<thead>
<tr>
<th>Business operation</th>
<th>Design → Sourcing → Transportation → Manufacturing → Transportation → Construction &amp; Erection → Operation &amp; Maintenance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Management</td>
<td>Everyone is responsible&lt;br&gt;Policies, guidelines, management and reporting systems, business continuity plans</td>
</tr>
<tr>
<td>Insurance</td>
<td>General third party and product liability + professional indemnity insurance&lt;br&gt;Cyber insurance&lt;br&gt;Professional indemnity insurance → Business interruption insurance → Cargo (Transportation) insurance → Property insurance → Cargo (Transportation) insurance → Construction/erection all risk insurance (CAR/EAR) → Property insurance for owner/buyer</td>
</tr>
</tbody>
</table>

Both risk management work and casualty insurance cover Wärtsilä’s products over their entire lifecycle.

### Financial risks

Wärtsilä’s financial risks are presented in the notes to the financial statements, Note 31.
## Risk profiles and responsibilities

<table>
<thead>
<tr>
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<th>High</th>
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<td><strong>Risks</strong></td>
<td><strong>Risk profile</strong></td>
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<td>Wärtsilä's strategy and business plans</td>
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<td>Market and customer risk</td>
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<tr>
<td>Competitive situation and price risk</td>
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<tr>
<td>Political and legislative risk</td>
<td>Various guidelines and risk management policy</td>
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<tr>
<td>Climate change and sustainability risk</td>
<td>QHSE policy, Code of Conduct, management systems (ISO 14001 &amp; OHSAS 18001)</td>
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<td>Technology risk</td>
<td>Patents and industrial rights, product guarantees</td>
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<tr>
<td>Operational risks</td>
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<td>Manufacturing risk</td>
<td>Production systems, Business Continuity Plan</td>
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<tr>
<td>Supplier and subcontractor risk</td>
<td>Supplier requirement and supplier management system, Business Continuity Plan</td>
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<tr>
<td>Lifecycle quality of products and product liability risk</td>
<td>Management systems (ISO 9001), safety instruction and manuals, risk management policy, R&amp;D risk elimination instructions</td>
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<td>Contractual risks</td>
<td>Standard contracts, Corporate Sales Contracting Policy</td>
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<tr>
<td>Risk Category</td>
<td>Control Measures</td>
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<td>-----------------------------</td>
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<tr>
<td>Commodity price risk</td>
<td>Production cost control</td>
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<tr>
<td>Data security risk</td>
<td>Data security principles and Cyber Security Strategy</td>
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<td>Non-compliance risk</td>
<td>Code of Conduct, Anti-corruption policy, Compliance policy, Whistle-blowing channel</td>
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<tr>
<td>Hazard risks</td>
<td>Risk management policy and guidelines</td>
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<tr>
<td>Personnel risk</td>
<td>Management system (OHSAS 18001), travel safety instructions, crisis management guidelines, near misses reporting and premises safety plans</td>
</tr>
<tr>
<td>Natural catastrophes</td>
<td>Crisis management guidelines, Business Continuity Plan</td>
</tr>
<tr>
<td>Fire, cargo and other accidents</td>
<td>Management systems (ISO 14001 &amp; OHSAS 18001), premises safety plan</td>
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<tr>
<td>Financial risks</td>
<td>Wärtsilä’s strategy and business plans</td>
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<tr>
<td>Foreign exchange risk</td>
<td>Treasury policy</td>
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<td>Interest rate risk</td>
<td>Treasury policy</td>
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<tr>
<td>Liquidity and refinancing risk</td>
<td>Treasury policy</td>
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<tr>
<td>Credit risk</td>
<td>Credit and Treasury policy</td>
</tr>
</tbody>
</table>

Low risk - High risk

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