

Risk management 2021

Risk management

Navigating risks

Risk management at A.P. Moller - Maersk is focused to support the strategic objectives in the medium term and ensure the longevity in the long term. A.P. Moller - Maersk's Enterprise Risk Management framework enables a consistent approach to the identification, management and oversight of key risks, allowing a holistic and meaningful comparison of the risks faced and how they are managed across the company's footprint.

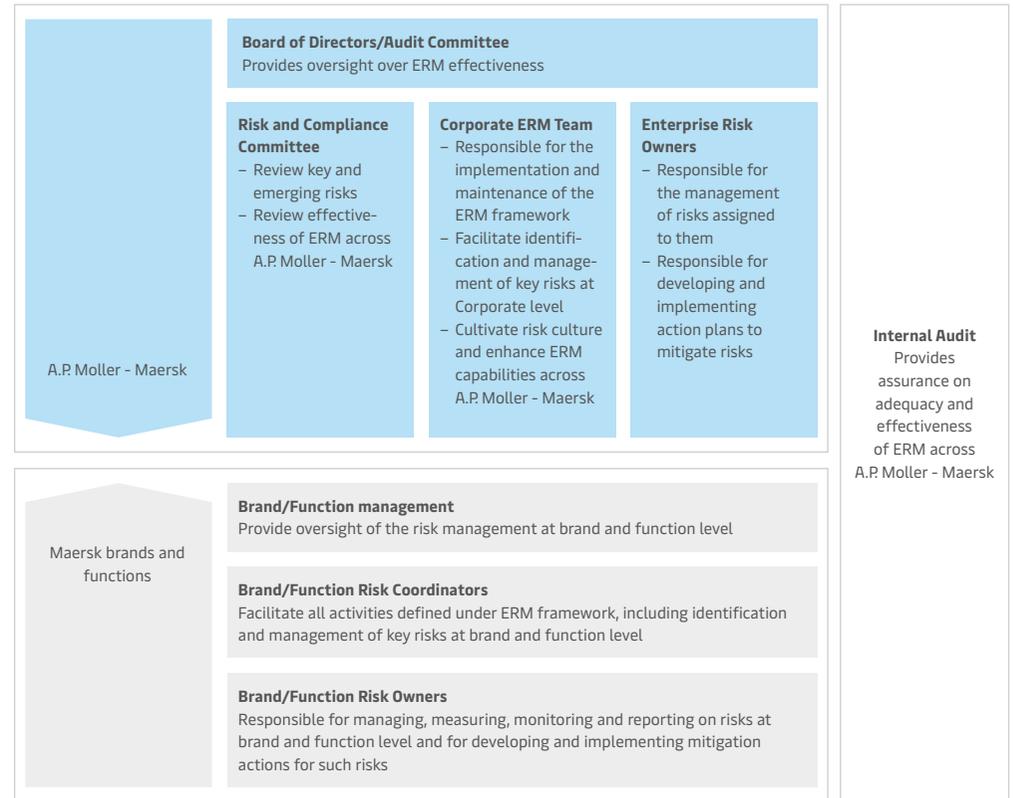
Identifying A.P. Moller - Maersk's risks

Using the enterprise risk management framework, all A.P. Moller - Maersk brands and functions identify the key risks that could affect their strategy and operations. In parallel, key risks to the company's business objectives are identified through interviews with executives. Finally, emerging risks to the company's longer-term value drivers are identified through an externally facilitated workshop with executives. The risks identified are then consolidated into an enterprise-wide risk landscape and validated for relevance and significance by the Risk & Compliance Committee. After final consolidation, the risk landscape is reviewed by the Executive Leadership Team, who determine the key risks for the company and the emerging risks that warrant detailed analysis to understand their potential impact. These risks are then submitted to the Audit Committee and the Board of Directors.

Managing A.P. Moller - Maersk's risks

Each key risk is assigned an executive owner who is accountable for the management of the risks, including confirmation that adequate controls are in place and that the necessary action plans are implemented to bring or keep the key risk within acceptable levels, if not already the case. To provide adequate oversight, key risk developments and mitigation progress are monitored and reported on throughout the year. Quarterly in-dept reviews of the status of the key risks and their mitigation are conducted in the management teams and various oversight fora such as the Risk & Compliance Committee and the quarterly performance reviews. In addition, the Audit Committee conducts deep dive sessions with executive risk owner throughout the year on selected key risks. **Figure 1** presents an overview of A.P. Moller - Maersk's process and governance structures, including the Risk & Compliance Committee and Audit Committee/Board of Directors.

Figure 1
Overview of governance structure



Strengthening A.P. Moller - Maersk's ERM framework

In 2021, A.P. Moller - Maersk has:

- Strengthened the **integration of ERM into strategy review and business planning**
- Strengthened the **risk oversight** through the Risk & Compliance Committee and quarterly performance reviews
- Conducted a **training programme** to develop A.P. Moller - Maersk's global risk community.

Key improvement projects underway consist of:

- Developing a comprehensive and operational **risk appetite framework** for the company
- Implementing a global risk tool allowing A.P. Moller - Maersk to have single source of risk and assurance data
- Assessing the impact of the **climate-related risks and opportunities** to meet future requirements and aligned with TCFD.

Key risks to the business plan

A.P.Moller - Maersk categorises risks into four different areas to provide the appropriate level of governance and oversight to effectively manage these risks.

Strategic

Risks associated with current and future business plans and strategies

- | | | | |
|--|---|--|---|
| <p>1. Customer service level
Inability to deliver a superior service level to customers</p> | <p>3. Process standardisation & technology roadmap
Failure or serious delay in the standardisation of end-to-end processes and execution of technology roadmap</p> | <p>6. Mergers and acquisitions integration
Failure to integrate a major acquisition</p> | <p>9. Decarbonisation
Failure to decarbonise A.P.Moller - Maersk's end-to-end supply chain at a speed that meets investors and customers' expectations</p> |
|--|---|--|---|

Operational

Risks associated with business activities and operations, procedures, people and systems

- | | | | |
|--|--|--|--|
| <p>4. Cyber attack
External or internal attack resulting in service unavailability or data breach</p> | <p>5. People safety and security
Failure to ensure the safety and security of A.P.Moller - Maersk's employees</p> | <p>7. Strategic hubs
Shutdown of strategic hubs resulting in significant network disruption</p> | <p>8. Organisational capabilities
Inability to attract and scale the right workforce matching business demand</p> |
|--|--|--|--|

Financial

Risks associated with potential financial losses and/or insolvency

- 2. Ocean industry collapse**
Financial loss from Ocean freight rate collapse

Compliance

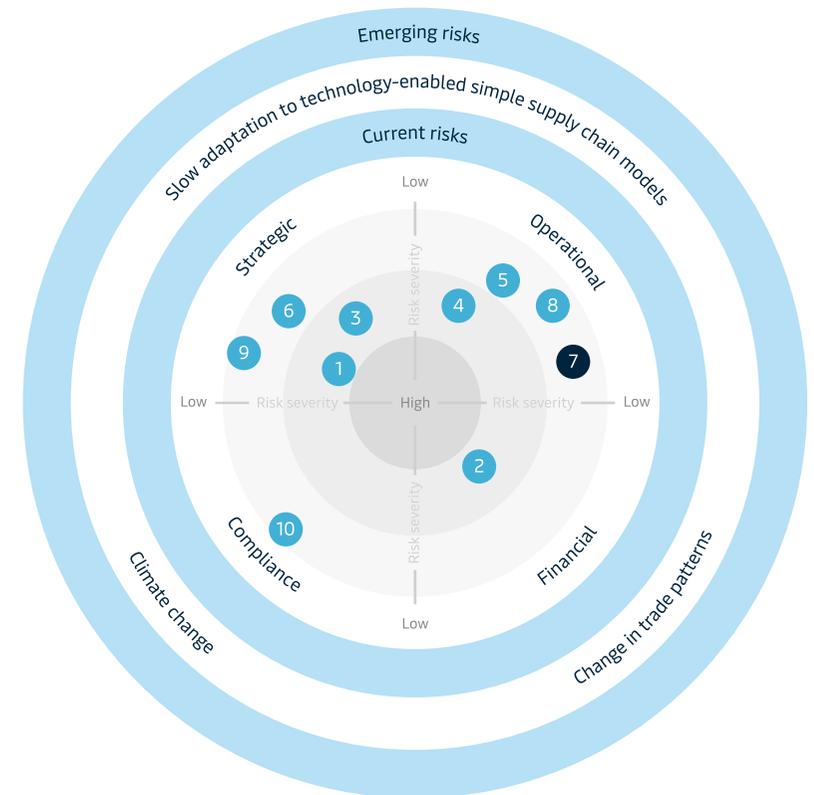
Risks associated with non-compliance with rules and/or policies

- 10. Legal and regulatory compliance**
Being hit by a large compliance case

Figure 2

A.P. Moller - Maersk's key risks

A.P.Moller - Maersk considers risks both individually and collectively to fully understand its risk landscape. The company quantifies key risks and the risk portfolio to understand how they may impact the performance of its business plan and budget and to have an objective basis for monitoring how the key risks trend compared to risk appetite. The quantification of the risk portfolio takes into consideration diversification benefits in the portfolio. The majority of the key risks determined for 2022 remain as they were in 2021, and the only new risk is a risk around shutdown of strategic hubs.



- December 2021 position
- December 2021 - new risk

<p>1 Customer service level</p> <p>What is this risk The success of A.P. Moller - Maersk's integrator strategy depends on customers' trust and confidence in A.P. Moller - Maersk to fulfil their end-to-end supply chain needs through superior and consistent service levels. A failure to do so would be a reputation risk and weaken the foundation of A.P. Moller - Maersk's integrator strategy.</p>	<p>Risk owner: CEO of Ocean & Logistics</p> <p>How we manage it A.P. Moller - Maersk has launched several transformation projects to mitigate this risk and progress towards the distinct delivery promises. The company is improving the business processes and systems to deliver the delivery promises, with service levels being monitored to mitigate adverse developments.</p>	<p>Year-on-year risk movement: Stable</p> <p>Target tolerance A.P. Moller - Maersk targets a high schedule reliability which is best among peers, a minimal impact on customers from commercial overbooking, consistent performance of delivery promises to customers, and a high Net Promoter Score from customers.</p>	<p>Risk category: Strategic</p> <p>Scenario Excessive demand for capacity and port congestion due to lack of labour combined with ineffective demand forecast and cargo management causes deterioration of service levels and customer dissatisfaction and impacts the company's brand reputation and financial performance.</p>
<p>2 Ocean industry collapse</p> <p>What is this risk Added capacity from planned new ship buildings and normalisation of the existing supply-demand imbalance due to expected easing of supply chain congestion could lead to a rapid collapse in Ocean freight rates.</p>	<p>Risk owner: CEO of Ocean & Logistics</p> <p>How we manage it A.P. Moller - Maersk has limited levers to impact the overall demand for container shipping and cannot influence the market rates. With the continuing development of differentiated value propositions, agile network, increased focus on cost leadership and a growing long-term contracts portfolio, the company will all-else-equal continue to reduce the exposure.</p>	<p>Year-on-year risk movement: Stable</p> <p>Target tolerance A.P. Moller - Maersk anticipates a normalisation of freight rates, but the targeted freight rates remain above pre-COVID levels reflecting a less volatile industry overall.</p>	<p>Risk category: Financial</p> <p>Scenario A severe contraction of Ocean industry due to excess capacity combined with rapid decrease in ocean freight rates causes lower cash flow generation and distraction to A.P. Moller - Maersk's strategy execution.</p>
<p>3 Process standardisation & technology roadmap</p> <p>What is this risk A serious delay or failure to standardise core end-to-end business processes and execute the technology roadmap to achieve A.P. Moller - Maersk's growth vision as an end-to-end integrator of global logistics.</p>	<p>Risk owners: CEO of Ocean & Logistics, CTIO</p> <p>How we manage it To achieve the right customer and business outcomes, A.P. Moller - Maersk has implemented several mechanisms to accelerate process standardisation and technology modernisation and monitor progress and process governance and cross-functional collaboration.</p>	<p>Year-on-year risk movement: Decreased</p> <p>Target tolerance A.P. Moller - Maersk targets operational excellence in addressing customers end-to-end supply chain needs, through effective integration of business products, standardised processes and technology platforms.</p>	<p>Risk category: Strategic</p> <p>Scenario Delay or failure to implement digitised and standardised supply chain solutions due to misalignment between business and technology causes loss of digital competitive advantage and customer dissatisfaction and impacts company's reputation and financial performance.</p>
<p>4 Cyber-attack</p> <p>What is this risk As A.P. Moller - Maersk becomes increasingly digitalised, more devices and control systems are connected online resulting in a wider technology surface. This, compounded with ever-increasing external threat capabilities, puts more pressure on systems to be cyber threat resilient. A cyber-attack could lead to severe operational disruption and/or data breaches.</p>	<p>Risk owner: CTIO</p> <p>How we manage it A.P. Moller - Maersk continues to execute its cyber security programme, strengthen business continuity plans and enhance its cyber threat resilience. Over the recent years, the company has enhanced capabilities to control impact through appropriate preparedness and response procedures.</p>	<p>Year-on-year risk movement: Decreased</p> <p>Target tolerance A.P. Moller - Maersk aims to avoid a material cyber-attack through increased threat intelligence and response capabilities, and builds digital resilience with business segments, third parties and wider supply chains.</p>	<p>Risk category: Operational</p> <p>Scenario Increased direct or indirect attacks on A.P. Moller - Maersk's brands, third-party partners or parts of company's network due to digitisation, threat sophistication and/or vulnerabilities from newly M&A environments cause severe business disruption and loss of customer trust.</p>

<p>5 People safety and security</p> <p>What is this risk Many of A.P. Moller - Maersk employees and external contractors work in high-risk business operations and geographies, exposing them to safety and security risks. The accelerated expansion into Logistics & Services increases the risk due to new areas of operations and new geographies.</p>	<p>Risk owner: CEO of APM Terminals</p> <p>How we manage it A.P. Moller - Maersk continues to drive personal engagement from leaders to ensure sufficient prioritisation of people safety and security. The company continues to embed a unified safety and resilience framework in the business operation systems, including for M&As and its integration.</p>	<p>Year-on-year risk movement: Stable</p> <p>Target tolerance A.P. Moller - Maersk targets a high level of duty of care towards people through strong safety and security standards, awareness of same in all business areas and a mature safety culture across the organisation.</p>	<p>Risk category: Operational</p> <p>Scenario Serious incidents due to lack of adequate safety standards or security intelligence and failure to embed a duty of care culture in day-to-day business operations cause injuries and fatalities and damage to brand reputation.</p>
<p>6 Mergers and acquisitions integration</p> <p>What is this risk A key driver to Logistics & Services growth is the expansion of product and people capabilities through M&As. Some of the acquisitions might be substantial, and if A.P. Moller - Maersk fails to integrate those, it may derail the execution of the integrator strategy.</p>	<p>Risk owner: CFO</p> <p>How we manage it A.P. Moller - Maersk has a dedicated post-merger integration office equipped with capabilities to assist the business in effectively managing M&A integrations. A comprehensive M&A integration framework has been implemented covering all commercial and functional aspects. The integration process is strongly linked to a well-structured M&A target identification, due diligence and synergy identification process.</p>	<p>Year-on-year risk movement: Stable</p> <p>Target tolerance A.P. Moller - Maersk aims to have adequate capabilities and effective processes to warrant that substantial M&As are integrated successfully and on time to realise the anticipated benefits as planned.</p>	<p>Risk category: Strategic</p> <p>Scenario A failure to successfully integrate a major acquisition due to inadequate integration approach, lack of internal processes or capabilities, or cultural differences cause value destruction in the form of unrealised synergies</p>
<p>7 Shutdown of strategic hubs</p> <p>What is this risk Hub terminals that handle transhipments are a critically important part of A.P. Moller - Maersk's supply chain management network. The network could be disrupted for a prolonged period if a strategic hub completely shuts down and there are no options to reroute cargo.</p>	<p>Risk owners: CEO of Ocean & Logistics, CEO of APM Terminals</p> <p>How we manage it A.P. Moller - Maersk has business continuity and contingency plans to manage disruption to network and terminal operations. A central coordination body is in place to handle largescale disruption events that cut across multiple trades and geographies. Mitigation strategies to prevent labour strikes, equipment breakdowns, etc. are in place for terminal operations and embedded into terminal business operating system.</p>	<p>Year-on-year risk movement: New risk</p> <p>Target tolerance A.P. Moller - Maersk aims to have adequate and effective disruption contingency plans to ensure that a shutdown of strategic hubs does not significantly deteriorate service levels and delivery promises to customers.</p>	<p>Risk category: Operational</p> <p>Scenario Shut-down of a strategic hub due to labour strikes, cyber-attack, major accident, extreme weather events, state emergency, pandemic, etc. causes disruption to the Ocean network and impacts service level to customers.</p>
<p>8 Organisational capabilities</p> <p>What is this risk A.P. Moller - Maersk's strategy to become a global integrator of container logistics requires the right capabilities. Inability to attract and retain skilled staff will impact the ambition to deliver a logistics-based, digitally transformed business model to support the integrator strategy.</p>	<p>Risk owner: Chief People Officer</p> <p>How we manage it A.P. Moller - Maersk has acquired new and diverse capabilities and skillsets, especially for Logistics & Services and technology. The company continues to build competencies through functional and leadership programmes targeted capability sourcing matching the business needs, and a strong employee value proposition.</p>	<p>Year-on-year risk movement: Stable</p> <p>Target tolerance A.P. Moller - Maersk targets to be an employer of choice able to attract and retain qualified talent and skills that are highly engaged and committed to the company's values, goals and objectives.</p>	<p>Risk category: Operational</p> <p>Scenario A.P. Moller - Maersk's strategy execution is hampered by lack of adequate organisational capabilities essential to match business needs and rapid shifts in external business, technology, and regulatory environment.</p>

9 Decarbonisation

What is this risk

Decarbonisation has become business critical and a licence to operate. It is critical for A.P. Moller - Maersk to decarbonise its end-to-end supply chain at a speed that meets customers' and investors' expectations.

Risk owner: **CEO of Fleet & Strategic Brands**

How we manage it

A.P. Moller - Maersk has a dedicated decarbonisation function to drive the decarbonisation agenda. The company's new accelerated 2040 decarbonisation vision is in line with the ambition of its customers. The first 13 methanol-powered vessels have been ordered, and the supply of green fuels for the first feeder vessel has been secured. Work on a roadmap for landside decarbonisation (and air) is in progress.

Year-on-year risk movement: **Stable**

Target tolerance

A.P. Moller - Maersk targets achievement of its decarbonisation vision by innovating supply chain solutions and accelerating its decarbonisation initiatives to drive credibility towards the customers and investors.

Risk category: **Strategic**

Scenario

Uncertainty around the direction of future sustainable fuel market developments, unavailability of sufficient amounts of green fuel, and customers' reluctance to adopt sustainable supply chain solutions causes delay in realising A.P. Moller - Maersk's decarbonisation vision.

10 Legal and regulatory compliance

What is this risk

The legal and regulatory landscape in which A.P. Moller - Maersk operates is becoming increasingly complex, and the company could be subject to compliance cases in connection with violations of anti-corruption laws, anti-trust regulations, international sanctions and/or data privacy.

Risk owner:

General Counsel & Head of Corporate Affairs

How we manage it

A.P. Moller - Maersk has a subject matter expert in each compliance area and a robust compliance programme designed to fulfil the global requirements. The company has implemented many initiatives to improve focus and emphasis on compliance training and awareness.

Year-on-year risk movement: **Stable**

Target tolerance

A.P. Moller - Maersk is committed to ensuring compliance with all applicable laws and regulations in all the countries where it operates.

Risk category: **Strategic**

Scenario

A violation of compliance regulation, including stemming from a newly acquired company, could cause severe reputational damage and substantial legal fines, damages and costs.

Changes to the key risks

The **process standardisation & technology roadmap** risk has decreased due to progress of the technology modernisation roadmap, and comprehensive plans built for the process standardisation agenda, underpinned by strong focus and commitment from the Executive Leadership Team.

The overall risk level for a **major cyber-attack** has decreased due to the enhanced capability to control impact and brand damage through preparedness and response activity procedure, albeit the likelihood of an attack has increased amid developments in the external threat environment and expansion of the attack surface due to digitisation, vulnerabilities across IT landscape and newly acquired companies.

The legal and regulatory **compliance risk** now addresses not only the compliance with anti-corruption laws, competition laws, and international sanctions but also the compliance with data privacy regulations across different geographies.

Looking beyond the planning period

A.P.Moller - Maersk looks beyond the business planning horizon and assesses emerging risks in a 5-15 years' perspective. This is to spot threats or opportunities to the long-term value drivers in a timely manner. An emerging risk radar is established based on prevailing megatrends seen through different lenses (figure 3). One or two emerging risks are then selected for analysis to better understand their potential implications for the logistics industry and for A.P.Moller - Maersk. For 2022 three emerging risks that could potentially impact the company in the longer term were selected for focus. Climate change was selected for a detailed analysis, the outcome of which will drive articulation and implementation of mitigating strategies.

1. Climate change

The physical impacts of climate change may affect A.P.Moller - Maersk's land-based assets and operations and the supply chains it operates. A.P.Moller - Maersk is conducting an in-depth analysis to understand and manage the risks from the physical effects of climate change. As underscored by the latest Intergovernmental Panel on Climate Change (IPCC) report, August 2021, the risks are real, and there is a need for a detailed analysis of their potential impact on A.P.Moller - Maersk. The analysis includes assessment of climate scenarios and their impact on company's operations in relevant locations, i.e. the land-based assets, the extended infrastructure on which the company depends and the vessel operations. Further studies are planned to examine the impact of climate change on the supply chains it operates. Besides addressing the need to understand the impact of the physical effects of climate change on the business, the study will also enable A.P.Moller - Maersk to expand and enhance the disclosure on climate related risks and opportunities in line with Task Force on Climate-related Financial Disclosures (TCFD) recommendations.

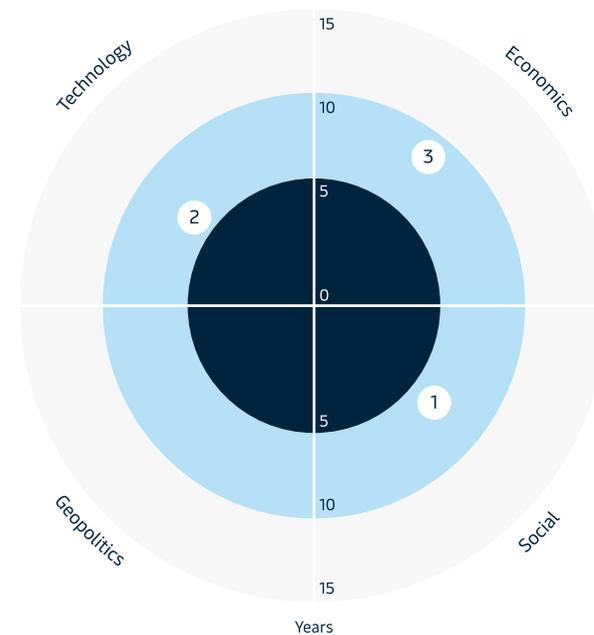
2. Slow adaptation to technology-enabled simple supply chain models

A.P.Moller - Maersk's integrator strategy depends on customers demanding simplified supply chain models. A lagging adoption of technology-enabled simple solutions could make the strategy irrelevant. Supply chains today are characterised by series of complex processes. Increased globalisation and shifting consumers demand add further complexities to supply chains. In response to these complexities, companies have started to adopt and utilise advanced technologies to transform and simplify their supply chains and enhance the customer experience. A.P.Moller - Maersk is advancing its strategy to digitise the customer interface and product offerings. However, if A.P.Moller - Maersk does not move fast and remain ahead of its peers in developing solutions aligned with its integrator strategy and customer demands, A.P.Moller - Maersk may not be able to provide superior value propositions to its customers.

3. Change in trade patterns

A.P.Moller - Maersk business model is global and dependent on the global economy and international trade. Consequently, fundamental changes in trade patterns could expose the current business model to risk. COVID-19 has led companies to revisit their supply chain models and evaluate alternative models to meet customer needs through more resilience and diversification (e.g. dual sourcing, near shoring etc.). Customer behaviours are also changing with an increased push for climate and social goals and opportunities arising from technology potentially leading to avoidance of long-haul transportation and manufacturing closer to market. Further, rising nationalism, populism, and protectionism (e.g. USA/China decoupling) could imply a retreat from globalisation towards an increased regionalisation of trade patterns.

Figure 3
Emerging risks radar



Emerging risks

1. Climate change
2. Slow adaptation to technology-enabled simple supply chain models
3. Change in trade patterns

COVID-19

As the world moves into its third year battling COVID-19, A.P. Moller - Maersk remains focused on protecting employees, supporting customers and contributing to societies by keeping goods flowing.

To achieve these objectives, regional and local leaders across the company have since early in the pandemic been empowered to set up the necessary protective measures across offices and onshore frontline facilities and a globally coordinated approach has been taken to keep vessels and ocean network operational. A central cross-functional COVID Coordination Team has provided strategic oversight, continuously evaluating risks and opportunities and providing leaders with updated information, guidance, tools and resources.

This approach has enabled A.P. Moller - Maersk to minimise infections and largely maintain business continuity throughout 2021 despite recurring global infection waves and constant change of local regulations and requirements.

All employees are kept closely informed about the evolving protective measures at their locations and are provided with appropriate instructions on safety protocols and personal protective equipment (PPE). Where relevant, vaccination drives are facilitated, not least for seafarers whose ability to safely travel to and from vessels may be affected by their vaccination status. Office employees have worked from home for large parts of the year, and business travel was restricted for most of 2021. Through effective communication, processes, systems and steadfast resolve from leaders, employees have been able to continue to work effectively to support customers and achieve business objectives.

A.P. Moller - Maersk has sadly lost more than 90 colleagues to COVID-19 since the beginning of the pandemic. The company has set up a relief fund to support the families of those employees who have fallen seriously ill or lost their life due to the virus.

Looking ahead to 2022, the COVID-19 situation across the globe is expected to continue to evolve, as seen with the newest variant of concern Omicron which is spreading at an alarming rate and has been detected in almost all countries worldwide. Operating conditions for A.P. Moller - Maersk vessels and seafarers will also continue to require special attention in the year ahead due to varying restrictions to crew change globally and this serious issue continues to be addressed through collaboration with governments and port authorities.

