

Risk management 2022

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 identification, assessment, mitigation and monitoring of key risks. This allows a holistic and meaningful comparison of the risks faced and provides transparency of how they are managed across the company.

Identifying A.P. Moller - Maersk's risks

Using the enterprise risk management framework, all A.P. Moller - Maersk brands and functions identify risks that could affect their strategy and operations. In parallel, 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 determines 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 risk, including confirmation that adequate controls are in place and that the necessary action plans are implemented to bring or keep the key risk within risk appetite. To provide adequate oversight, key risk developments and mitigation progress are monitored and reported on throughout the year based on agreed metrics. 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. In addition, the Audit Committee conducts deep dive sessions with executive risk owners 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.

ERM road map 2022-2024

In 2022, a third-party maturity assessment of A.P. Moller - Maersk's Enterprise Risk Management capabilities was carried out. The assessment concludes that the company has a solid ERM program, which over the past few years has undergone steady and continuous improvement. To further strengthen the capabilities a road map of activities was established for the period 2022-2024 to:

1. Enhance the project risk management capabilities
2. Establish a risk appetite framework
3. Address uneven ERM maturity levels in brands and functions
4. Build system support for ERM.

Work on the above activities is either ongoing or completed.

Figure 1

Overview of governance structure

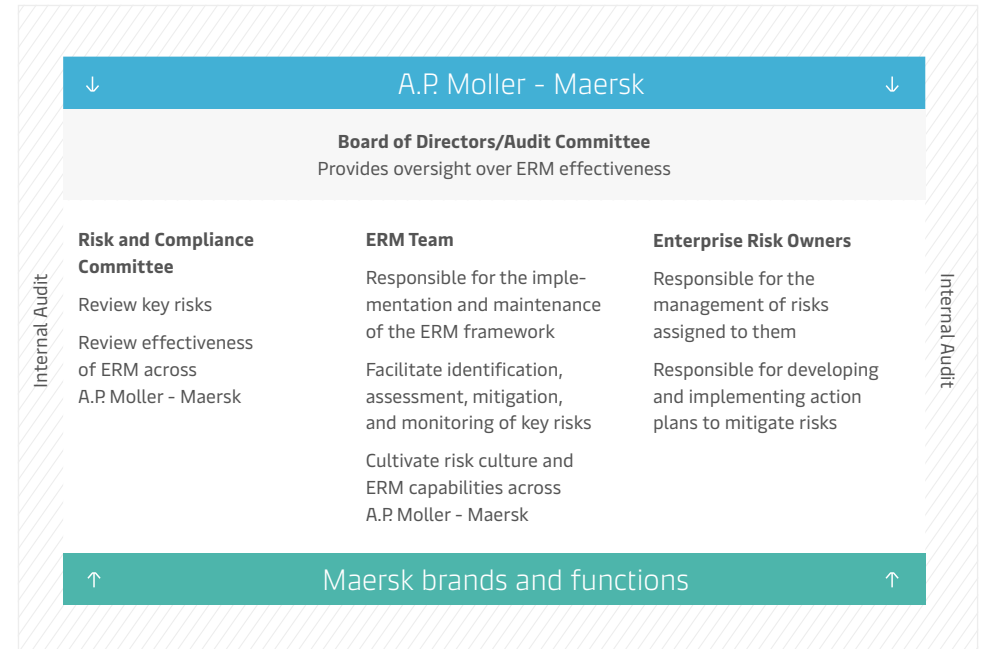


Figure 2

- Risk continuing from 2022
- New risk

Key risks to the 2023-2027 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

- 1 **Ocean industry collapse**
Financial loss from Ocean freight rate collapse
- 2 **Geopolitical tension**
Escalation of geopolitical tensions and political uncertainty impacting future supply chain.
- 4 **Process standardisation & technology roadmap**
Failure or serious delay in the standardisation of E-2-E processes and execution of technology roadmap
- 8 **Decarbonisation**
Failure to decarbonise A.P. Moller - Maersk's end-to-end supply chain at a speed that meets investor and customer expectations
- 9 **Mergers and acquisitions integration**
Failure to integrate a major acquisition

Compliance

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

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

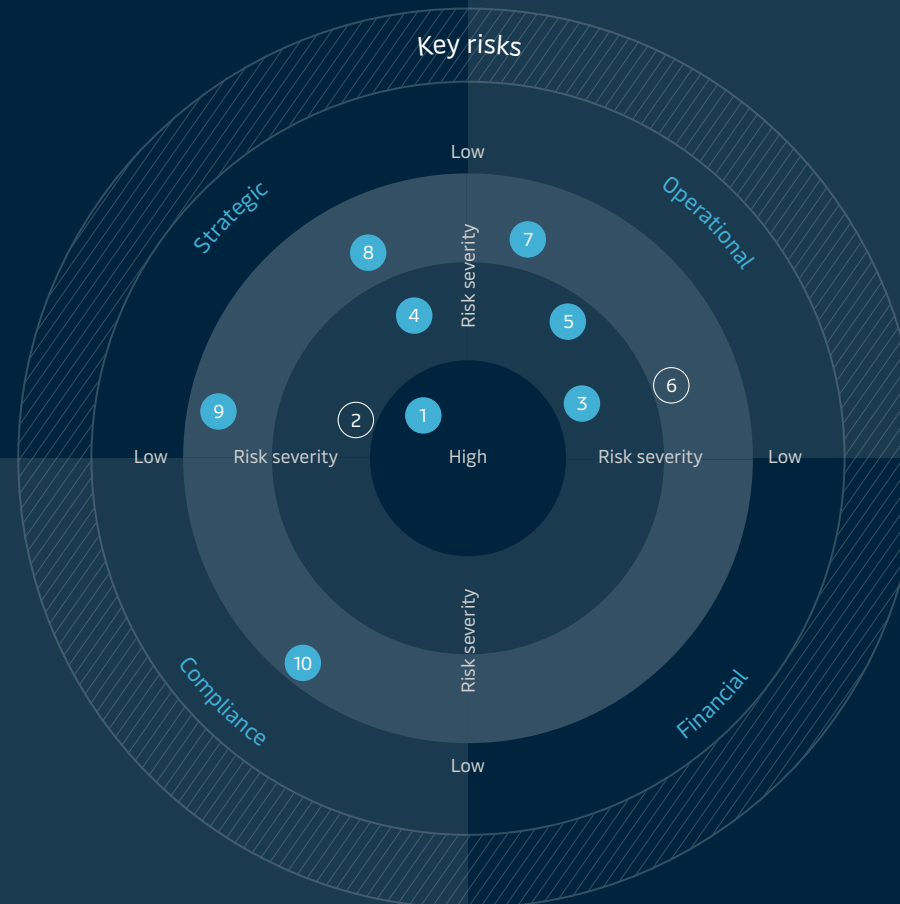
Operational

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

- 3 **Customer service level**
Inability to deliver a superior service level to customers
- 5 **Cyberattack**
External or internal attack resulting in service unavailability or data breach
- 6 **Rising cost in an inflationary environment**
Inflationary cost pressure or lack of product standardisation hampering long term profitability and scalability of business.
- 7 **Organisational capabilities**
Inability to attract and scale the right workforce matching business demand

Financial

Risks associated with potential financial losses and/or insolvency



	1	2 NEW RISK	3	4
	<p>Ocean industry collapse</p> <p>Risk owner..... Chief Product Officer, Ocean Year-on-year risk movement..... Increased Risk category..... Strategic</p>	<p>Geopolitical tension</p> <p>Risk owner..... Chief Corporate Affairs Officer Year-on-year risk movement..... New risk Risk category..... Strategic</p>	<p>Customer service level</p> <p>Risk owner..... Chief Delivery Officer Year-on-year risk movement..... Decreased Risk category..... Operational</p>	<p>Process standardisation & technology roadmap</p> <p>Risk owner..... Head of Transformation Year-on-year risk movement..... Stable Risk category..... Strategic</p>
What is this risk	Drop in demand due to the economic downturn and the geopolitical situation at a time where the global fleet capacity increases with planned new-buildings may lead to a rapid collapse in Ocean freight rates.	Escalation of geopolitical tension and political uncertainty may have a strong and immediate impact on the future supply chain, through disruptions in supply, demand, and logistics infrastructure, and eventually fragmentation of supply chains.	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.	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.
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 adaption of network, slow steaming, focus on cost leadership and a long-term contracts portfolio, the company will all else equal continue to reduce the exposure.	A.P Moller - Maersk monitors political developments and events which may impact status quo as well as measures taken by customers which may change their supply chain needs.	A.P Moller - Maersk is transforming towards distinct end-to-end delivery promises. The company is improving the business processes and systems to support the delivery promises, with service levels being monitored to mitigate adverse developments.	A.P Moller - Maersk has accelerated process standardisation and technology modernisation. To achieve the right customer and business outcomes, the company monitors progress and ensures adequate process governance and cross-functional collaboration.
Target tolerance	A.P Moller - Maersk calculates with normalised freight rates, but the geopolitical environment and the development in the economic situation in Europe and the USA makes the industry very volatile.	A.P Moller - Maersk aims to have plans available to adjust network and capacity to accommodate potential disruptions and changes in customer needs as well as enhancing security measures in areas with a potential security/safety exposure.	A.P Moller - Maersk targets a high reliability, consistent performance of delivery promises to customers, and a high Net Promoter Score from customers.	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.
Potential scenario	A severe contraction of Ocean industry due to rapid decrease in demand combined with new capacity causes freight rates to drop below break-even for a longer period.	Potential wide sanctions inhibiting trade in major markets, and in a worst case, military conflict leading to obstruction of major network routes.	Inefficient management of assets/network and bookings leading to rupture of customer promises.	Unsuccessful implementation of digitised and standardised supply chain solutions causes loss of digital competitive advantage and customer dissatisfaction.

	5 Cyberattack	6 NEW RISK Rising cost in an inflationary environment	7 Organisational capabilities	8 Decarbonisation
	Risk owner..... Chief Technology & Information Officer Year-on-year risk movement Stable Risk category Operational	Risk owner..... Chief Financial Officer Year-on-year risk movement New risk Risk category Operational	Risk owner..... Chief People Officer Year-on-year risk movement Stable Risk category Operational	Risk owner..... Chief Infrastructure Officer Year-on-year risk movement Stable Risk category Strategic
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 cyberattack could lead to severe operational disruption, data breaches and/or loss of customer trust.	Inflationary cost pressure, unexpected costs associated with M&A Integration, or lack of product standardisation, impacts A.P. Moller - Maersk's profitability.	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.	Decarbonisation is a business necessity and a mission-critical factor. It is imperative for A.P. Moller - Maersk to decarbonise its end-to-end supply chain in a credible and transparent way and at a speed that meets customers, investors and society's expectations, and at the same time generates business value for A.P. Moller - Maersk and its customers.
How we manage it	A.P. Moller - Maersk continues to invest in cyber security to enhance its digital resilience, and strengthen its business continuity plans. The company continues to enhance its capabilities to control impact through appropriate preparedness and response procedures.	A.P. Moller - Maersk will drive efficiencies and productivity to reduce the cost base in general, mainly in terms of standardising and automating processes and products. Increase in costs due to inflation will to the extent possible be passed on to customers.	A.P. Moller - Maersk has acquired new and diverse capabilities and skillsets, especially for Logistics & Services and technology. The company has revitalised the Maersk values and continues to build competencies through functional and leadership programmes, targeted capability sourcing matching the business needs, and a strong employee value proposition.	A.P. Moller - Maersk has made progress on both the asset, products and supply side. The first methanol-powered vessel will be delivered in 2023, with 18 more vessels on order through 2024 to 2025. The supply of green fuel is ongoing through partnerships with green methanol suppliers. ECO delivery products are offered to Ocean customers and will be launched across Logistics during 2023. The company is establishing an emission platform in 2023 to support the ECO products, enable emissions target setting and reporting.
Target tolerance	A.P. Moller - Maersk aims to avoid material cyber-attacks through increased threat intelligence and response capabilities, and builds digital resilience with business segments, third parties and wider supply chains.	A.P. Moller - Maersk targets a low negative impact from the inflation in costs through a combination of reduction of the cost base and passing on the higher costs to customers.	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.	A.P. Moller - Maersk targets achievement of its value-generating decarbonisation vision by innovating supply chain solutions and accelerating its decarbonisation initiatives to drive credibility towards the customers, investors and society.
Potential 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 acquired environments cause severe business disruption and loss of customer trust.	A competitive landscape with drop in rates as a result of price competition does not allow A.P. Moller - Maersk to get compensated for the effects of inflation by the customers.	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.	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 or failure to generate business value from it.

	9	10
	<p>Mergers and acquisitions integration</p> <p>Risk owner..... Head of Transformation Year-on-year risk movement..... Stable Risk category..... Operational</p>	<p>Legal and regulatory compliance</p> <p>Risk owner..... Chief Corporate Affairs Officer Year-on-year risk movement..... Stable Risk category..... Strategic</p>
What is this risk	<p>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>The legal and regulatory landscape in which A.P.Moller - Maersk operates is 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.</p>
How we manage it	<p>A.P.Moller - Maersk has a dedicated post-merger integration office equipped with experienced 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 structured M&A target identification, due diligence and synergy identification process.</p>	<p>A.P.Moller - Maersk has global and regional subject matter experts 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, awareness, processes and controls.</p>
Target tolerance	<p>A.P.Moller - Maersk aims to have adequate and experienced 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>A.P.Moller - Maersk is committed to ensuring compliance with all applicable laws and regulations in all the countries where it operates.</p>
Potential scenario	<p>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>A violation of compliance regulation causes severe reputational damage and substantial legal fines, damages and costs.</p>

Changes to the key risks

The **Ocean Industry Collapse** risk has increased due to the current economic environment, negatively impacted by inflation and high energy prices, leading to decline in trade at a time with newbuildings increasing the supply side.

The **Customer Service level** risk has decreased assisted by the ease in global supply chain congestion along with progress on the programme to build delivery promises to customers.

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. Emerging risks are established based on prevailing mega trends seen through different lenses (Figure 3). In 2021, two risks were selected for focus and further analysis. These risks were the physical impact of climate change and change in trade patterns. The planned analysis has been performed during 2022, and the outcome is described below.

1 Climate change

Climate change will increasingly impact global trade. There will be impact on infrastructure and transportation (**the operation side**) and changes to the patterns of economic activity and trade flow (**the demand side**).

The analysis of **the operation side** includes assessment of climate scenarios and their impact on the company's operations in relevant locations, i.e. the land-based assets. The risks are assessed for the portfolio of assets and for the individual assets. On average the asset portfolio is predicted to incur 30% higher costs for physical damage and business interruption compared to a baseline of 2022. This does not include the potential impact on the network. For individual assets identified to be high-risk assets, the company is conducting on site assessments by risk engineers of vulnerabilities to relevant climate hazards in the short, medium and long term and provide concrete and actionable recommendations.

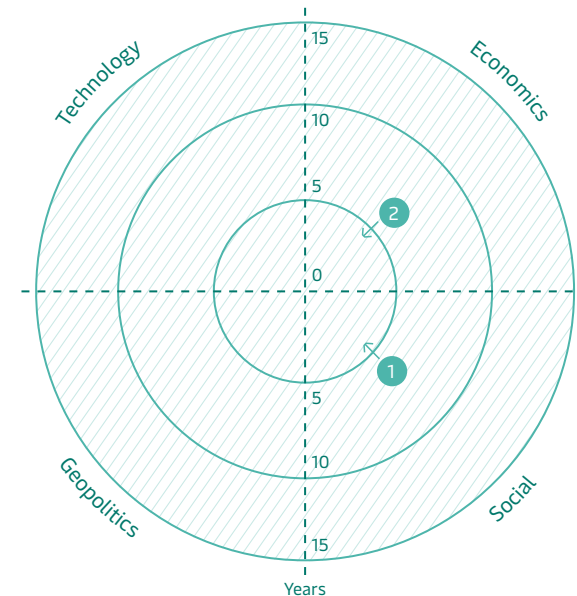
In respect of climate change impact on the future trade flows, the analysis focuses on understanding **the demand side**. It captures the influence of climate change on where things are made and who buys them. Different climate-economy scenarios have been modelled to determine how global trade and demand for container transport and logistics could be impacted by both a changing climate, the world's mitigation responses and the global economy's response. The findings are that irrespective of efforts to reduce global emissions, the global economy will be harmed in the medium or longer term depending on whether the scenario is a coordinated transition or a disorderly approach, and with a high degree of variation between regions.

2 Change in trade patterns

A.P. Moller - Maersk's 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. The company is monitoring trends in the global environment leading to fragmentation in the key supply chains. Three main trends are contributing to such fragmentation, 1) The geopolitical competition and supply chain disruptions are

increasing the interest in re- or near-shoring, 2) Rise in protective industrial policy is leading to government intervention in markets to prioritise local and regional production, 3) Prioritisation of ESG goals is increasing the regulation, impacting businesses and impacting consumer preferences which is expected to lead to avoidance of long-haul transportation and manufacturing closer to market. A study was undertaken to analyse the geopolitical risk. Three scenarios were built with a view on the short-term, medium-term and long-term impact on the supply chains and detailed analyses were done on verticals (customer product segments) that are globally important to trade and strategically important for A.P. Moller - Maersk. The analysis concluded, that on current policy settings the impact on container trade will be manageable. However, certain tail events will increase risks within the scenarios exponentially. These tail risks relate to the geopolitical situation as well as climate change.

Figure 3
Emerging risks in focus



- 1 Climate change
- 2 Change in trade patterns