



The Chartered
Institute of Logistics
and Transport

December 2023

CILT *Buzz*

THE CHARTERED INSTITUTE OF LOGISTICS AND TRANSPORT SINGAPORE

TRANSITIONING to the **NEXT NORMAL**

CONTENTS

Click on article to go to page



CHAIRMAN'S MESSAGE

03



SINGAPORE'S ARMOURD VEHICLES

22



LOOKING BACK 2023

06



ECONOMIC OUTLOOK ON SHIPPING

27



DIGITIZATION AHEAD OF DIGITALIZATION

09



NORMALISATION IN A DIFFERENT WORLD

31



2024 SUPPLY CHAIN TRENDS

11



THE FUTURE OF LOGISTICS

35



WHAT'S HAPPENING IN ASIA-PACIFIC

15



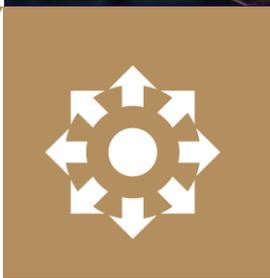
THE NEW ERA OF DUE DILIGENCE

37



NAVIGATING THE FUTURE OF MOBILITY

18



WE ARE CILT

41

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CHAIRMAN'S MESSAGE

Dear Colleagues,

We are almost at the year end with both the Ukrainian War and the recent Hamas-Israel Crisis unresolved. World economy and trade are slowing. High interest rates are likely to continue till mid-next year or so until inflation declines closer to the FED's 2% target.

Geopolitical Tensions may ease assuming China and USA top leaders can compromise when meeting at the APEC forum in SFO. Locally, the Government, after extensive consultations, has announced the FORWARD SINGAPORE Report – a visionary roadmap of the new social compact.

LAND

ERP — LTA has announced the next-generation, satellite-based ERP (Electronic Road Pricing) system that will replace the current 25-year-old system which is reaching the end of its operational lifespan. The switchover details to the new satellite system, which can support distance-based charging, will be shared later. During this transition period, the next-gen ERP onboard units are being installed in phases and expected to conclude by end-2025.



COE — Meanwhile the vexatious issue of high COE premiums, arising from growing demand

for private vehicles (including private-hire cars) has been tackled by LTA injecting extra supply of COE certificates. Longer term, with the satellite-based ERP system and distance-based pricing, there could be a better balance between controlling Vehicle Ownership and Vehicle Usage to pre-empt potentially serious road congestion issues.

Bus — LTA plans to set up and operationalise a new Bus Captain Training & Certification Centre at the Ulu Pandan Bus Depot by the second quarter of 2024. The centre will include a new training circuit to train new Bus Captains for the bus Industry. SBS Transit will collaborate with LTA's Singapore Bus Academy to elevate Bus Driving Proficiency, Road Safety and Service Excellence.



A total of 360 new electric buses will be added to the public bus fleet from Dec 2024 after the LTA awarded contracts worth \$166.4 million in the biggest purchase of its kind.

Rail — LTA has unveiled a 3km high-speed MRT testing track at the new Singapore Rail Test Centre (SRTC) costing \$640 million, near Tuas Checkpoint.



The unprecedented extensive MRT Network Expansion, till the early 2030s, will enable local integration and testing of complex new systems for the Upgrading & Renewal of existing lines and testing of new rail assets and signalling systems.

AVIATION

SIA and Scoot flights involved in the use of drop-in Sustainable Aviation Fuel (SAF) trials show that Singapore is operationally ready to switch to a combination of fossil-based Jet Fuel and SAF Biofuel made from used cooking oil and animal fat.



CAAS plans to have the SAF Air Hub Blueprint, including lessons learned from the SAF fuel trials, by end of first half 2024, after insights are gleaned from the ICAO Conference in Dubai where Sustainable Fuel Policies, Regulatory Frameworks and Financing are discussed.

CAAS will explore the creation of a marketplace for SAF fuel credits. As SAF biofuel costs three to four times more than conventional jet fuel, the sale of fuel credits would help to defray the higher hybrid fuel costs. Policy moves to drive demand growth and incentivise investments in producing such eco-friendly SAF jet fuel will also be considered. Finland Neste’s refinery, in Tuusula, has the capacity to produce a million tonnes of SAF fuel annually.



AIR NAVIGATION — CAAS has meanwhile signed 2 Agreements that will enable more DIRECT and QUICKER flight routes through greater collaboration between airspace regulators. These advanced air traffic management arrangements will cut Flight Distance and Air travel Time, and also help reduce jet fuel consumption and carbon emissions.



The First Agreement on the Asia-Pacific Trajectory Based Operations (TBO) includes Air Navigation Service (ANS) providers from China, Indonesia, New Zealand, Singapore and the United States, as well as Civil Air Navigation Services Organisation (CANSO) and IATA. CAAS had in 2023 already worked with Thailand, Japan and USA on a multi-leg flight of the Trajectory Based Operations Concept.

The Second Agreement signed by 5 parties - Indonesia, Singapore, New Zealand, CANSO & IATA - will provide seamless Air Traffic

Management through collaboration among the three countries. When implemented, aircraft will be able to take the most efficient path to their destinations unlike the current network of predefined flight routes. Trials for identifying city pairs and flights are planned from the first to third quarters of 2024. Operationalisation of selected city pairs is slated for 4th quarter 2024.



Currently, each country provides navigation services SEPARATELY & INDEPENDENTLY as and when an aircraft travels within its airspace. Under the broader Asia Pacific new TBO concept to be operationalised within 4 years, ANS providers will work together, from TAKEOFF to TOUCHDOWN, to plan an aircraft's DIRECT route across different flight regions.

MARITIME

The Maritime Port Authority (MPA), PSA and Energy Market Authority (EMA) are exploring the use of AMMONIA for Bunkering and Power Generation as international supply chains and the technology for transporting ammonia are well established.

Following their initial Expression of Interest (EOI), 26 proposals were received. Six consortia have been shortlisted for the planned RFP by end-2023 before a Lead Developer is selected after appropriate trials. Ammonia production challenges include

Transport, Storage, Safety, Emissions Management and Optimisation of BOTH Marine and Power Generation infrastructure.



CARGO SHIPPING — Singapore-based shipping firm, Berge Bulk has launched a Bulk Carrier retrofitted with 4 mega steel sails that can harness WIND POWER and reduce Fuel Emissions and Fuel Costs by 20%. The 210,000 tonne Berge Olympus was on its maiden charter enroute Singapore from China to Brazil.



Allow me, on behalf of the CILT Board and Exco, to wish all our Advisory Panel Members, IHL and Corporate Partners, as well as our loyal CILT Members, a Merry Christmas and a Blessed, Healthy and Happy New Year!

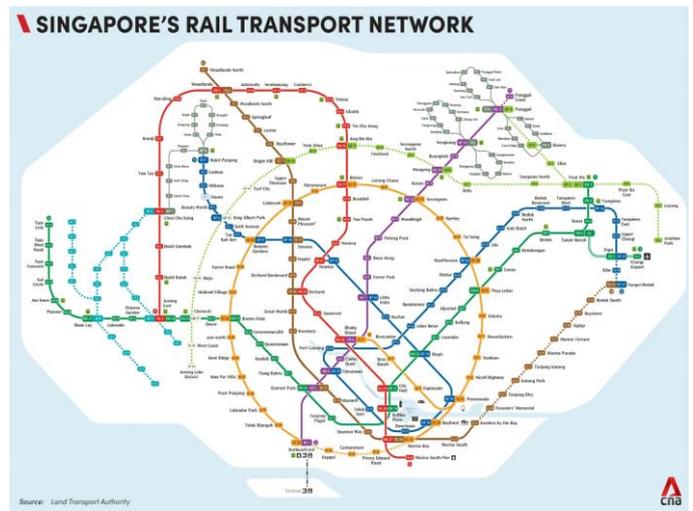
Karmjit Singh
Chairman



Looking Back 2023



JAN – EV Charging: The national EV Charging Infrastructure Network was ramped up. The 3,600 charging points will be supplemented by another 12,000 charging points across all HDB car parks by 2025. By 2030, there will be a total of 60,000



JAN – New MRT Lines: The construction of Singapore's 7th and 8th MRT lines – 24km Jurong Region Line (JRL) and 50km Cross Island Line (CRL) – were officiated. JRL is to be completed in 3 stages, from 2027 to 2029, while Phase 1 (12 stations) of 3 of CRL will be finished by 2030.



FEB – Rapid Transit System (RTS) JB-SIN: Progress continues to be made to complete the 4 km rail shuttle service, connecting Singapore and Johor Bahru by end-2026. The RTS has the capacity to carry up to 10,000 pax per hour in each direction and will be connected to Woodlands North MRT Station.



MAR – The Ever Given container ship blocks the Suez Canal for six days, disrupting global shipping traffic. The blockage caused delays and shortages of goods around the world, and cost the shipping industry an estimated US\$9.6 billion.



MAR – Changi Airport regained the World’s Best Airport title. This is the 12th time it has won the coveted award from SKYTRAX, a London based research firm.



APR – Sustainability. As part of its green transport and energy conservation efforts, LTA completed a year-long effort to replace the orange glow of conventional street lamps with a more energy efficient lighting system using clear Light-Emitting Diodes (LEDs).



APR – Changi Airport is the first airport in the world to officially offer an airport experience on the global gaming platform Roblox. Users can explore and play games in the Aviation Hub’s Metaverse equivalent, ChangiVerse.



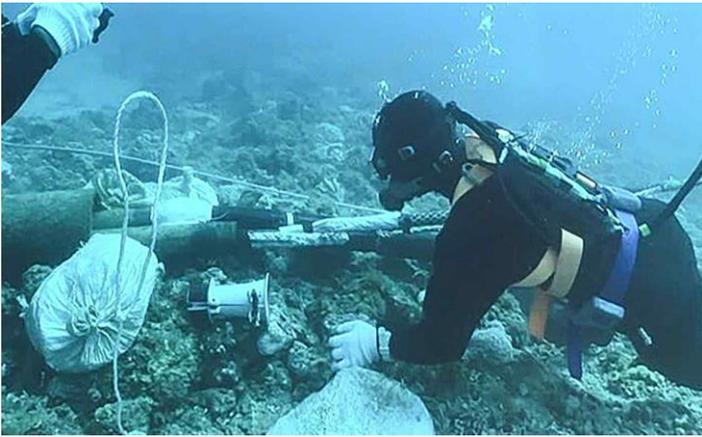
APR – LTA Electric Buses: As part of the Singapore Green Plan and to minimise GHG Emissions, LTA called for a tender for 400 Electric Buses for deliveries from late 2024. This effort is part of a plan to replace half of Singapore’s fleet of 6,000 diesel public buses with electricity powered buses (lithium batteries) by 2030.



APR – SMRT/Strides Taxi Merger: SMRT Corporation merged its taxi business with Premier Taxis to form a new JV Company, Strides Premier, becoming the second largest taxi company with a combined fleet of 2,500 taxis.



MAY – Fire at Yantian International Container Terminal, Shenzhen, China. The fire destroyed more than 1,000 containers and caused major disruptions to shipping in the region. The port was closed for several days, and it took several weeks for traffic to return to normal.



JUN – MARITIME: Singapore announced plans to enhance its Digital Connectivity. It aims to double its capacity for international subsea cable landings over the next decade. Singapore has 26 subsea cables landed locally at 3 landing sites. The expanded Cable Network and new green Data Centres are expected to attract \$20Bn in investments.



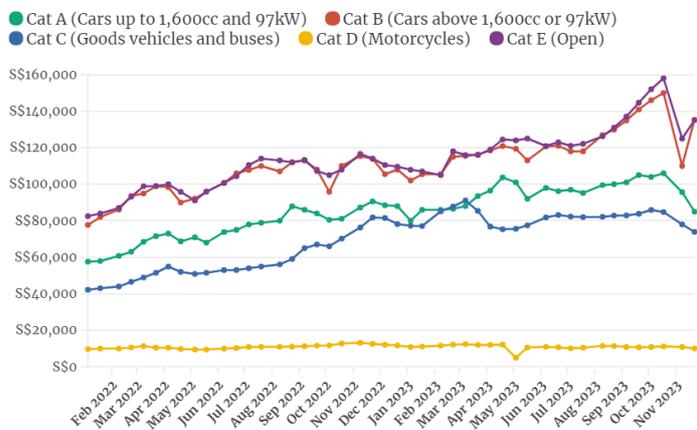
JUL – 5.12 million passengers passed through **Changi Airport** in June, marking the first time since the start of Covid-19 that monthly passenger traffic has crossed the five million mark. 27,500 flights – 88 per cent of the flights in June 2019 – took off from or landed at the airport.



JUL – Port strike in Los Angeles and Long Beach, USA. The strike by dockworkers caused major delays at the two busiest ports in the United States. The strike lasted for 10 days and resulted in the backlog of millions of containers.



OCT – China celebrated the **10th anniversary of its Belt and Road Initiative (BRI)**. The project has had a global impact, with 147 countries signed on to BRI projects and having invested more than a trillion dollars in infrastructure and investment projects.



DEC – Certificate of Entitlement (COE) prices for cars reached record new highs in 2023, crossing the \$150,000 mark in October, for the first time in its history. In the Open category, the COE premium attained a new record of \$158,004.

Bus and Train Fares
From 23 December 2023

- CONCESSION CARD FARES: A - 5 cents increase per journey
- ADULT CARD FARES: 10 - 11 cents increase per journey
- BUS CASH FARES: 10 cents increase for students, seniors and persons with Disabilities; 20 cents increase for adults and other commuters
- Monthly Workfare Transport Concession Pass: \$59.833 less than the price of Adult Monthly Travel Pass
- Up to 10% reduction in prices of hybrid bus and rail monthly concession passes
- Public Transport Vouchers (\$10 each) for eligible households from end-December 2023

DEC – In the **Fare Review Exercise (FRE) 2023**, the Public Transport Council (PTC) raised overall bus and train fares by 7%, which is one third of the 22.6% maximum quantum. The PTC deferred the remaining 15.6% to future FREs. The adjusted fares took effect from 23 Dec 2023.



Digitization ahead of Digitalization

CILTS Board Director for Corporate Membership, Mr Eddie Sng, Supply Chain Consultant and former Managing Director of Agility International Logistics, shares his vast experience and perspectives on Digitalization.

First Things First

It is often said that taking the first step is **THE** most important but what is also critical is taking the **RIGHT** first step.

Digitization versus Digitalization

So much has been said that digitalizing the supply chain – that's important. But what is more important is how that data is procured. Digitization and digitalization go hand in hand but getting the priority right is even more critical.

Digitalizing the supply chain involves the transformation of business processes by leveraging digital technology to improve efficiency and accuracy within the supply chain leading to overall business improvement, cost efficiencies and even creating new opportunities.

While it is critical for us to digitalize the supply chain, what is more important is the data that is used throughout the digitalization journey. Like they say – “Garbage in, garbage out!”. We need to get it right up front... In comes digitization.

Digitization is the process of converting analog data (paperwork) to digital ones (data).

The **FIRST STEP** to digitalization is digitization and while many companies are talking about an efficient supply chain model, few have recognised that credible and accurate data input is the first step and is critical.

Removing Manual Data Entry

The Logistics & Transportation industry has been relying on manual data entry for many of their processes – starting with receiving documents from the Shipper, followed by Freight Booking, and then, Customs Declaration and the like. There are companies out there that aim to provide cost effective & efficient solutions to address these challenges.

Leveraging on OCR and Artificial Intelligence (AI), they model the application to read the relevant documents – Commercial Invoice, Packing List, HAWB, MAWB, Bill of Lading etc. The OCR AI picks out the relevant data, extracts it and populates several freight related applications like the Customs Declaration System thereby replacing data entry. All the users need to do is eyeball the resulting conversion to ensure accuracy and

hit the “Submit” button when all is correct. Taking it one step further, the same data from the Commercial Invoice and Packing List can be pushed to the Freight Management System to generate the House and Master shipping documents.

When the data at source is correctly interpreted, extracted and digitized, the data flow down the line will be good. Manual data entry is fraught with errors and delays – with digitization using OCR AI technology, not only will accuracy improve over time, it will speed up data procurement. And with machine learning, the accuracy improves over time going up as high as 99.9% accuracy.

So, while you look towards digitalizing the supply chain, shouldn't you look at digitization first?

Embarking on the Digital Transformation Journey

When companies embark on the digital transformation journey, there are many benefits to be had:

1. **Improved data accuracy and speed of procurement** – with the OCR AI digitization, the speed of digitizing is definitely faster than manual data entry. In some cases where each document spans over several pages, productivity can go up to 80%. What's more, it is also more accurate.
2. **Reusing the data from source in multiple applications** – digitizing from the source allows the same data to be pushed to multiple applications with one conversion. The same data will flow down the entire supply chain ensuring consistency and accuracy.

3. **Sustainability** – imagine taking away the amount of printing in the whole workflow.
4. **Redeploying employees to higher value-added roles** – allows the company to retain in this difficult hiring environment while moving those impacted to higher value-added roles to create more value for the company.

While we may all believe that digital transformation is critical, what is more critical is that the digital transformation journey be supported by the top management. It has to be a top-down approach with Management leading the charge.

Many transformation journeys have failed when the management did not lead the programme. People are resistant to change and there will be roadblocks but with proper change management tactics, transformation can be a less painful experience with real world benefits when completed.

Take the first step – make the right decision. Digitize, then digitalize.



2024 SUPPLY CHAIN TRENDS

Omnichannel is Everything

If the pandemic taught us anything, it demonstrated that to succeed, maximize resilience, and ensure business continuity, companies need to maximize every available channel – ecommerce, direct-to-consumer, retail, distributors, and Amazon. That way, if one channel is disrupted, whether by natural or man-made causes, the show will go on. Companies need to consolidate demand across every channel, and have a view into every point of supply (even containers on ships!) to be able to maximize service levels, grow revenues, and minimize costs. And they will need a supply chain platform that makes it possible – like One Network.

Direct-to-Consumer is King

If you haven't figured out how to maximize this channel for your business, you're behind your peers. You'll need to figure out "lot size 1" production and delivery, you'll need last mile logistics, you'll need a returns process, and ecommerce technology able to handle the proliferation of choice and SKUs that customers are demanding. One Network's multi-enterprise platform offers the ideal solution for consumer-direct and drop-ship business models.

Information Lags are Out

The hard lesson of recent years was if there is supply risk anywhere in your supply network or an actual disruption, you need to know about it right away. And if there's a demand surge, your suppliers need to know it too. Too many companies were left unable to respond when the Pandemic hit because of information delays and time lags. In 2024, companies will continue to improve collaboration in their supply networks, and will be installing more real-time systems and processes to help make information time lags approach zero. One Network's real-time business network platform enables this and provides one version of the truth for every business partner.

Optimal Demand-Supply Matching Gains Traction

In 2024, more and more firms will be applying technology to optimally match demand with available supply within their supply lead times. Those last few words are important, because to minimize costs and maximize service levels, it can mean reallocating products to orders in near real time as things change – even for containers already on the ship! Companies with global demand supply matching (GDSM) technology will have the competitive advantage in 2024. When rapid shifts in demand and supply make

historical forecasting impossible, the best strategy is to have an agile GDSM approach in place to continuously reallocate and optimize the use of resources and manufacturing capacity.

Supply Chains are Out. Supply Networks are In

The importance of collaboration with suppliers, co-manufacturers, customers, carriers, and distributors has never been more apparent, so companies will focus in 2024 on strengthening their business networks. Post-pandemic, many companies discovered that their legacy enterprise-centric systems no longer work “good enough”, so in 2024 they’ll need platforms to support tight collaborative workflows around plans, forecasts, orders, shipments, ETAs, and inventories in real time. As collaboration and improved information flows eliminate errors and inefficiencies, all sides can drive out costs and improve their competitiveness with business network strategies. And you’ll be able to on-board and off-board suppliers more quickly, as needed.

ERP Silos Must Go

How many separate ERP instances does your company run – 5? 20? 100? More? In 2024 and beyond, the massive inefficiencies of these self-imposed business barriers have come to light and firms have recognized that they need to be eliminated. These silos have artificially propped up costly inventory buffers, caused information delays, hurt service levels, and bring with them the enormous IT cost of interfaces, maintenance, and upgrades. Who can afford that anymore? You likely inherited this problem, rather than caused it – and now it’s up to you to fix it. The best solution is to move supply chain workflows onto a collaborative business network platform, like the one from One Network Enterprises, that cuts across all these silos. This can be done in a way that matches each company’s unique priorities and generates value at each step along the way. It’s the only option for large enterprises saddled with stitched-together legacy systems, and in 2024 more and more global enterprises will see network solutions as the only viable way out of this costly situation. Plus, it’s the fastest path forward.

Cold Chain is Hot

With vaccines front-and-centre of the pandemic, the Cold Chain took on new importance. But with new biological products, the cold chain will remain a vital component of the pharmaceutical supply chain. Supply chain is hard enough, but keeping the entire chain continuously temperature controlled and refrigerated is much more challenging. Yet that’s required for many temperature-sensitive products, including vaccines, medicines, foods, and some chemical products. Companies need full

monitoring, track-and-trace, chain of custody, and point of origin information across all sites and multiple parties – a challenging task, yet essential for these critical products. Business network platforms with these capabilities, like the one from One Network Enterprises, will increasingly become “must haves” for firms looking to handle such product movements and monitoring from order to delivery, across all tiers of supply and distribution, while ensuring product requirements are met and remain in compliance. The good news is that business network platforms also help suppliers, manufacturers, and logistics providers lower costs and boost service levels in managing resources across storage and multi-modal movements throughout the cold chain.

Supply Chain Organizations Revamp

With the rapid rise of generative AI, many companies will be making organizational changes to better use AI and machine learning technologies. With a focus on greater workflow automation and new AI capabilities around generative AI, prescriptive analytics, and autonomous agents, companies will find efficiencies and adopt new supply chain software technologies to boost resilience and competitiveness. These new automation technologies will essentially remove dozens of roles across the organization through technology leverage. At the same time, decision making will become far more data-driven, AI-assisted, and automated — rather than through tribal knowledge.

2024 promises to be a pivotal year in supply chain management and technology. There are exciting times ahead. What a great time to be in supply chain.

SOURCE

[One Network Enterprises](#)



What's happening in ASIA-PACIFIC

Being Smart & Responsible is the Next Thing

1: The Rise of Middle-Mile Logistics Will Help Bolster Margins

Middle-mile logistics refers to the transfer of goods from a distribution centre to a fulfilment facility. In some cases, there may be several middle-mile delivery stages, making tracking important for consumers and logistics providers.

For supply chain and logistics players in APAC, there lies huge cost-saving potential in the middle-mile. Businesses will find it easy to automate, cut processes and take complete operational control over the entire supply chain, providing opportunities to tighten supply chains and help businesses get ahead of the competition with competitive pricing and healthy margins.

The rise of middle-mile logistics will be most significant in industries dealing with large volumes of goods that require efficient distribution between various nodes in the supply chain, especially e-commerce, retail, manufacturing, and fast-moving consumer goods (FMCG).

Driven by e-commerce expansion, rapid urbanization and growing youth population, the changes would be most significant in developing Southeast Asian markets such as Indonesia, Thailand, Malaysia, and Vietnam, as well as Singapore, a major regional logistics hub that is playing a critical role in the facilitating and connecting of the world's shipping lines to build resilient supply chains.

2: Omnichannel Logistics and Easing of Supply Bottlenecks

Omnichannel logistics is the synchronization and optimization of inventory, logistics and distribution across sales channels to meet consumer demand. As global transaction volumes will foreseeably surge closer to the different shopping seasons in H2 2023, the lack of inventory visibility and disconnected supply chain affects timely and reliable delivery, in turn creating pressure for brands, as well as transportation and logistics companies. Omnichannel logistics aims to provide a consistent and unified customer experience across various channels, while integrating both front-end and back-end operations.

End-to-end tracking and shipment visibility remain a challenge for logistics companies three years after the onset of the pandemic, with technology implementation challenges as one of the biggest barriers, according to a recent study by HERE Technologies.

In addition, commercial flights played an important role in supporting the global air freight market by providing last-mile support as part of an integrated logistics chain – providing additional capacity, network connectivity, speed, and flexibility to enhance efficiency and effectiveness. Overall, technology presents a significant opportunity for omnichannel logistics to streamline the fulfilment process and enhance customer satisfaction.

3: Multimodal Logistics on the Back of Resumption of International Travel

Multimodal logistics involves moving goods through various modes of transportation. In the face of global supply chain disruptions, the logistics industry is turning to digital solutions to address inefficiencies and vulnerabilities.

As a start, multi-modal logistics presents a viable, low-risk opportunity for integrating digital solutions. Optimizing multimodal operations grants comprehensive operational visibility, ensuring decisions are both informed and cost-effective, while ensuring timely delivery within their designated periods.

The reopening of international travel, including in China from June 2023 helps solve a significant bottleneck, in turn helping minimize congestion as the resumption of flights by both Chinese and international carriers on routes to and from China is set to vastly increase shipment options for shippers.

Asia is set to benefit from this alleviation of congestion as Asia's export cycle reaches its trough in Q2 and looks to rebound in H2. Teleport, the air logistics arm of Malaysian carrier AirAsia, resumed 18 cargo routes into China earlier in March with a combination of passenger airlift and freighters chartered from third parties, and intends to increase to 40 routes by Q3 2023 from Malaysia, Thailand and Philippines.

4: Optimization, Improved ESG Scoring Reflecting Advances in AI

Route optimization is the process of finding the quickest and most cost-effective route between any two points. The lack of real-time tracking and manual route planning in traditional routing has led to inefficiencies and difficulties in adapting to last-minute contingencies.

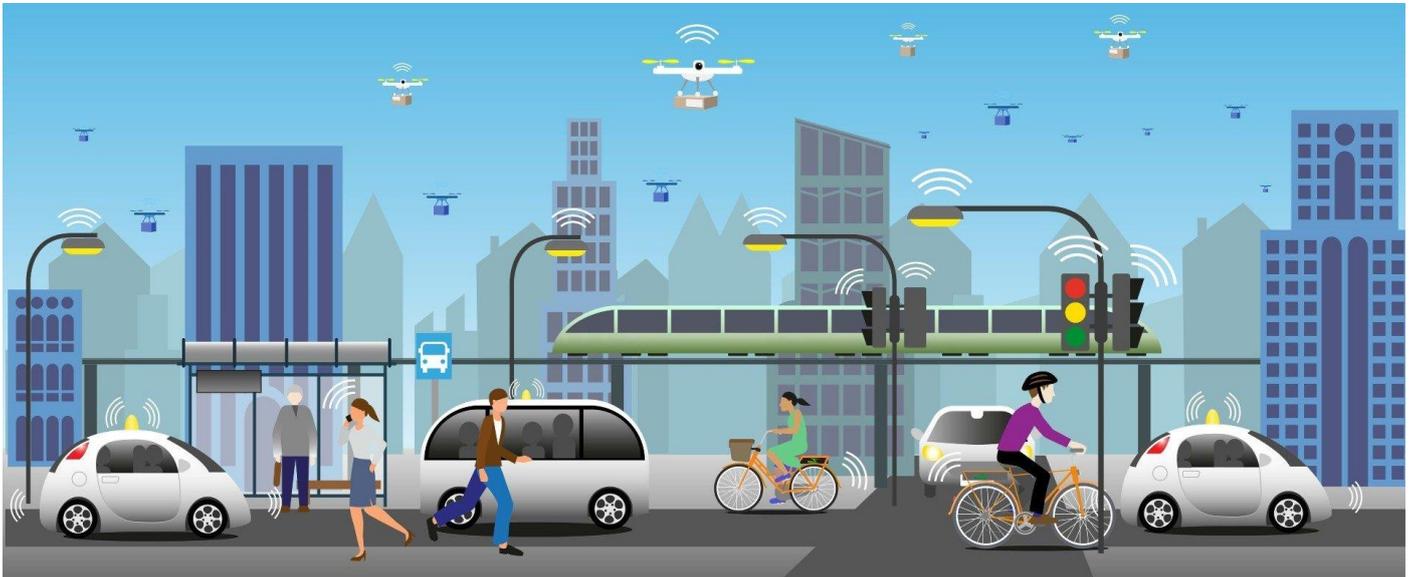
To alleviate the pain points, optimized routes provide end-to-end ground-level visibility for better logistics and operation control, while also reducing carbon footprint by reducing fuel consumption. Optimization and consolidation will be the way forward to achieving carbon neutrality.

Moreover, AI-driven innovation will also start seeing more use cases, as consumer demand will continue to move in the direction of faster fulfilment, smaller order sizes, and more customization – all while demanding lower costs. This, in turn, will cause pressure on companies to use technology to optimize their operations.

SOURCE

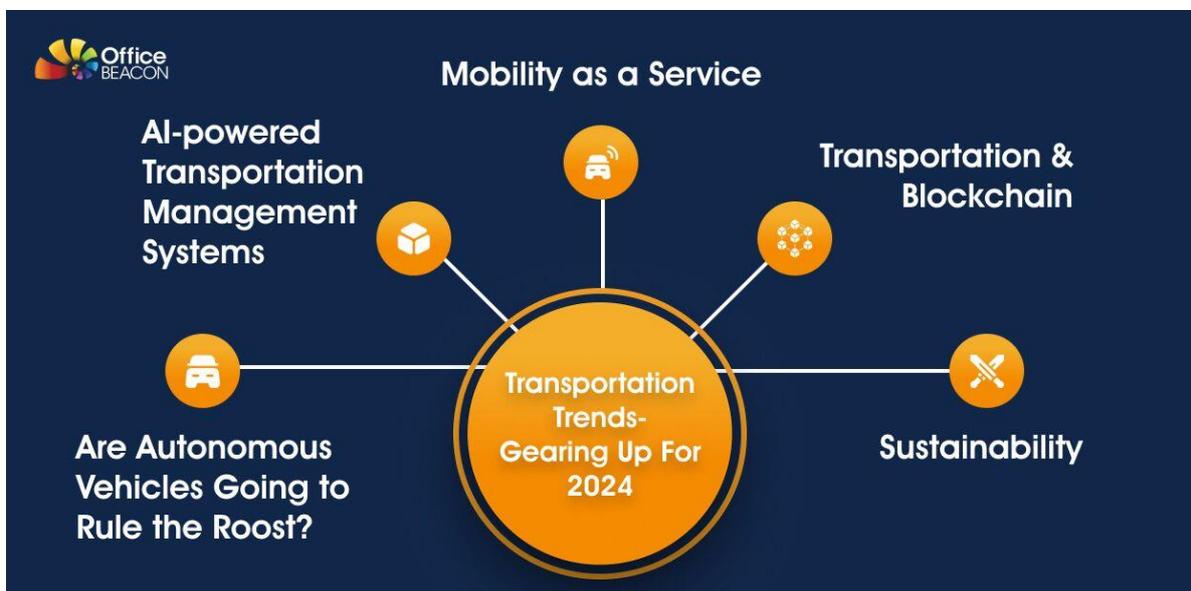
[SMEhorizon](#)

NAVIGATING THE FUTURE OF MOBILITY



The future of transportation logistics management remains tentatively poised. It will be shaped by revolutionary transformations with major disruptive technologies like blockchain, IoT, Artificial Intelligence (AI), and autonomous vehicles. However, the transport industry also faces headwinds in the near term with sluggish growth, worsened by inflationary pressures worldwide. With real-time tracking becoming the need of the hour, can outsourcing logistics services to third-party logistics partners provide a competitive advantage? Let's take a dive into the logistics challenges and trends of 2024.

Transportation Trends: Gearing up for 2024



1. Automation

It is the age of automation and it promises greater safety benefits with Automated Driving Systems (ADS). In the future of mobility, driverless cars are a reality.

Self-driving vehicles will progressively incorporate six levels of driver assistance technology, making improvements in the coming years. The six levels range from **Level 0**, which requires human drivers to do all driving tasks, to **Level 5**, wherein vehicle ADS executes all tasks.

Level 0 – No Automation: No autonomy, the driver performs all driving tasks.

Level 1 – Driver Assistance: Vehicles are controlled by drivers with little driving assistance features.

Level 2 – Partial Automation: Vehicles are armed with automated functions (acceleration, steering, etc). However, driver engagement is required and they have to monitor the environment.

Level 3 – Conditional Automation: Drivers are a necessity but they are now free from monitoring the environment. Nevertheless, they must be on their toes to take control at all times.

Level 4 – High Automation: The vehicle is now able to execute all driving functions under specified conditions. The driver might have the option to take control, though not required.

Level 5 – Full Automation: The vehicle is capable of performing all driving functions under all conditions (even in the absence of a driver).

2. Sustainability

Before the transportation industry seeks to upgrade and build modern infrastructure, lay new railway tracks, and construct new roads, it's vital that the stakeholders come together to improvise and become sustainable. While other industries have taken baby steps to reduce emissions, the transport sector continues to expand at the expense of fossil fuels.

Without taking major actions to counter this tendency, the climate targets established by international organizations, such as the Paris Agreement, to attain net-zero emissions by 2050 would be almost unattainable.

The regulators and consumers alike are waking up to the dangers of extreme climate and demanding greater sustainability across the transportation sub-segments.

Sustainability Infrastructure vis-a-vis Angles to Approach Projects

Sustainability Dimensions	Angles to Approach Projects
<div style="display: flex; align-items: center; margin-bottom: 15px;">  <div> <p>Environment</p> <p>Performance indicator example: CO2/ton-mile</p> </div> </div>	<p>Resilient</p> <p>Sustainability as resiliency to climate change and reduced environmental impact</p>
<div style="display: flex; align-items: center; margin-bottom: 15px;">  <div> <p>Social</p> <p>Performance indicator example: safety or cost of public transport</p> </div> </div>	<p>Inclusive</p> <p>Sustainability as enhanced social inclusivity and no prevention from benefiting from the service</p>
<div style="display: flex; align-items: center; margin-bottom: 15px;">  <div> <p>Institutional</p> <p>Performance indicator example: regional development</p> </div> </div>	<p>Technological</p> <p>Sustainability as benefits from increasing technology innovations</p>
<div style="display: flex; align-items: center; margin-bottom: 15px;">  <div> <p>Economic</p> <p>Performance indicator example: revenue, EBITDA</p> </div> </div>	<p>Productive</p> <p>Sustainability as increased productivity and streamlining of delivery and implementation of the projects</p>
	<p>Flexible</p> <p>Sustainability as improved ability to flexibly adapt to shocks and changing environment</p>

3. AI: Backbone of Level 5 Autonomous Vehicles

Pedestrian detection is a key hindrance in Computer Vision and Pattern Recognition since they are freakishly unpredictable when negotiating with road traffic. The key is not necessarily for AI to recognize distinct human features like eyes and beards, but to distinguish a human from another object and understand a pedestrian’s intention.

***Will a pedestrian cross the road out of nowhere?
How likely it is for a person to move right (or left) in response to an approaching vehicle?***

Traffic Management in Mega Cities

Congestion is a major problem in all major cities worldwide. AI can revolutionize traffic management. Coupled with embedded sensors and cameras, large volumes of traffic details can be captured at minimal investments. AI-powered systems can analyze the data and provide commuters with important details such as traffic predictions, road blockages, route optimization options, etc.

AI in transportation is an inevitable trend. And the benefits of outsourcing logistics services in the field of AI are manifold since you have to tap into the talent transcending national boundaries!

4. Mobility as a Service

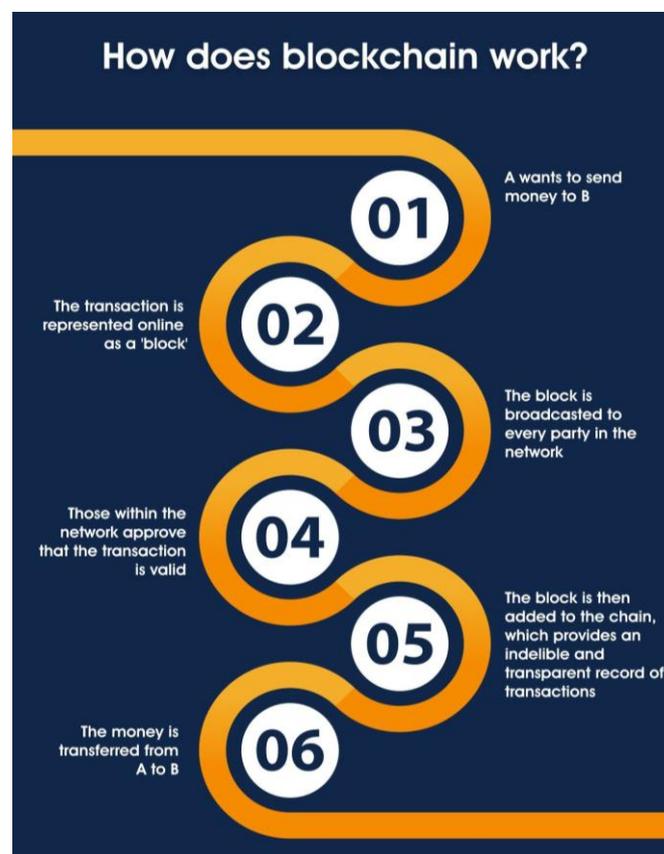
MaaS (Mobility as a Service) adds value to both commuting as well as cargo transport ecosystems by deploying a single application to access unified mobility options. It also uses a single payment channel instead of multiple ticketing, which is the standard norm till now. In simple terms, the whole MaaS concept involves 3 key components:

- Providing a service that focuses on the transport needs of **individuals and businesses**;
- Providing **mobility** instead of transport; and
- Providing **integration** of transport services, payment, ticketing, and data insights.

5. Transportation & Blockchain: An Inevitable Marriage!

Imagine you are a freight broker who needs to fill a load in a specific pickup location. You have discovered a new carrier who can do the job, but you can't assign it until the carrier is properly onboarded. This situation can be *frustrating* when you are in a hurry!

Blockchain technology can help you by creating a *decentralized network* that stores all the necessary records of carriers across the transportation and freight industry. This is almost impossible to fake and can be verified instantaneously.



SOURCE

[Office Beacon](#)

SINGAPORE'S ARMoured VEHICLES

NEXT-GENERATION TRANSFORMATION

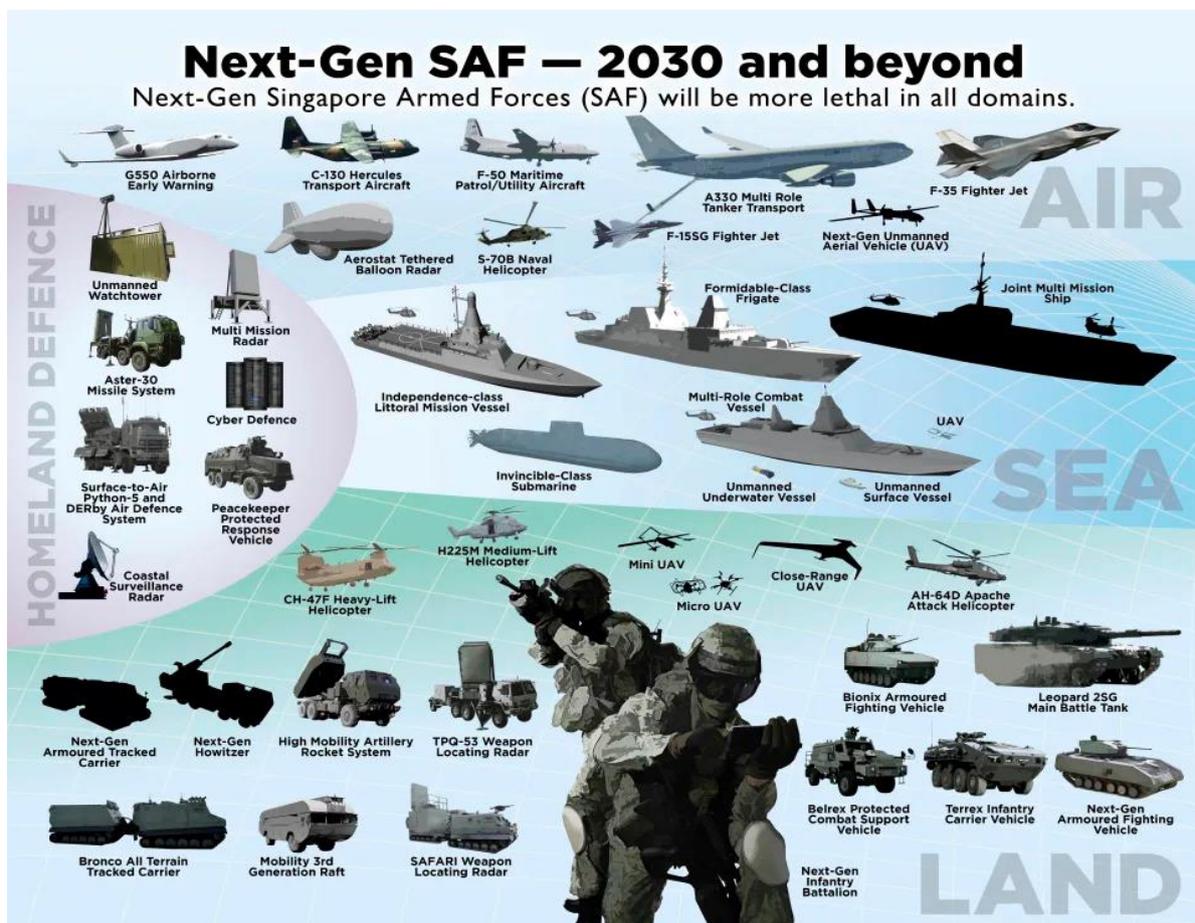
As militaries around the world continue to extract operational lessons from contemporary conflicts such as the 2022 Russian invasion of Ukraine and the 2023 Israel-Hamas war, the SAF continues to forge new frontiers in its military developments.



In a global climate increasingly characterized by polarization, the Singapore Armed Forces (SAF) has continued to push forward with its next-generation transformation to serve the island-state's defence needs. This was on display during the [recent](#) Exercise Forging Sabre 2023 (XFS23), which saw the official play-testing of a multitude of the SAF's freshest technological novelties during a military exercise conducted in the United States.

Singapore’s Ministry of Defence (MINDEF) [announced](#) it had signed an arms contract with ST Engineering to acquire six Multi-Role Combat Vessels (MRCV) for the RSN. Slated to replace the existing Victory-class missile corvettes by 2030, MINDEF has [earmarked](#) the six MRCVs to function as a “mothership” for other unmanned drones and vessels in the SAF’s sea warfighting setup, particularly when out at sea. Essentially, the MRCVs have been designated as the sea-based control tower for an SAF that is moving toward a widespread integration of unmanned assets across its four services.

Looking into the SAF’s land service, similar concepts are at play in its newest armoured vehicle, the [Hunter](#) Armoured Fighting Vehicle (AFV), officially [commissioned](#) for service in June 2019. What is most notable about the Hunter is its full digitalization and technological sophistication, with its interior equipped with an Integrated Combat Cockpit alongside a myriad of visual screens and controls for the vehicle crew. Considering this, the Hunter could already have the digital complexities built in to serve a role equivalent to the one the MRCVs play for the RSN, with the AFV as the ground-based “mothership” for the Singapore Army.



In the SAF's [plans](#) for 2030, there are several unmanned aerial vehicles (UAVs) classified under the "Land" category of the SAF's next-generation iteration, with some of these elements making their official [debut](#) during demonstrations conducted in XFS23. Such UAV elements alongside an atypical section of infantry soldiers, with the Hunter as the "control tower," could potentially be used to capture footage of military targets and translating them into actionable military intelligence through target identification. That represents a tantalizing prospect for the upgrading of Singapore's land fighting capabilities, both for its soldiers on foot, and in cabin for its armoured vehicles.

With this in mind, having a digitally sophisticated intelligence and command system that is able to process swathes of data is of paramount importance for any state when trying to develop its military capabilities. The aforementioned Hunter is equipped with the Army Tactical Engagement Information System (ARTEMIS) Battle Management System (BMS), the SAF's next-generation tactical Command and Control (C2) system that has been [depicted](#) as the functional brain of the vehicle itself. That is a potentially synchronous nod to ARTEMIS as the control tower software for the rest of the SAF's assets.

The long-term development and cross-platform application of ARTEMIS is perhaps the vital deciding factor of the success of the SAF's mothership concept for its land fighting setup – a future where the entirety of the SAF's services are able to look at a singular digital "map" that combines intelligence gathered from all sources thereafter ensures maximum interoperability across all frontiers of the battlefield, and more critically, elevates the SAF's efficiency and lethality as an integrated fighting force.

This systemic centralization will undoubtedly lead to a quantum leap in the efficiency of the SAF's C2 systems and warfighting capabilities, but the application of similar concepts across other platforms in the SAF remains a technical and conceptual challenge for Singapore's conscript-based military. Although ARTEMIS is a local defence innovation, attempting to embed a brand-new command system onto the SAF's fleet of vehicles, and resultantly across the SAF's four services, is much easier said than done. This process might be more straightforward when

attempting to install elements of it onto locally-produced armoured vehicles such as the [Bionix](#) or [Bronco](#), but functional challenges emerge when it comes to overseas-produced assets of the SAF.

A key [cog](#) in any land warfighting setup is the functionality of its main battle tanks (MBTs), vehicles renowned for their blend of firepower, mobility, and protection. Looking at the SAF's existing fleet of MBTs, it currently possesses the Leopard 2SG (L2SG), which is already equipped with existing German-produced command systems. Attempting to supersede the original system of a vehicle, or to install a new system to operate in tandem with an existing one, is a challenge both in function and purpose for the SAF. As the SAF's 2040 [plans](#) continue to include the L2SG as part of its warfighting force, whether the SAF will be able to realize a full implementation of the mothership concept across its land service remains to be seen.



Modular Variants and Future Possibilities

The concept of modular variants has seen widespread application in militaries all around the world, and the SAF is no different. Singapore's locally-produced Bionix AFV has multiple modular variants, including a combat bridge variant similar to the Hunter, a recovery [variant](#) that involves the Lego-like fitting of the Bionix's original chassis with a 25-tonne winch and a 30-tonne crane, and an artillery variant that involves the same chassis retrofitted with a 155mm howitzer, also known as the Singapore Self-Propelled Howitzer [Primus](#). Looking deeper into Singapore's existing vehicles, the ultimate illustration of its success in developing modular variants is the [Bronco](#) All Terrain Tracked Carrier (ATTC). The Bronco ATTC has been described as having more than 40 different modular iterations, with multiple variants already in service across the SAF, including a [Mortar](#) variant, an [Ambulance](#) variant, and a [Maintenance](#) variant.

Thereafter, applying this modular concept into the SAF's vehicles opens up intriguing possibilities that could transform the entire outlook of its warfighting setup. With the SAF [predicted](#) to face a one-third reduction in its available manpower by 2030, the SAF has emphasized its “**Technology as a Force Multiplier**” [adage](#) while developing new technologies that require less manpower to perform the functions of its older predecessors, or even for unmanned [assets](#) to replace manned roles. The SAF had already explored the potential for unmanned armoured vehicles previously, with [archives](#) recording attempted developments of an unmanned version of the SAF's older version armoured vehicle, the Ultra M113 armoured Personnel Carriers (APCs), in 2000. For the Hunter AFV, notable defence observers have already commented on the evident visual cues to note that the Hunter's closed-hatch camera-based operations, placed alongside its drive-by-wire capabilities and automatic targeting systems, present the potential for a fully unmanned Hunter variant, thereafter opening up a host of different tactical possibilities in land warfare.

SOURCE

[The Diplomat](#)

Economic outlook on shipping industry



Downturn challenges safety and decarbonization progress

Decline in freight rates threatens future investments in these areas and could impact maintenance levels and risk management budgets.

Following the post-pandemic boom in container shipping, economic and geopolitical uncertainty and falling demand has hit freight rates. The cost of shipping a container between Asia and the US or Europe in April 2023 was more than 80% lower [1] than a year earlier. While some routes are now at pre-pandemic levels.

As freight rates have declined, new vessels ordered during the boom have begun to arrive, adding to already excess capacity. The Mediterranean Shipping Company [2] took delivery of two mega ships in March 2023 – MSC Tessa and MSC Irina – which are among the world's largest container ships to date at more than 24,000 teu each. It followed the delivery in February of the 24,118 teu OOCL Spain, the first of six under construction.

The Baltic and International Maritime Council (BIMCO) [3] forecasts weak demand for container shipping outstripping supply in 2023, putting freight rates and second-hand ship values under pressure through to next year. The shipping body predicts negative demand growth through the first half of 2023, with a recovery in the second half leading to overall demand growth of 1-2% in 2023, followed by 5-6% in 2024.

The global container fleet is forecast to grow by 6.3% in 2023 and by 8.1% in 2024. Supply is set to rise with the easing of port congestion and deliveries of new vessels ordered during the boom period of the past two years. BIMCO predicts that 4.9 million teu will be delivered during 2023 and 2024, equivalent to an additional 19% of the fleet size at the beginning of 2023.

“A big question is whether the decline in freight rates will result in cost-cutting and, if so, will this impact maintenance levels or result in lower risk management budgets? In prior downturns, investment in vessel maintenance has not always been at the required level, leading to losses and an increase in machinery claims,” says Justus Heinrich, Global Product Leader Marine Hull at Allianz Global Corporate & Specialty (AGCS).

Lower freight rates could also potentially put vital investments in fire safety and decarbonization in jeopardy, according to Captain Rahul Khanna, Global Head of Marine Risk Consulting at AGCS.

“We are on the cusp of the delivery of new larger vessels at a time when the industry is already under pressure from lower freight rates. This may be good news for cargo owners, but not so for the container shipping industry,” says Khanna.

“Record profits for the container industry supported innovation in areas such as decarbonization, alternative fuels and fire detection and prevention. If the market comes under pressure, there is a risk such initiatives will lose momentum. We would not like to see safety initiatives, especially in terms of the improvements we are hoping to see in container ship and roll-off, roll-on (Ro-ro) design and fire protection in particular, take a back seat.”

Trend towards large ships intensifies

Driven by the downturn and decarbonization targets a high proportion of new container ship orders are concentrated on larger vessels but risk exposures continue to grow too.

Over two-thirds (65%) of fleet growth over the next two years will be concentrated in the segment of ships larger than 15,000 teu, while the fleet of ships smaller than 3,000 teu will reduce, The Baltic and International Maritime Council (BIMCO) estimates. [4]

“Decarbonization and the drive for more efficient shipping will reinforce and accelerate the trend for large vessels, which now make up a significant proportion of the world fleet, and account for a disproportionate amount of container trade,” says Captain Rahul Khanna, Global Head of Marine Risk Consulting at Allianz Global Corporate & Specialty (AGCS).

“Large container vessels are clearly here to stay. Efforts now need to focus squarely on making them more efficient, less polluting, and safer. If the risks are not appropriately managed, some insurers may look to scale back their exposure to large container vessels and other mega ships.”

As new orders are delivered, smaller, older tonnage is being replaced by large container vessels, Justus Heinrich, Global Product Leader Marine Hull at AGCS notes. The 10 largest container operators have 440 new vessels on order, and the majority will be larger than the ships they replace.

“An increase in the number of larger vessels leads to higher container cargo accumulation and exposure,” says Heinrich. “This trend could compound the problems seen in recent years with large vessels, including fires, grounding and port blockages. The salvage cost for large container ships is tremendously high, with only a limited number of ports and shipyards able to service and repair such vessels.”

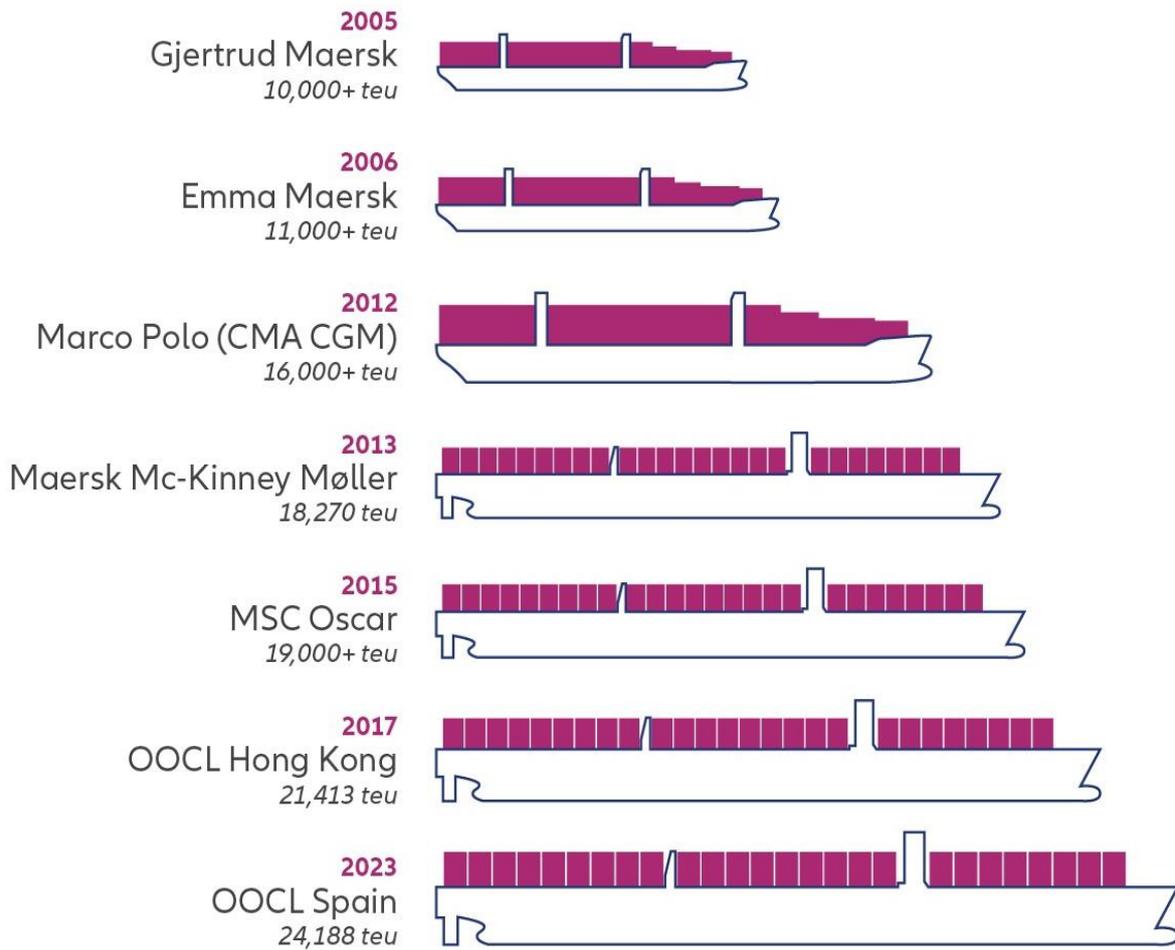
According to Cefor (the Nordic Association of Marine Insurers) analysis [5] of hull claims trends, the container ship segment is the only large segment with an increase in the claim cost per vessel between 2020 and 2022 and an increase in the frequency of large losses. The frequency of claims in excess of US\$500,000 remained high, contrary to the bulk and tank segment.

The increase in the number of large vessels may be one of the factors behind high levels of shipping incidents in South East Asia, with the region being something of a hot spot in recent years for marine insurance claims and total losses. “We have seen a number of grounding and collision incidents involving large vessels in both the Singapore Strait and the South China Sea. The waters around Singapore can be congested and the shipping lanes narrow. A small mistake by a large vessel can easily result in a grounding or collision,” says Captain Nitin Chopra, Senior Marine Risk Consultant at AGCS.

Large vessels can also lead to longer delays for cargo owners. Whether it is a fire or a grounding incident, if it involves a large container vessel it will likely take longer to resolve, leading to increased costs. Large vessels can take longer to re-float when grounded and may have to travel further to reach an appropriate port of refuge or repair yard. “The larger the vessel, the higher the risks of having multiple interests involved in an incident. Companies need to consider the risks of container shipping cargo delays and prepare contingency plans should their cargo become involved in an incident,” says Régis Broudin, Global Head of Marine Claims at AGCS.



20 years of container ship growth



Capacity of the largest container vessels has doubled in the last 20 years.

SOURCE

[Allianz](#)

GLOBAL TRANSPORT & LOGISTICS OUTLOOK: Normalisation in a Different World



The pandemic extremes are gradually fading in transport and logistics, but normalisation comes with after-shocks and sanctions are shaking up trade routes. So, what does the year ahead have in store for shipping, container shipping and aviation?

A change in transport and logistics in the wake of the pandemic

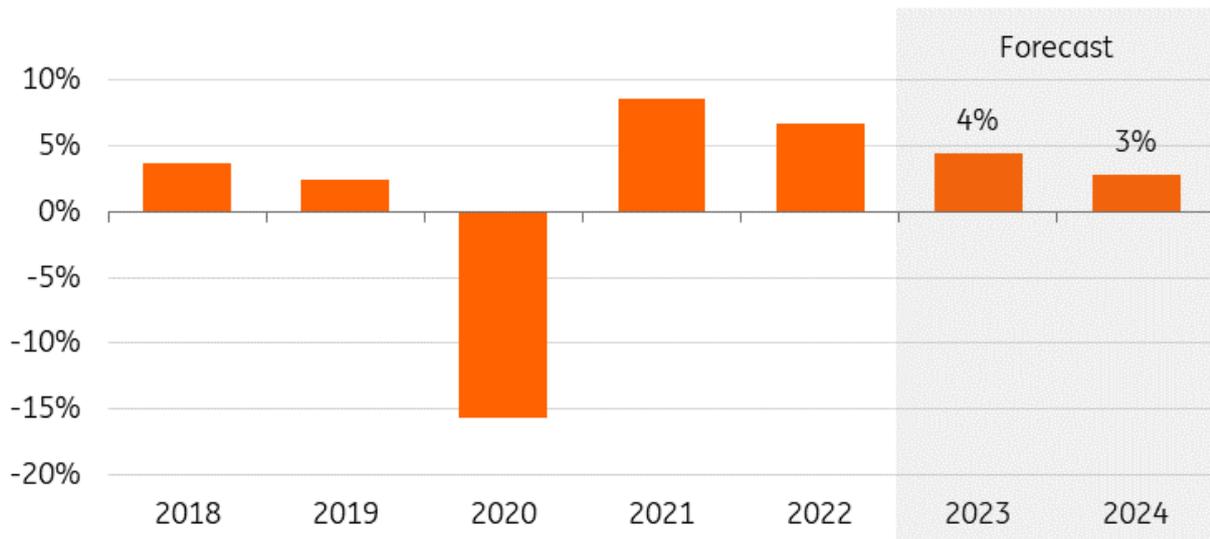
The transport and logistics sector will see growth of 4% in 2023 and 3% in 2024.

While the extremes of the Covid-19 pandemic supply shock have faded, the sector is still witnessing the ripple effects of normalisation in consumer behaviour and prolonged capacity issues. At the same time, the economy is slowing and industrial production is slumping.

The supply shock from the pandemic and the impact of the war in Ukraine have also left their mark on various parts of the transport and logistics sector. Either long

because of excess capacity after a historic boom (in container shipping) or short because of lagging deliveries of aircraft and capacity-absorbing rerouting because of sanctions (in shipping).

While consumer goods logistics is facing a correction, there is a [sunnier outlook for aviation](#) which is benefiting from pent-up travel demand, while public transport is turning busier again as well.



ING Research based on Oxford Economics

Airline passenger demand outweighs the slowdown in goods

For (inland) goods transportation, 2023 will, on balance, be a year of stagnating tonnage and some segments will show declines. On the passenger side, however, it’s the opposite. The pace of recovery is exceeding expectations since travel has opened up post-lockdowns and restrictions. As consumers continue to prioritise travel, the double-digit rebound of aviation is helping to push growth in the global transport and logistics sector to 4%, exceeding global GDP growth. After the unprecedented drop in 2020, the sector will exceed its pre-pandemic level by the end of the year. After digesting the initial ‘after shocks’, the global economic slowdown will have a stronger impact in 2024, leading to a more challenging year for most of the sector.

Public transport volumes continue to recover more gradually

For public transport volume, 2023 will be a year of continued recovery as well. Rail figures in European countries were still significantly below pre-pandemic levels in 2022. Full recovery won’t be reached in 2023, but figures are trending up and weekends are relatively busy.

Early indicators from the UK show a strengthening recovery this year (to 93% of pre-pandemic levels). There is a similar trend in public transport figures in the Netherlands, another services-driven economy where working from home is part of the new normal. On the other side of the Atlantic – in the US – public transport is picking up at a similar rate, recovering to 72% of pre-pandemic levels in May 2023, up from 62% a year earlier.

2024 will be more challenging year for many logistics companies

On the goods side, recent stretched and vulnerable supply is helping transport and logistics companies navigate their way through a phase of lower demand. With shortages fresh in mind, companies in road transport have managed to pass on higher costs fairly well despite a sluggish market. In [container shipping and logistics](#), locked-in higher rates – accounting for more than half of the volume – will expire in batches over 2023, leading to falling profits into 2024.

Higher transport activity in Asia as economies catch up

While advanced economies including the US and the EU are struggling to avoid recession, China's economy is bounced back after its post-pandemic re-opening, and India is returning to trend growth. This geographical mixed picture means that transport activity in Asia will grow faster. A relevant factor here as well is that Asian airline traffic lagged for much longer in the aftermath of the pandemic, and Asian intercontinental airline passenger numbers are catching up stronger now.

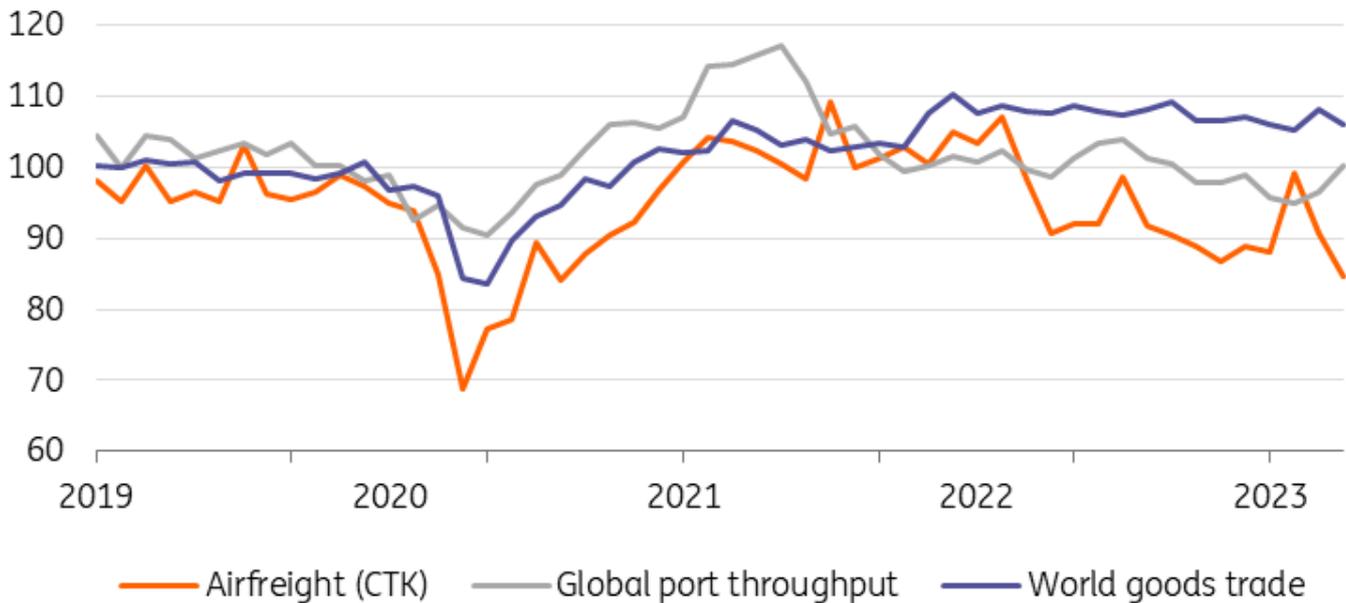
Excess inventory cuts will impact transport activity

After surging during the pandemic, container trade suffered a setback in the final months of 2022 because of a shift away from consumer spending on goods alongside the economic slowdown. Shippers had to adjust to earlier piled-up stocks in the second quarter of 2023. Effectively, this has created an accelerated slowdown (reverse bullwhip effect) across supply chains, especially in consumer products. This was most prominently felt in US logistics, but also in Europe as reflected in significantly lower container throughput in ports in the first quarter of the year.

A global wind of protectionism also hasn't helped, for instance in automotive parts. More rules and restrictions [complicate trade and make it more costly and less beneficial](#). As [outlined earlier](#) world trade faced a correction and will only grow slightly in 2023 and 2024.

World trade flattens, air and sea freight slump on consumer products correction

Indices global trade, airfreight traffic and global ports throughput 2019 = 100

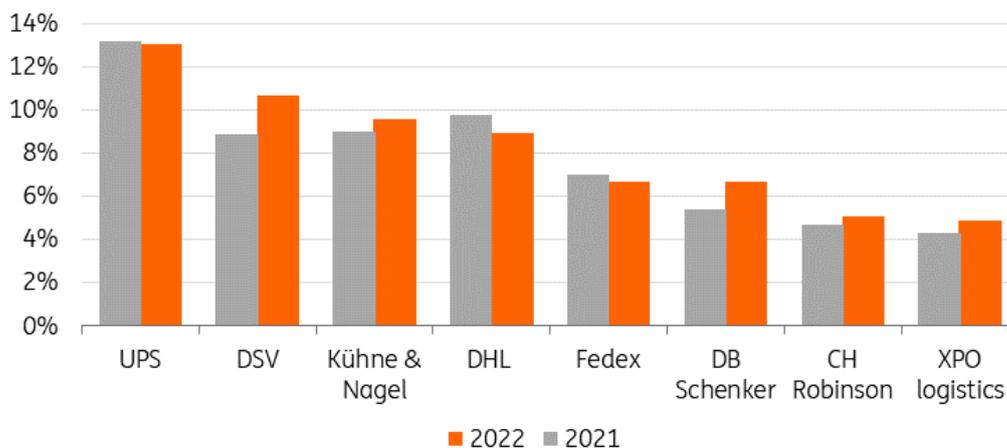


Air cargo slumps – signaling lingering freight market weakness

Air cargo has suffered a double blow over the last year, not only from reduced spending on higher value consumer products – which comprises the majority of its volume – but also because of the shift back to sea transport after the immediate supply chain issues were resolved and the price gap increased. Mounting working capital costs for goods in transit couldn’t compensate for that.

Logistics services providers boosted margins amid rebound and disruption

Operational margins of large global logistics service providers (EBIT) in % per year:



SOURCE [ING](#)



The Future of Logistics

Thanks to technological advancements and new trends, the logistics industry has undergone rapid changes in the past few years. However, the pace of change shows no sign of slowing down. As we move towards 2024 and beyond, the logistics industry is set to experience further evolution and transformation. Here are some predictions and trends that are likely to shape the future of logistics:

- **Increasing use of automation and robotics:** In recent years, the use of automation and robotics has become more prevalent in the logistics industry. This trend is set to continue, with many companies expected to invest in automated technologies like drones, autonomous vehicles, and robots. These technologies can help to streamline logistics processes, reduce costs, and increase efficiency.
- **Rise of last-mile delivery solutions:** Last-mile delivery is the final leg of the logistics process, which involves delivering products to the end customer. With the increase in e-commerce sales, last-mile delivery has become more critical than ever. To address this, logistics companies are expected to adopt innovative solutions like micro-fulfilment centres, delivery robots, and autonomous delivery vehicles to provide fast and cost-effective delivery to customers.

- **Greater focus on sustainability:** As consumers become more environmentally conscious, the logistics industry is expected to emphasize sustainability more. This could include a shift towards electric vehicles, sustainable packaging, and more efficient transportation methods, such as intermodal transport. Also, logistics providers will likely adopt more sustainable practices, such as reducing carbon emissions and minimizing waste.
- **Adoption of blockchain technology:** Blockchain is a secure and transparent way of recording data, making it an ideal technology for logistics providers. It can help to reduce costs and improve efficiency by providing a tamper-proof record of transactions and reducing the need for intermediaries. As a result, more logistics companies are expected to adopt blockchain technology in the coming years.
- **Greater use of big data and analytics:** The logistics industry generates vast amounts of data, and using big data and analytics can help companies make more informed decisions. Logistics providers can optimize their operations and improve customer service by analysing data on factors like delivery times, inventory levels, and customer behaviour. As a result, big data and analytics are expected to become more widespread in the logistics industry.

In conclusion, the future of logistics is set to be shaped by automation and robotics, last-mile delivery solutions, sustainability, blockchain technology, and big data and analytics. By embracing these trends, logistics providers can improve their efficiency, reduce costs, and provide better customer service.

SOURCE

[Forderline](#)

THE NEW ERA OF DUE DILIGENCE

10 DRIVERS OF THE NEW ERA OF DUE DILIGENCE

1. Regulatory Expansion

Asia Pacific

- Singapore's **Criminal Justice Reform Act (2018)** introduced Deferred Prosecution Agreements (DPAs), which allow prosecutors to agree not to prosecute a company if it meets conditions like implementing adequate compliance and remediation processes. DPAs had already been adopted in countries including the US, UK and France to incentivise companies to self-disclose any evidence of wrongdoing surfaced during due diligence.
- Banks in Hong Kong must ensure they meet certain requirements for managing climate risk and make appropriate disclosures on their activity to the regulators, following a regulation which came into force in December 2022.
- Australia has introduced new legislation which compels businesses to provide documents related to alleged workplace sexual harassment. The **Fair Work Act** came into effect in March this year.

UK

- The UK's **Modern Slavery Act** of 2015 was the world's early leader in human rights due diligence legislation, requiring large UK companies to publish an annual statement on steps taken against human trafficking or modern slavery within their organisation or supply chain.
- But it had limitations, including not penalising companies whose statement does not demonstrate taking action, and allowing firms to decide whether to publish their statement on a public registry. So in summer 2022, the UK government proposed an updated **Modern Slavery Bill** which would require statements to address firms' due diligence processes and spell out their assessment of risks and the steps taken to mitigate them.
- The UK's capacity to tackle financial crime (including bribery) was strengthened with the passage of the **Economic Crime (Transparency and Enforcement) Act** in 2022.

2. Heavier Enforcement from Regulatory Agencies



Bribery and corruption:

- A multinational telecommunications company based in Sweden pleaded guilty in March 2023 to breaching the anti-bribery provisions of the US FCPA and must pay a \$206 million penalty. This came after it allegedly failed to meet the conditions of a DPA over alleged bribery of government officials and falsification of records in China, Vietnam, Indonesia, Kuwait and Djibouti.
- A multinational conglomerate agreed to pay over \$160 million in December 2022 to resolve bribery investigations by regulators in the US and Brazil. The company was accused of paying a multi-million pound bribe to a senior official in a Brazilian state-owned oil company in an attempt to win a lucrative building contract.



Financial crime:

- A fintech firm was fined \$360,000 by the United Arab Emirates' regulator in August 2022 over alleged due diligence failures in its AML approach. The regulator said the firm had failed to carry out enhanced due diligence on high-risk customers after a business relationship had started. The firm was also alleged to have failed to properly assess the risk of customers according to their nationality and geography.
- A UK regulator fined a bank over £4 million earlier this year for allegedly failing to put in place adequate AML controls, citing deficiencies in its enhanced due diligence checks for higher risk customers.
- A company based in Hong Kong settled with a US regulator in 2022 for allegedly breaching sanctions around trade involving Iran.

3. The Explosion of ESG

Many of the new laws we explored earlier make it mandatory for companies to understand the environmental and human rights impacts of their activities and those of prospective third parties. But legal risk is not the only reason companies today should carry out ESG due diligence. Surveys show that consumers, investors and employees increasingly want to buy from, invest in and work for companies that can demonstrate a positive impact on society. There is growing evidence that responsible and ethical businesses are attracting custom and enjoying profits.

4. Due Diligence as an Opportunity

The success of B Corporations and ESG investment funds demonstrates that compliance is increasingly being recognised by companies as a driver of responsible profits and a sustainable long-term future. As young people are particularly committed to ESG and ethics, this trend is only likely to accelerate.

5. 'Black Swan' Events Have Become the Norm

The business world has always experienced changes, but the period since 2020 has brought a series of external shocks which have forced companies to shut down products and services, and even their offices. The Covid-19 pandemic, European heatwaves, blockage of the Suez Canal and Ukraine war were so unexpected and consequential that they would ordinarily be regarded as 'black swan' events. Such events are supposed to be extremely rare—but they seem to have become the new normal.

6. Rising Supply Chain Risks

Supply chains have clearly been affected by these disruptions. But even if they hadn't happened, supply chains have become more difficult for compliance teams to monitor. The chains are getting ever longer, more complex, and more global.

The best response to supply chain risk is to get the right data to understand your web of suppliers. This should include company data which reveals ownership and associations; legal data which reveals any formal allegations against suppliers and their third parties; and news data across multiple languages which gives insights into rumours to be followed up.

7. Misinformation and Noise

An additional complication is the proliferation of misinformation, and unsubstantiated claims made in sources with dubious origins. Social media posts can publicly make allegations about an individual or a company without offering evidence or provenance. Compliance officers need to be able to identify and buy in high-quality data from authoritative sources as the basis for decisions on risk.

8. Shifting Sanctions Landscape

The conflict in Ukraine was swiftly followed by a raft of sanctions by many countries against companies and individuals in Russia and Belarus, as well as sanctions by Russia against foreign entities in retaliation. New entities continue to be regularly added to these lists at an unprecedented rate.

Sanctions lists can appear to be a tangled web, ranging from lists maintained by individual national agencies (such as the US OFAC list) to supranational sanctions lists (like the European Union's). Compliance officers can effectively manage by risk by using a technology platform which automatically flags changes in all relevant sanctions lists in relation to their company's third parties.

9. Acceleration of Technology

The best compliance operations are taking advantage of new and longstanding technologies to make efficiency savings and surface risks that would not have been possible to capture under the traditional and inefficient model of manual due diligence searches. For example:

- Technology platforms allow companies to screen multiple entities against a wide range of data sources; carry out risk scoring of these entities; and alert the user to new information or changes to risk levels.
- Artificial Intelligence and Machine Learning technologies can search across high volumes of datasets to offer insights around risk which would not have been possible in a manual search.
- Robotics can be employed to automate a large chunk of the compliance workflow.
- Cloud computing technologies can store data virtually, while APIs can deliver data in an optimised way to power technological applications—without the need for heavy manual involvement in cleaning and optimising datasets.

10. New Pressures on Compliance

The nine drivers above have added new requirements, risks and pressures that typically fall on a company's compliance team. The asks on them now include:

- Reviewing a much broader range of sources to capture ESG risk.
- Surfacing risks before they event emerge, such as alerting management to a key supplier who might go out of business if an external shock occurs.
- Advising the C-suite on risk management, including reputational risk management.
- Contributing to their company's revenue and responsible profit by providing evidence of ethical practices and positive ESG impacts.
- Understanding and adopting new and fast-emerging technologies to streamline the compliance process.

SOURCE

[LexisNexis](#)

VIDEO / AUDIO RESOURCES

The rapid advancement of technology, emergence of new business models and remarkable shifts in consumer behaviour have reshaped the logistics industry and the way that organisations conduct business. To maintain a competitive advantage, businesses must stay plugged in to the global market trends and leverage them. Here are five emerging logistics and transportation trends that businesses should keep on their radar to stay competitive.



Five Major Trends Set to Disrupt the Logistics Industry

[WATCH VIDEO \(2:00 min\)](#)

Are you eager to stay ahead in the rapidly evolving world of technology? What are the top 5 tech trends that are set to dominate 2024. Dive deep into the future where quantum computing revolutionizes industries, sustainable technology takes the centre stage, and where the boundaries between the physical and digital worlds blur more than ever.



The Five Biggest Technology Trends

[WATCH VIDEO \(4:43 min\)](#)



**CILT INTERNATIONAL ANNUAL
GENERAL MEETING 2023
4 DEC, 9PM (SGT)**



Members, you are cordially invited to join the CILT International AGM on 4 Dec via video conferencing.

[REGISTER >](#)

Details of the Minutes of the last Annual General Meeting held on 25 October 2022 can be found [here](#).

Details in respect of appointing a proxy can be found [here](#).

**CILT AFRICA FORUM 2024
2-12 APRIL 2024**

The Chartered Institute of Logistics and Transport (CILT) AFRICA Forum is a major continental event providing a platform for governments, corporate organizations, individuals, students and other stakeholders of the transport and logistics industry to share, learn, and promote professional and business interests.



Location

the 17th CILT Africa Forum will take place at the Elephant Hills Resort, Victoria Falls, Zimbabwe.

Theme

“Unlocking Africa’s wealth through logistics and transport”

[FIND OUT MORE >](#)

SEE THE BUZZ: CILTS, Members & Friends

WiLAT SINGAPORE NETWORKING 7 DEC 2023, 6PM



YOU ARE INVITED TO
WiLAT SINGAPORE NETWORKING
DIVERSITY & INCLUSION

DATE
Dec 7, 2023

TIME
6.00-9.00PM

VENUE
5 JLN KILANG BARAT #06-03
PETRO CENTRE S159349

Ticket Type:
CILT Member/ Friends of WiLAT: \$38
CILT Student Affiliate : \$12 (Bring a guest for FREE!)
Non-member: \$68

Scan the QR below or click to [Register NOW](#)

KEYNOTE SPEAKER
CATHERINE SOO
CEO
DB SCHENKER

Women in Logistics and Transport

Organized by WiLAT Singapore

Block your calendar and be part of this incredible event! Your support means the world to us, so bring along your friends and business partners to make it even more memorable.

EVENT HIGHLIGHTS

- **Networking Reception:** Connect with industry professionals and leaders.
- **Keynote Address:** Gain insights on Diversity & Inclusion.
- **Expert Insights:** Engage with Catherine Soo, CEO of DB Schenker, and other industry experts.
- **Interactive Discussions:** Participate in discussions on fostering inclusivity.

Come, unwind, and enjoy a delicious meal surrounded by good company. Let's create lasting memories filled with warmth and laughter.

[REGISTER >](#)

MEETING WITH PLYMOUTH UNIVERSITY



CILTS Chairman Karmjit Singh, with Board Directors, hosted a dinner meeting with distinguished visitors from Plymouth University UK - Dr Saeyeon Roh, Lecturer International Logistics, and Dr David Adkins, Deputy Head Business School (first and second from right respectively in the photo).



For information on joining WiLAT, please contact WiLAT Singapore Chairperson Kelly Lee at WiLAT.SG@cilt.org.sg

EDUCATION

EVENTS ON CILTS WEBSITE

To keep up with the latest developments and sharing in the Supply Chain, Logistics and Transport industry, check out the [EVENTS](#) section of our website, which includes the following insightful webinars:

- [**BUILDING TRUST IN SUPPLY CHAINS**](#)

8 DEC 2023

Join us to learn what steps you can take to build Trust in your Supply Chain ecosystem:

1. Define Trust and why it matters
2. Explore data around how Trust impacts Supply Chain performance
3. Learn which factors of Trust have the biggest impact on Supply Chain performance (reliability and humanity)
4. Learn behaviours/strategies to build Trust in your Supply Chain organisation

- [**YOUR AUDIENCE WILL HAVE A CRUSH ON YOU IF YOU DO THIS WITH YOUR BRAND**](#)

14 DEC 2023

Imagine your brand is a person – is this how it would make you feel? Is your brand your crush, or the old crotchety teacher you were afraid of? In this webinar, we'll learn how to make your brand swoon-worthy.

We'll learn what you can do immediately to be your audience's crush as well as a long-term strategy. If your brand is the personality of your business, who are you?

- 3 things you can do right now to make your brand your audience's crush
- How you can employ long-term brand management strategies to make sure you don't fall back on old habits
- Real-time examples and audits of audience members' brands

- [**3 B2B INTEGRATION USE CASES YOU WILL SEE IN 2024**](#)

15 DEC 2023

Your supply chain is predictably unpredictable, especially when it comes to integration. As your trading partner's expectations continue to rise, and more applications are added to your technology stack, it's imperative to identify integration gaps within core revenue processes such as load tender-to-invoice or order-to-cash.

Understanding these upcoming integration use cases and challenges will enable your organization to not only provide a better customer experience, but also give you a leg up on the competition.

Join us to learn:

- How to future proof your B2B integration strategy for 2024 and beyond
- What applications you should add as extensions to your TMS
- Where to look within your fulfilment and procurement process for areas that can be automated
- How to improve customer relations through a stronger integration strategy

KNOWLEDGE CENTRE

CILTS Members have exclusive access to our online Knowledge Centre, a rich repository of more than **1,300 publications and webinars** on **SUPPLY CHAIN, TRANSPORT, MILITARY LOGISTICS AND MANAGEMENT/SELF DEVELOPMENT.**

To access Knowledge Centre, use your CILTS member-registered email address to log in at www.cilt.org.sg/account/knowledge-centre

If you have not set your password yet, click on “Forgot Password”. If you need help to log in, please contact secretariat@cilt.org.sg.

PUBLICATIONS

Click on image to read:

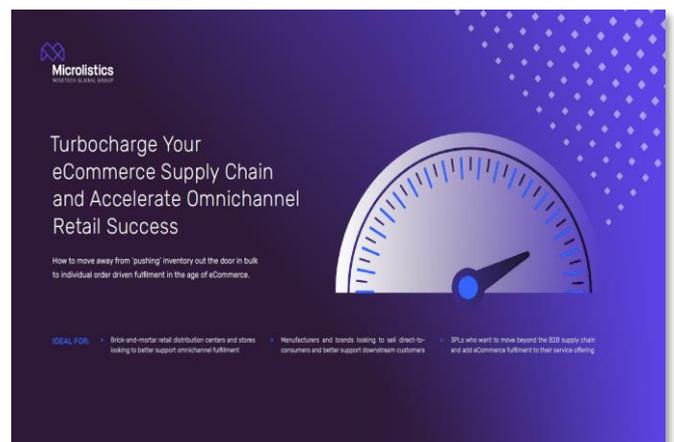


The “2024 problem” in logistics refers to the logistical delays that are expected to result from two regulations related to truck driver working hours, both set to take effect in April 2024.

Nomura Research Institute analysed the situation under these two regulations in comparison with projections of what would happen if they were not implemented. The institute showed that, by 2030, these two regulations could reduce the volume of transportable cargo by roughly 35% nationwide in Japan.



In researching for the ‘Global Supply Chains – Networks of Tomorrow’ report, HSBC teamed up with East and Partners to understand global supply chains and the future of supply chain financing and sustainability.



eCommerce growth at the expense of brick-and-mortar retail has been a feature of the consumer landscape for the past few decades. However, in the last decade alone, online sales as a percentage of total sales have grown from 7.4% in 2015 to 19.5% in 2021. This growth comes at the expense of brick-and-mortar sales and is displacing the traditional, linear supply chains.

As a result, fewer goods are needed in stores and more goods are required for the nearly instantaneous fulfillment of digital purchases. In essence, warehouses built and organized for the B2B supply chain now have to adapt to support B2C and D2C fulfillment.



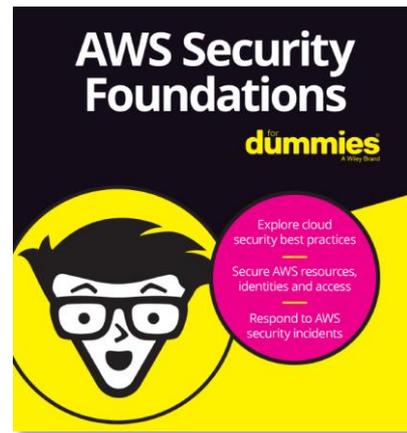
This report examines the impact of the substitution of labour with capital – for short: automation – on the workforce of the urban passenger transport sector.

It lays out risks and opportunities associated with automation and discusses how public authorities can steer the progress in automation in ways that support workers and help attain public policy objectives.

Digitalization in Transport and Logistics Services: --- A Case for Data Flows

This presentation covers:

- Digital trends
- Digitalisation in road, rail, urban and maritime transport
- Digitising the global supply chain
- Mobility as a Service
- Policy implications



This book discusses how using a modern cloud environment like AWS services can be kept safe and secure according to the following approaches or techniques:

- » **AWS security foundations:** Explains how responsibility is divided between the provider and the customer and what kinds of actions customers can take to cover their side of the ledger.
- » **Securing AWS infrastructure:** Employing zero trust to protect your environment at every layer.
- » **Protecting identity and permissions:** Using best practices, tools, and approaches to identify users, and make sure they can access the right stuff at the right time.



Public speaking is an act of talking to a group of people, usually through giving a speech or a presentation, and requires the talent of addressing an audience effectively. Learn how to do it well!

Who We Are

The Chartered Institute of Logistics and Transport Singapore is part of the leading, global professional body for those engaged in supply chain, logistics and transport – covering all sectors of the industry, namely air, land and sea, for both passenger and freight transportation.

Our primary objectives are to support our members in continuous professional development to future-proof their careers, as well as to work in close collaboration with the public and private sectors, Government agencies and the academia to develop opportunities and synergy for industry transformation and growth, underpinned by strategic thrusts in digitalisation and sustainability.

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