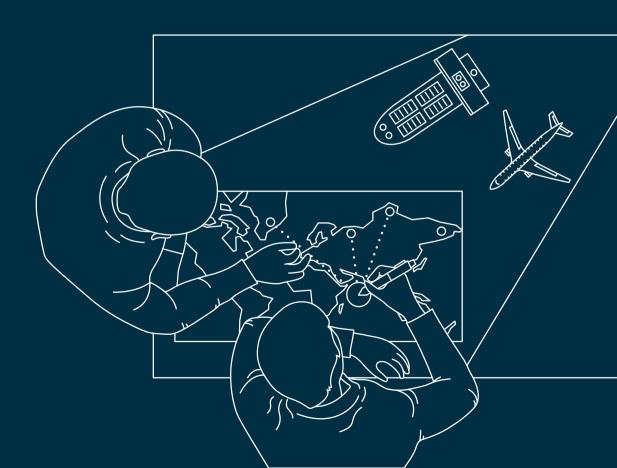
Transport Middle East 2025

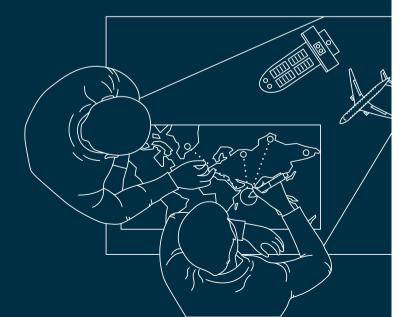
The Sustainability of Transshipment & Transshipment Hubs

Salalah, September 1st, 2025





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What is transshipment?

There are two distinct transshipment markets, each driven by different pressures, but occurring across the different sub-regions:

"Hub-and-spoke" transshipment:

- Growing ship sizes and evolution of alliances have increased the advantages of reducing the number of port calls in a rotation. This is due to the high capital costs and the fees associated with port calls in relation to load/discharge relatively small consignments.
- It is likely that carriers will continue to reduce port calls and favour larger ports, leading to an increase in demand for transshipment
- Major lines will continue to serve port regions by as few direct calls as possible, allowing hub-and-spoke distribution to strengthen

"Relay" transshipment:

The aim with this style of service is to extend service coverage and flexibility by linking two or more mainline east-west services with north-south services. This increases the number of revenue earning leas for larger vessels.

Why do shipping Lines want to use t/s?

- The purpose of transshipment is to increase the countries and port destinations served by each of the shipping lines/alliances
- Allows services to connect with smaller ports and markets that wouldn't be able to handle the larger vessels on mainline services
- To minimise the costs of the main arterial trade lanes in time, expect fewer direct calls either end of main services
- Expect an increase in the size and instance of transshipment operations in the future bigger and more frequent feeder services
- Transshipment hubs have developed beyond handling just t/s volume. Ports now tend to be seen as ports worthy of direct calls in their own right, with at least 30-40% of cargo handled being gateway cargo to tie the vessel call to the rotation. There are fewer options of ports that maintain their role in a rotation with >75% t/s cargo, given the potential to move this cargo elsewhere, although some (like Salalah) – especially those close to a trade lane – that do still exist and are maintained because of their first mover advantage, location and efficiency.



The key determinants for a port to evolve into a Transshipment hub are its location, infrastructure development, and efficient operational capabilities

Main determinants of container Transshipmenthubs



LOCATION

- Hinterland access and local cargo demand minimum 30/40% gateway cargo
- Proximity to major shipping routes
- Intermediary location connecting feeder and deep-sea services



INFRASTRUCTURE

- Greater depth (>13.5m) to accommodate new larger vessels
- Large container vard area
- High-capacity equipment (STSs, RTGs, etc.)



OPERATIONAL CAPABILITIES

- Competitive costs
- High berth productivity
- Reliability high level of service / productivity



Development of Global Mega-Hubs



- Primary hubs Panama, Algeciras, Rotterdam, Marsaxlokk, Port Said East, Jebel Ali, Singapore
- Secondary hubs Cartagena , Valencia, Lome, Wilhelmshaven, Baltic Hub, Gioia Tauro, Tanger Med, Piraeus, Jeddah, Salalah, Tanjung Pelapas
- Limited capacity generally means that primary hubs are sharing the burden of handling most t/s with a group of secondary ports in similar geographies that all remain close to the main trading lanes
- Ownership by terminal operators that have ties with shipping lines, is another reason why other lines to choose a different facility



Pursuit of Economies of Scale Reduces Number of Ports Capable of Handling **ULCSs Needed for Transshipment Hubs, Limiting Shipping Line Options**

- Shipping lines seek greater economies of scale through larger vessels, but declining benefits of scale for vessels >20.000 TEU.
- Rise in containerisation is not restricted by technology or knowledge but ability to fit through the various canals.
- New ULCSs, mainly deployed on the main arterial trade lanes direct from the Far East to Europe, are struggling with the lack of infrastructure at various ports.
- A lack of deep-water capabilities in a region will drive a continued increase in transshipment and size of feeder vessels
- Port depth is a crucial factor, as it directly impacts the types of vessels that can access the port. Currently, a port needs ~18m of depth to be able to accommodate largest vessels at full capacity, together with the appropriate guay length.
- Not all STS are equal number of able cranes, and max rows and weight are important to evaluate port attractiveness for transshipment.
- Yard capacity current operations need more than space, with increases in automatization and stacking heights (specialized and new generation RTG/RMG)

| Year | Vessel | Capacity (TEU) | | LOA (m) | Beam (m) | Draft* (m) |
|------|----------------------|----------------|---|------------|-------------|---------------|
| 1980 | Panamax | 3k-4k | 4 | 250 | 32 | 12.5 |
| 1988 | Post Panamax | 4k-5k | | 285 | 40 | 13.0 |
| 2000 | Post Panamax Plus | 6k-8k | | 300 | 43 | 14.5 |
| 2014 | New Panamax | 12.5k | | 366 | 49 | 15.2 |
| 2006 | Post New Panamax | 15k | | 400 | 59 | 15.5 |
| 2013 | Triple E | 18k | | 400 | 59 | 15.5 |
| 2019 | New Generation | >20k | | 430 | 59 | 15.5 |

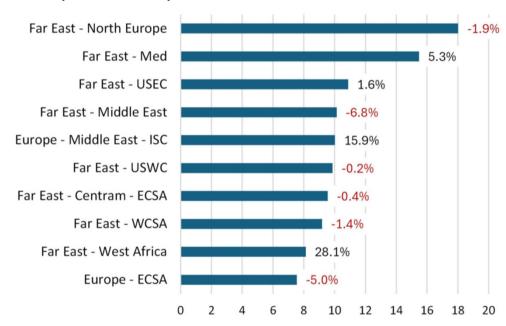
^{*} Fully laden draft. Vessels require 10-15% under keel clearance at the berth.



Changes in Transshipment Strategies

- Shipping Lines will always adapt to change to maximise the utilisation of the assets that they deploy, i.e. their ships.
- With additional new ULCS vessels still being ordered, there is a need to find services for their deployment.
- There has been a slow down in the Chinese economy meaning that other Asian countries are now as likely to encourage direct calls – Japan, Vietnam, South Korea, Indonesia and Thailand all have improving economies, but limited ports that can handle ULCSs
- Increase in transshipment opportunities in Asia.
- But this isn't enough to utilise all the main ULCSs, which has resulted in the rise of new services from Asia to West Africa for the first time. This is mainly a decision made by MSC, who have shifted 24,000TEU vessels to Asia-WAF, bringing the service into the top 10 trading routes for the first time
- Additionally, because of the Red Sea Crisis, there is an increase in vessel size on Europe to ME/ISC. Gemini, MSC and Cosco have deployed 41 vessels >12,500TEU on this route compared with 20 just a year ago.

Development of the Top 10 Trade Lanes, 2025





New Alliances – New Ideas

- Maersk and MSC, announced the end of the 10-year 2M agreement in 2025.
- A new alliance has formed between Maersk and Hapag-Lloyd. The Gemini Cooperation started at the end of Jan 2025. It's objective, to reach a 90% schedule reliability.
- New "shuttle" services designed to reduce number of mainline calls and increase direct port to port feeders.
- THE Alliance members of Ocean Network Express, HMM and Yang Ming renamed Premier Alliance has reached VSAs with MSC and Wan Hai for certain routes but continue to use more traditional feeder multi-port rotations.
- This confirms the view that no line is yet big enough to fill the ULCS units alone, MSC has formed a VSA with the Premier Alliance, to ensure that its ULCS ships can be filled sufficiently to take advantage of the economies of scale.

Alliance Group Transition – 2024 to 2025

THE Alliance

| Image: Line |



2025Q1



Gemini Cooperation





Ocean Alliance

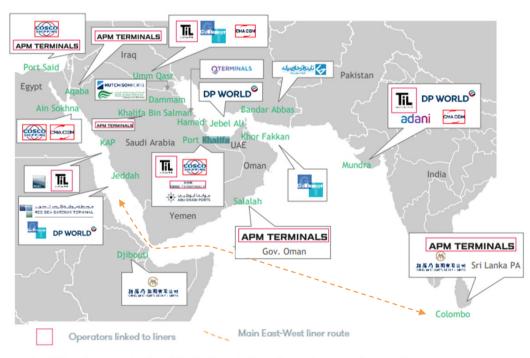




Middle East Transshipment Focus

- Main t/s hubs in the region are Jebel Ali (Dubai), Salalah and Jeddah
- 5 liner-related terminal operators are already active in the region: (1) APM Terminals, linked to Maersk, (2) TIL, linked to MSC, (3) COSCO Shipping Ports, linked to COSCO, and (4 & 5) Terminal Link and CMA Terminals, linked to CMA CGM. This set of affiliated operators already cover the most important lines/operators, which dominate the transshipment market. Thus, as all main liners have already developed presence in the region and there is very limited appetite for another transshipment hub in the foreseeable future.
- DP World in Jebel Ali and Jeddah is the only main example of a common user operator that has managed to attract and maintain substantial Transshipment volumes, due to either:
 - First mover advantage obviously critical to be the first of its kind in the region, but equally important to back this up with highly efficient port services, which have encouraged lines to stay.
 - Being situated as almost exclusive gateway for important O&D markets.

International Terminal Operators Active in the ME Region



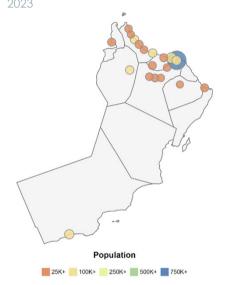
In addition, there are other Ports linked to the main Liners through its operator's ownership structure. E.g., RSGT (COSCO), Salalah (APM Terminals)



Oman Transshipment Focus

- Salalah continues to be the strongest t/s opportunity in Oman and one of the strongest in the wider ME region, with volumes almost exclusively t/s (90%) and facility operated by APM Terminals. Also close to population centre of Dhofar.
- Large-scale transhipment is unlikely at Duam, due to significant regional overcapacity and shipping line-linked ownership of major transshipment hubs in the region. However, some niche feeder transhipment opportunities such as a land-bridge to Yemen and services to Indian Ocean Islands and the East Med, which offer higher margins than traditional mainline transhipment are possible. Duam is reliant on the SEZAD with limited large population centres close by.
- Sohar's proximity to Muscat remains its key strength and unlike Salalah, the closeness to large population regions makes the facility dominant for agreeway cargo volumes.

Population evolution in Oman, by region and main cities



| City | Region | Population | |
|---------|------------|------------|--|
| Muscat | Muscat | 797,000 | |
| Seeb | Muscat | 237,816 | |
| Salalah | Dhofar | 163,140 | |
| Bawshar | Muscat | 159,486 | |
| Sohar | Al Batinah | 108,274 | |
| Suwayq | AlBatinah | 107,143 | |
| Ibri | AlBatinah | 101,640 | |
| Saham | AlBatinah | 89,327 | |
| Barka | AlBatinah | 81,647 | |
| Rustaq | AlBatinah | 79,383 | |
| | | | |

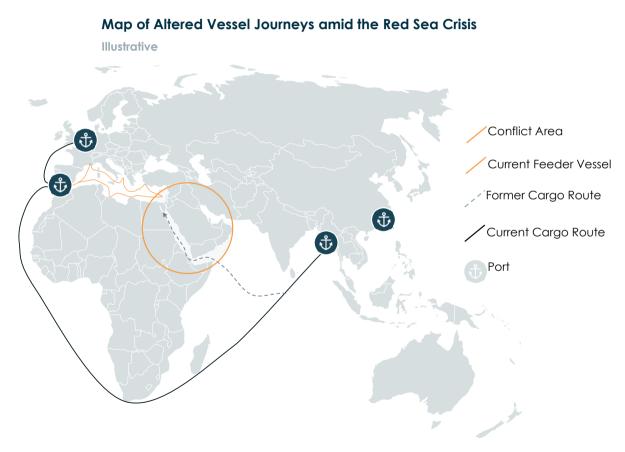




The Red Sea Crisis - Impact

Key points

- Impact has shifted the dynamics of cargo flows, resulting in longer vessel times and higher costs for shippers; reduced calls for Red Sea ports
- While this has affected cargo flows worldwide, Mediterranean ports have seen some of the most significant changes in terms of vessel calls.
- Prior to the Red Sea Crisis vessels traversed through the Red Sea to Mediterranean ports, vessels have since been rerouted around The Cape of Good Hope before arriving at their European and Mediterranean destinations. As a result, feeder vessels are more frequently used to ferry cargoes to Mediterranean destinations.
- Increases in journey times as well as prices, altering the dynamics to Mediterranean ports. War risk premiums have further added to the cost. deepening ongoing headwinds at regional ports.





New Transshipment Opportunities in Middle East to Mediterranean

- About 12-15% of global trade and 30% of global container traffic typically transits the Suez Cana, but the current situation in the Red Sea has meant that the volumes of container vessels transiting the Canal has reduced by some 66%.
- It remains unclear how long the Red Sea Crisis will continue, but it is very clear that utilising the IMEC will avoid this area and offer shippers another viable opportunity of moving goods safely to and from their destinations.
- Increase in feeder services from ME to Med, with mainline vessels from Asia turning in main ME ports.
- Short-term opportunity whilst Red Sea Crisis is discouraging services from using the Suez Canal.
- Niche feeder transhipment opportunities such as a landbridge to Yemen and services to Indian Ocean Islands and the East Mediterranean exist in the short-term.
- These opportunities exist for most ports in the ME region making this a competitive fight for these short-term volumes.

IMEC offers alternative solutions to maritime choke points

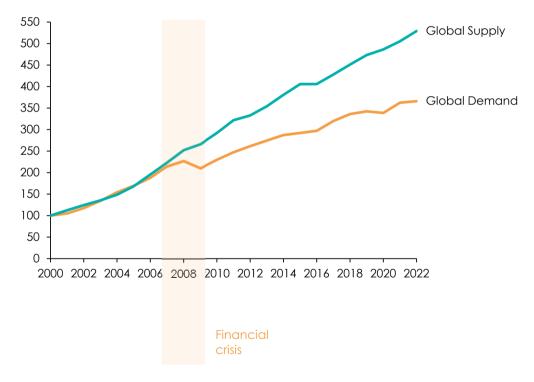




Return to Equilibrium – Still Possible?

- Global supply and demand has not been in equilibrium since before the Financial Crisis in 2007.
- Shipping lines continue to make big profits during times of global unrest, manifested in events such as Covid-19, Ukraine War, Red Sea Crisis.
- In all of these cases, supply has been artificially adjusted and freight rates increased.
- The avoidance of the Suez Canal has added to the transit time of services, which also means the need for more vessels to maintain a weekly rotation.
- It is not in the shipping lines interest to return to using the Suez Canal, until they can find sufficient trade lanes to deploy their "spare" tonnage on, otherwise freight rates are likely to drop with more tonnage available.

Global Container Supply v Demand Growth, 2000-2022





Conclusions

Long-Term Future

- Shipping lines want to be in charge of their own destiny and will look to avoid any alliance deals once they are able to fill the largest vessels with their own cargo.
- Expect vessels to max-out at c.24,000 TEU, because of the diminishing returns of the economies of scale as vessels increase much beyond this level.
- Lines are then expected to reduce the number of mainline calls at either end of the main rotations, with more cargo connecting to these major hubs with bigger feeder vessels.
- Lines will prefer to call at ports where they have some equity stake to ensure better performance levels.
- Larger feeder vessels are likely to handle greater volumes initially expect 3,500-5,500 TEU to be common and even as large as 6.000-10.000TEU in some instances once the mainline vessels are able to fill without the need for extra calls when alobal demand recovers.
- As individual lines start to get areater owned demand, there is an increased likelihood of more sole operated services in 10-18,000 TEU range for some of the smaller lines – which will still require 500-2,500 TEU feeders. Service potential remains for ports with less deepwater during this phase.
- When the main individual lines are capable of filling 24,000 TEU vessels on their own, there is a likelihood of the continual breakup of alliances – the announcement of the break of the 2M Alliance has shown that both lines still need help from other lines in order to fill their vessels on their own.



Thank you

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