Baltic & Black Sea Ports & Shipping Conference – Palanga, Lithuania, 28th September 2022

"Baltic Container Terminals – A Competitive Review"

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About Infrata: Services

infrata

Technical Advisory

Our technical advisory services underpin all the work that we do. Our advisors are with you every step of the way, from the stage of evaluating investment opportunities and risks, to value creation and divestment.

Strategic & Commercial Advisory

Infrata brings a track record of developing bespoke solutions to meet the specific needs of its individual clients, from O&M Advisory Support role at bid stage to Asset Management services post-transaction. This creative approach is essential to our success, and that of our clients.

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We believe that accurate traffic forecast analysis is crucial to making a shrewd investment in infrastructure. Market analysis and sector insight help us evaluate revenue potential with our clients.

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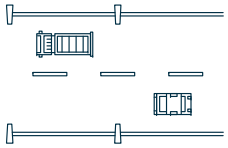
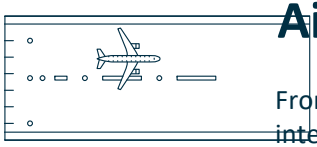
The infrastructure landscape is changing. Increasingly, Environmental, Social, and Governance (ESG) are playing a key role in investment decisions. We are able to support you in this key transition.

Infrata operates in key infrastructure sectors



Roads

Our advisory team provides support throughout the entire lifecycle of the investment in highways, from due diligence at bid stage to acquisitions and divestment.



Airports and Aviation

From small regional airports to major international transportation hubs, we provide key industry insight.

Ports & Shipping

Maritime investments require in-depth knowledge and experience directly from the industry– two things the Infrata team has in abundance.

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Our main goal is to help our clients create clear paths to growth in their rail investment projects.

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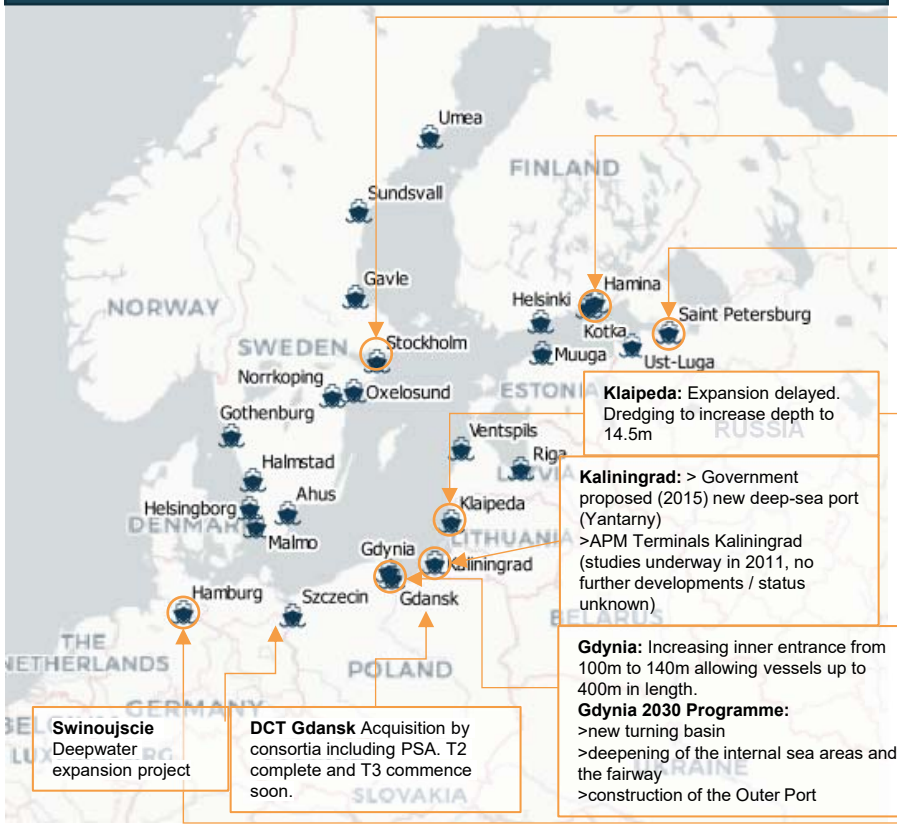
INTRODUCTION TO REGION – KNOWN MAJOR CONTAINER PORT DEVELOPMENTS

There are a number of regional port development plans throughout the competitive region - a summary assessment of each project is outlined

Regional Port Developments



Swinoujscie Deepwater expansion project

DCT Gdansk Acquisition by consortia including PSA. T2 complete and T3 commence soon.

Klaipeda: Expansion delayed. Dredging to increase depth to 14.5m

Kaliningrad: > Government proposed (2015) new deep-sea port (Yantarny)
>APM Terminals Kaliningrad (studies underway in 2011, no further developments / status unknown)

Gdynia: Increasing inner entrance from 100m to 140m allowing vessels up to 400m in length.
Gdynia 2030 Programme:
>new turning basin
>deepening of the internal sea areas and the fairway
>construction of the Outer Port

Stockholm port has been expanding over the largest three years with its new freight capacity increased by 30% opened in May 2018. Stockholm Norvik Port, operated by Hutchison Ports, opened in 2020 and is targeting capacity of 500,000 containers per annum (plus additional ro-ro).

HaminaKotka received approval for a two-phase construction of a new terminal in May 2018. The port is known for its liquefied natural gas with the project helping to diversify and expand gas supply sources in Finland.

In Saint Petersburg, container terminal of MSCC Bronka capacity will reach 1.45 m TEUs by end of phase 1. In future the MSCC Bronka expansion will help increase the facility's container throughput to 1.9 m TEUs and 3m TEU by the end of the final phase.

Klaipeda port development is part of a large development scheme to improve the area by 2030. Development includes dredging in the Malku Bay (currently ongoing). The total cost of the expansion project is expected to cost 57m euros with some EU financing been given, although the port expansion remains unconfirmed. China Merchants has a long-standing interest in port investment but is yet to undertake the process.

Gdynia development aims to improve the port's market position in the South Baltic Sea Region. The investment will include a new turning basin and deepening of the port to 16 metres and widening the entrance to the port 40 metres. This was approved on the 11th August 2014 and fill form part of the 2014- 2027 development plan. Other changes include the creation of a ferry port. The aim of the development is to be capable of handling the biggest vessels along the Baltic Sea and will be a key port in the Baltic –Adriatic Trans -European Transport Corridor.

The Hamburg Port Authority has confirmed that dredging will occur along the River Elbe with the scheme costing $700m. The development will include: adding 2.4m of depth to the existing channel which will allow larger container ships with approximately 1.8k TEU more on board than its current capacity (which is 20k TEU). The project will improve the traffic flow in the port, so that container ships will be able to navigate around one another.
EUROGATE West Expansion Project - an expansion of the port to the west will increase the total capacity to 6 m TEU.

Source: Infrata/Respective Port Websites

KLAIPEDA: Existing Port with TiL (MSC) Involved but no Asian services to date

Klaipedos Smelte Terminal is the main container port in Klaipeda, primarily based on water depth and TiL involvement – however, MSC traffic is not growing substantially and expansion plans are very slow to progress

- The Port of Klaipėda is in the eastern coast of the Baltic Sea in Lithuania. It is one of the few ice-free ports in the region and the largest in Lithuania.
- Port of Klaipeda plans to dredge approach channel to 14.5m but insufficient to attract >20,000TEU Asia services
- Container traffic is an important cargo component, with a total of 640,000 TEU handled in 2020, down on the 2019 (703,000 TEU) and 2018 (750,000 TEU) totals.
- There are currently two terminals for container handling:
  - **Klaipedos Smelte Container Terminal:**
    - Leasehold by TIL (96%, and local shareholders (4%) – runs to 2066
    - Handled approx. 35.9% of total port container traffic
    - No direct Asian calls have been secured. Deepsea links to Latin America for seasonal reefer traffic is occurring, but ships are around 7,000 TEU
    - Has known plans to expand the facility, but to date there has been no tangible progress.
  - **KKT:**
    - Volumes are growing throughout this facility, to c.450,000 TEU recently
    - Share of port container traffic is an estimated 64.1% at present
- China Merchants has maintained an interest regarding investing the port.

Relevant Future Expansion Plans:

- Dredging of approach channel to 17m and KKT basin to 14.5m required for ability to receive larger ships (from Asia).
- Construction of Outer Port: conceptual plan to reclaim deepsea container terminal (130 ha.) outside of the northern port entrance.
- Southern Port development (adjacent to KKT): conceptual plan to reclaim and expand southern area of the port (will likely only be executed if Outer Port does not materialise) but remains unconfirmed.

Container Terminals at the Port of Klaipeda

Criteria	Klaipeda Smelte Terminal	KKT
Depth Alongside	13.8m	10m
Total Quay Length	1088m (480m + 608m)	820m
Cranes	5 Konecranes STS (with 19 container row outreach 2 MHC (13-15R outreach)	2 post-Panamax STS 2 MHC
Container Yard Operation		5 RTG
Estimated Capacity	450K TEU	800K TEU
Terminal Area	40ha	32ha 450 reefer plugs
Road Connectivity	Main highway connectivity	Main highway connectivity
Rail Connectivity	2 rail tracks on terminal with a shunting station of 5 tracks outside of the terminal	4 rail tracks

Key Conclusions:

- **Competitive position of Klaipeda has decreased – as DCT has expanded**
- **With investment in deeper water and supporting infrastructure, it could become more of a transshipment hub, but MSC have a number of alternatives to consider**
- **Potential expansion plans need to take place in order for Klaipeda not to lose market share although costs and timing are prohibitive**

RUSSIAN BALTIC

Ports in Russia and the Baltic remain important markets in terms of potential demand but primarily handle smaller (feeder) vessels due to limited infrastructure and water depths available – the Ukraine conflict has significantly reduced volumes handled by major shipping lines

- Russia's invasion of Ukraine has had a major impact on Russian container terminals, with most lines no longer calling, although once the conflict is over lines are expected to return.
- It is estimated that penetration of containerisation in Russia is around 40% of the general cargo imports and only a negligible share of general cargo exports. As a result, the Russian hinterland market offers significant potential to shipping lines.
- Container traffic has fallen in recent years at St. Petersburg, from over 2.5m TEU in 2013.
- There remain access issues to the St Petersburg port (and Ust-Luga) due to ice ensuring that non-ice-strengthened ships are unable to reach terminals for up to six months per year (and four months to Ust-Luga).
- The current estimated capacity at the port of 3.1m TEU was originally due to increase to 4.7m TEU, eventually reaching 6.6m TEU. However, weakening recent demand has slowed this process and Ukraine War stopped it indefinitely.
- After the conflict ends, Russia will continue to be a strategically important market to serve, with strong potential hinterland demand. Access to these markets can be gained via Russia's own ports, but also through other gateway options in Finland, Germany and Poland.
- As a result of the Russian invasion of Ukraine, APMT divested its shares of Global Ports which operates facilities in St.Petersburg, Ust-Luga and Vostochny.
- Continuing weaker economic conditions are also likely to further impact the throughput of container terminals in St. Petersburg.
- Neither Muuga or Ventspils are major container facilities, but do have potential as container feeder outports.

Relevant Ports in Russia and Baltic Terminal Infrastructure

Port/Terminal	Length (m)	Depth (m)	Terminal (ha)	No. of Cranes
Russia:				
St Petersburg – First Container Terminal	779	11.5	89.0	8
Ust Luga – Phase I	440	13.5	50.4	3
Petrolesport	947	8.7 – 12.0	34.5	7
Containerships (Moby Dik)	321	9.5		1
Fourth Container Terminal	477	10.3	25.0	5
Estonia:				
Muuga Container Terminal	378	12.4	21.0	3
Latvia:				
Ventspils Container Terminal	578	14.2	16.9	1

Key Conclusions:

- **Russian invasion of Ukraine has changed the complexion of Russian CT's with majority of major shipping lines refusing to call**
- **APMT's divestment of Global Ports which seriously impact the operational quality of some Russian terminals**
- **Russia is an important market in terms of overall demand, but not served by large, deep-sea ships - will remain a feeder market (albeit with larger sizes of feeder vessel)**
- **Estonia and Latvia are not major container facilities and there is minimal, if any, transshipment occurring - position not expected to change**

TALLINN

HHLA operates TK Estonia in Tallinn-Muuga Container Terminal

- HHLA acquired Muuga CT in 2018 and is largest CT in Estonia. Concession until 2062.
- Ambition to grow HHLA's hinterland links between owned assets in Baltic and North Europe.
- Development of interlinked regional hubs – effort to make Tallinn gateway for Russia.
- Rail logistics help to connect container terminal with wider regions
- Increase from 3 to 5 STS cranes in 2022.
- 2021 handled 224,000TEU and 184,000TEU P8 2022. All major shipping lines call regularly, but with smaller services.
- Main strength in diversity of services offered and internationally recognised terminal operator.
- Feeder outport will develop as feeder vessels increase in their size.

Key Conclusions:

- **Strength as Multi-Purpose facility and diversity of services offered by internationally recognized terminal operator**
- **Developing logistics hub and connecting with other HHLA operated facilities**
- **Feeder outport will develop as feeder vessels increase in size**

POLAND

Poland is one of the most active ports in the Baltic expansion-wise. There are currently three port gateways are available in Poland - Gdansk, Gdynia and Szczecin with reported expansion plans in all three

Polish Port Sector - Current Position

- Within Poland, there are over thirty seaports, of which roughly 18 are large enough to serve international maritime traffic with three major container facilities. There are some developments that may impact this position:

Gdansk Port:

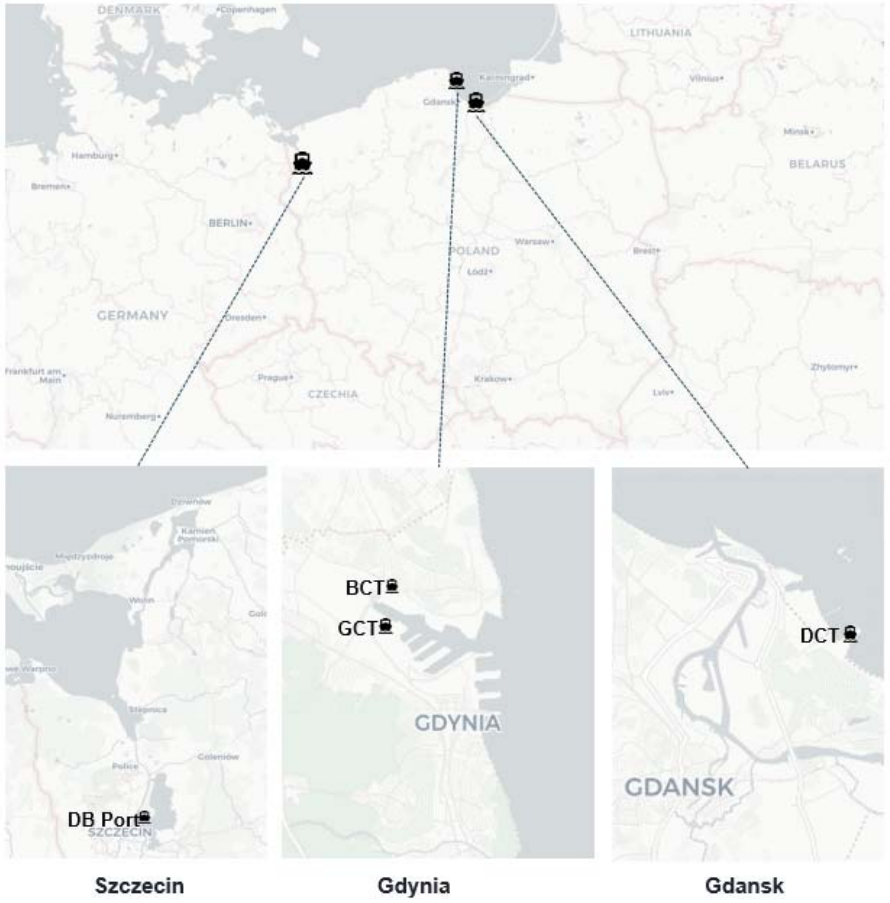
- DCT Gdansk is the container handling facility.
- Gdansk Container terminal, a small facility on the river, has handled around 90,000 TEU per year.
- T3 deepwater expansion is underway.

Gdynia: Includes two terminals that handle containers:

- GCT: Gdynia Container Terminal SA, operated by international operator Hutchison.
- BCT: Baltic Container Terminal, operated by international operator ICTSI
- A large scale development plan is underway in Gdynia to deepen the access channel and container terminals. This will improve the capabilities of the two terminals in the port although will be very expensive.

Świnoujście and Szczecin: within one container handling facility:

- DB Port Szczecin: operated by Deutsche Bahn (henceforth Szczecin).
- There are known plans to develop deep-water at Swinoujscie, which will include water depth of 17m an increase from 9.15m, although construction is yet to commence and no terminal operator is in place.



DCT GDANSK

Over the past 10 years the facility has rapidly expanded, becoming one of the largest container ports on the Baltic Sea and in Europe - but needs to expand further

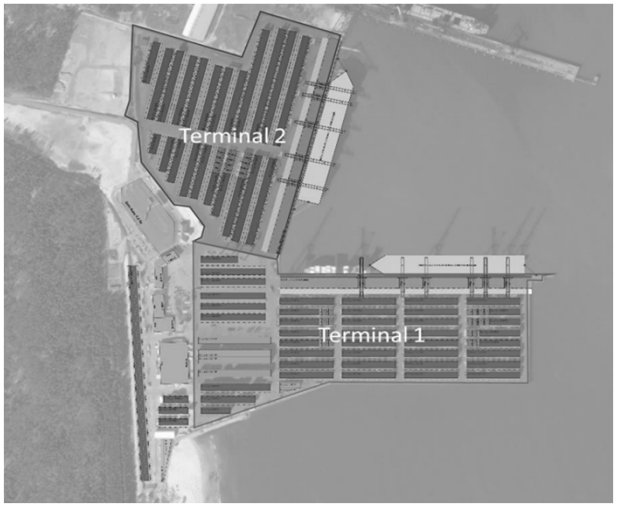
- The existing facility is divided into two main operating areas, known as Terminal 1 and Terminal 2:
  - Terminal 1, which opened in 2007, was designed to cater for large container vessels calling from the Far East.
  - Terminal 2, which commenced operations in 2016, was designed for Ultra-Large Container Vessels (ULCVs), offering more modern STS cranes.
- The two terminals share a single gate complex - which is in the process of being upgraded, a single rail terminal, and relevant service infrastructure - including the administration building, workshop building, port health facility and substations.
- Rail consists of 6 tracks with total rail line of 4,500m.

Future Expansion Plans:

- DCT Gdansk is expanding its flagship container terminal to handle 4.5m TEU per annum (up from 3.0m TEU) with the construction of a third deepwater terminal (T3 or BH3) adjacent to the existing DCT Terminals – T1 and T2.
- The construction of the additional capacity is expected to commence in 2022 and be completed in 2024.
- OTL Land could potentially offer DCT another opportunity to increase capacity, although there are other parties interested in the land. OTL is opposite DCT Gdansk, just over 1km away. The location would be ideal for providing additional capacity for container operations with volumes forecasted to reach maximum utilisation in 2032.
- Currently, OTL is a brownfield site and there is further interest from a Danish company to handle dry bulk vessels .

DCT Gdansk Terminal Infrastructure

Terminal	Quay Length	Water Depth - max	No. of Cranes	Capacity - TEU
Terminal 1	650m	17m	6 x PPx (18-wide)	3.25m
Terminal 2	650m	17m	8 x SPPx (25 wide)	



Key Conclusions:

- **Highly successful in growing volumes and establishing role as premier regional container port facility**
- **High-quality infrastructure - but needs to continue to expand to keep pace with potential demand available and to target new customers**
- **T3 will provide sufficient capacity to allow the terminal to handle all three major Alliance services from Asia**
- **Potential additional capacity from existing OTL Land**

GDANSK PORT AUTHORITY PLANNED OUTER PORT EXPANSION PROJECT

The Outer Port Project is considered highly speculative and a longer-term possibility - but it will need to gain interest and traction, as well as funding to support the (anticipated) expensive development plans

Outer Port Plan

- The Port Authority's outer port plan strategy document indicates that the expansion potential for the overall port within the existing land boundaries is limited.
- For further expansion, land reclamation is planned conceptually within the port administrative limits.
- The plans are expected to be based on developing the land in accordance with market interest and the involvement of private capital is anticipated through a BOT model.
- A modular implementation in successive phases, depending on the scale of demand and market interest, is the most likely approach.
- Also reasonable to assume a container facility will be included, as the artist impression of the outer port shows - sourced from Port of Gdansk Authority.
- However, it is an expansive option and will require substantial funding.
- No current evidence for potential TEU capacity.

Gdansk Outer Port Project

Key Conclusions:

- **Outer Port Project: If developed, the outer port project represents a competitive port option. However, the plan is highly speculative and the market demand does not justify such a significant development.**
- **The ability to attract private finance, especially within a BOT structure, is questionable.**
- **The development of the outer port project is unlikely**

GDYNIA TERMINALS – SMALLER FACILITIES OPERATED BY ICTSI & HPH

Two container terminals are present in Gdynia - operated by highly-experienced global companies, ICTSI and Hutchison Ports - but the water depth is limited and restricts sizes of ships that can call. Possible outer port development.

- Total port area: 971.6 hectares, including 619.8ha of land of which only 280ha is ”owned”/administered by the Port of Gdynia Authority
- Maximum draught along quays: 13m
- Total length of quays: 17.7km
- 2,500m long external breakwater
- Maritime entrance to the port: 150m wide with a draft of 14.5m

Summary overview of the Terminals:

- ICTSI Container Terminal (BCT):
  - Concession period **only** runs to 2023
  - BCT states the terminal is key link in logistics supply chain for import / export steel products
- Gdynia Container Terminal (GCT):
  - Part of Hutchison Ports
  - Concession period to end in 2089

Potential Outer Port Expansion Plan

- The plans are understood to include a new deep-water terminal, which extends beyond the current breakwater
- This area is a Natura 2000 site - this makes it part of a network of nature protection areas in the territory of the European Union.
- Current capacity is 1.6m TEU with an upside to approximately 2.5m TEU based on unsubstantiated reports.
- The proposed design is technically feasible, however at a relative high cost. In addition, the Natura 2000 listing may add compensatory measures to the development

Gdynia Container Terminals Key Facts

Criteria	Overview of Terminals	
	ICTSI	Hutchison Ports
Depth Alongside	12.7m	11.0m - 13.5m (opportunity to dredge to 15.5m)
Total Quay Length	800m	812m (although 192m is not usable)
Cranes	3 post-Panamax STS 3 Panamax STS 2 MHC	2 super-post-Panamax STS 2 post-Panamax STS 1 Panamax STS 1 MHC
Container Yard Operation	20 RTG 2 RMG	7 E-RTG (1-over-6, 6 wide) 7 RTG (1-over-5, 6 wide), 5 reach-stackers / 1 Empty handler
Estimated Capacity	1.0m TEU	636k TEU
Terminal Area	• 30 ha Container Yard of which 2ha storage and 2ha CFS • 600 reefer plugs	• 19.6ha • CFS • 384 reefer plugs
Road Connectivity	Kwiatkowskiego Elevated Highway, the Tri-City Bypass and the A-1 Highway	Kwiatkowskiego Elevated Highway, the Tri-City Bypass and the A-1 Highway
Rail Facilities	• 3 rail tracks at 680m each	• 2 rail terminals with 7 rail tracks • Marshalling yard with a total length of 1473m

Key Conclusions:

- **Both terminals benefit from operating capabilities and knowledge of ICTSI/Hutchison, respectively**
- **Infrastructure is limited - notably water depth and space for larger vessels**
- **Future role to remain specialist niche terminals, not for larger deep-sea ships carrying transshipment cargo**
- **Gdynia could be a threat if the project goes ahead, however with first mover advantage by DCT to expand, there is unlikely to be a desire to spend the necessary money to create a new facility.**

SZCZECIN / SWINOUJSCIE – HANDLES SMALL SHIPS BUT POTENTIAL EXPANSION

Expansion plans exist at both ports - of the two, Swinoujscie targeting 17m water depth and 1.5m TEU p.a. container capacity would be a competitor to DCT Gdansk - but the project is long term and faces considerable challenges even before construction

- The Port of Szczecin is currently focussed on general cargo although also handles a small amount of containers.
- The container terminal is operated by DB Port Szczecin and has a capacity of 120,000 TEU. Currently volumes are around 85,000 TEU per annum

Summary of Szczecin Development:

- Total area available of up to 170ha.
- 3 new quays on the western side of the Ostrów Grabowski Peninsula.
- Ability to offer sites able to specialise in a wide-range of different general cargo activities - i.e. containers, conventional cargo and heavy lift products.
- 3 new quays for bulk cargo activities located on the eastern side of port.
- Allocation of 25ha in the central part for port-related industry.
- Availability of West Pomeranian Logistics Centre in Port of Szczecin.
- If developed, will not compete with DCT Gdansk in its role as a largescale container deep sea transshipment hub.

Summary of Swinoujscie Development:

- Located to the east of the outer port in Swinoujscie
- Hub-tterminal means a possibility of servicing ocean-going vessels
- A water depth of 17m
- The target is to develop an offer and an annual capacity of 1.5m TEU

Szczecin Container Terminals Key Facts

Criteria	Value/ Comment
Depth Alongside	9.15m
Total Quay Length	1,000m
Cranes	2 Panamax STS 2 MHC
Container Yard Operation	4 RTG 3 Reachstackers
Estimated Capacity	120k TEU
Terminal Area	157 reefer plugs
Road Connectivity	Highway connections
Rail Connectivity	• 3 rail tracks at 300m each • Marshalling yard with 6 tracks 1,000m long

Key Conclusions:

- **The port has some expansion potential, but the overall competitive position is restricted by the access channel**
- **The container traffic through Szczecin is predominantly local cargo and there is limited to no overlap with DCT's hinterland**
- **Szczecin has potential to further target, and specialise in serving, niche feeder operators, including on a regional basis**
- **Current terminal utilisation is around 70%, leaving some spare capacity - albeit sizes of ships that can be handled are of a feeder size only**
- **Szczecin not competitor to DCT due to limited infrastructure - position will not change for this terminal and it will continue to target specialist niche opportunities**
- **Swinoujscie claims to be targeting a 1.5m TEU p.a. container terminal - this, if it did come to fruition, could offer some competitive overlap to DCT Gdansk, but the project has a substantial number of hurdles to overcome before any construction work.**

SCANDINAVIA – SOME GOTHENBURG POTENTIAL

Development of Gothenburg is targeted to serve regional transshipment markets – recent and prolonged labour issues have badly impacted the port's competitiveness and volumes handled

- The majority of container volumes for the Scandinavian market shipped via Gothenburg) and a limited element of feedering into Baltic ports.
- Despite the significant sailing distance from the main East-West shipping routes, APMT signed a 25-year concession at Gothenburg to operate the Skandia Container Terminal (SCT) in 2011, therefore endorsing potential that exists..
- Maersk Line believes that there is enough demand to warrant a direct call, which may be occurring after the ship has discharged cargo at other key hubs en-route.
- A prolonged labour dispute during 2017 severely impacted operations at SCT and in mid-July it was reported that the facility was operating at 30% of its full operating capacity.

Expansion Delay in Gothenburg – Finnish Ports Serve Russia/CIS

- APMT has an investment plan of SKr250m to introduce new straddle carriers to increase current yard capacity by 25% and build a second container yard.
- Merged HaminaKotka port in Finland serves approximately 50% of total country container market through Mussallo Container Terminal.
- Port offers 80km of rail within its control and is 250km to St Petersburg and 1,000km to Moscow – same track gauge applies to Finland, Russia and CIS states, which theoretically means it is possible to reach Chinese country borders without any transloading needed.
- Helsinki is a multi-cargo port, with container activities centred upon Vuosaari Harbour, which offers direct rail connectivity to national network.

Relevant Ports in Scandinavia

Port/Terminal	Length (m)	Depth (m)	Terminal (ha)	No. of Cranes
Sweden:				
Gothenburg (APMT)	1793	11.0 – 14.2	80.0	8
Finland:				
HaminaKotka	1610	10.0 – 15.3	75.0	7
Helsinki	1500	11.0	32.0	10

Key Conclusions:

- **Gothenburg has some key attributes to attract deep sea direct container calls, most notably a concession held by AP Moller**
- **A recent history for workforce disruptions at Gothenburg impacted volumes and port attractiveness to shipping lines**
- **Gothenburg's role as a hub port will remain, at best, a limited one outside local hinterlands and neighbouring Scandinavian countries**
- **HaminaKotka continues to target Russian hinterlands due to its good rail connectivity, with Helsinki continuing to see growth in container throughput**
- **Scandinavia will primarily remain a region served by feeders, linked to large hub ports in North Europe and the Baltic**

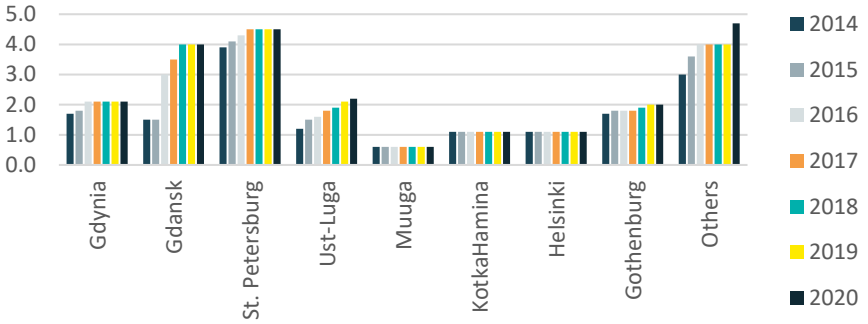
CAPACITY SUMMARY of SCAN-BALT REGION

Major capacity increases in the region are concentrated at only a small number of container terminals

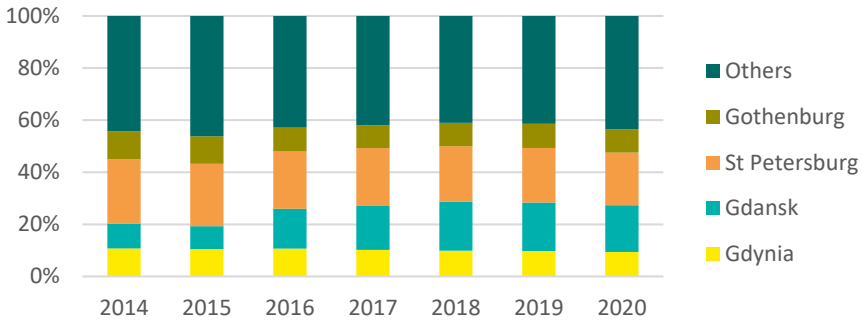
Additional container port capacity in the Scandinavia-Baltic region will be concentrated at a number of key ports over the short-term to 2020:

- **DCT Gdansk** - continued development at DCT Gdansk is the major driver of capacity in this sub-region, with the terminal offering around 3.25m TEU per annum from 2018-2019 onwards. Terminal 3 and Terminal 4, when built, will further boost the port's role as largest facility in the region..
- **Gdynia** – investment projects targeting improved operational efficiencies by both ICTSI and Hutchison Ports will see around 300,000 TEU of extra capacity added, collectively.
- **Gothenburg** – investment by concession-holder APM Terminals is already underway and is projected to see the port being able to provide a total annual capacity of 2m TEU by 2024, an increase over current levels of 1.7m TEU per annum.
- **St. Petersburg** – First Container Terminal has reached its maximum build-out, so the port's expansion has focussed at Berths 49-50 (Petrolesport) where 365m of quay and equipment as part of a 5.5ha project added 375,000 TEU to the container space available.
- The Fourth Container Terminal has unconfirmed plans to add 1.05m TEU.
- Ust-Luga is working to complete its Phase II expansion, which will see annual container capacity reach 2.2m TEU and a 3rd phase bringing total capacity to 2.9m TEU but timescales remain unconfirmed.
- All above Russian expansion projects are likely to remain on hold since volumes are significantly depleted as a result of the Ukraine War.

Scan-Balt Container Port Capacity Development, 2014-2020



Scan-Balt Region Container Port Capacity Share, 2014 - 2020



Key Conclusions:

- **DCT Gdansk remains the largest port in the region for transshipment activity involving deeper-draft ships arriving from Asia directly**
- **St Petersburg is a gateway to the large Russian markets and capacity has risen to reflect this objective, but it is not a direct-call facility from larger container ships and Ukraine war has changed the dynamic somewhat**

CONCLUSIONS

Terminal Operators should consider diversification rather than expansion to attract larger vessels, where first mover advantage has already been claimed by DCT Gdansk as well as existing NWC Ports

- One of the most significant trends affecting the container shipping industry has been the continuing increase in the size of vessels deployed. Other than the economic benefits for shipping lines, deep draught is a major competitive advantage of the port that could attract the main line container ship calls / services in addition to handling feeder / short sea container ships.
- However, DCT has the first mover advantage to attract Far East services operated by all three of the major Alliances into the Baltic Sea with the T3 expansion providing enough additional capacity to do so and lines are only likely to move away if there are "significant" costs savings are service levels can be proved to be better elsewhere
- Suggested deepsea developments elsewhere in Poland should only be considered for a long-term strategic positioning and ports may be better served offering other types of cargo, such as automotives, cruise, dry bulk, general cargo and RoRo to provide a more diversified offering
- Offering a strong hinterland connectivity by road and rail is also becoming increasingly important

- Existing large scale transshipment facilities in NWC such as Rotterdam, Antwerp, Bremerhaven and (the improved) Hamburg plus developing facilities such as Wilhelmshaven will continue to attract a proportion of transshipment cargo for the Scan-Balt region
- Ports in Scandinavia and Russia represent former spoke markets to the largescale hub facilities (especially in Germany) and have seen some direct calls, such as in Gothenburg (as port infrastructure has improved). The Russian market has understandably crashed as a result of sanctions imposed because of the invasion of Ukraine, but the market is a large one that will return once the hostilities have ended
- Shipping lines prefer to handle up to 50% gateway cargo even at designated t/s hubs, making it increasingly important to have a good core local market
- Current port investment is largely focused on building out existing projects, rather than Greenfield developments, as well as projects to improve access to the largest vessels
- Equity stake ownerships should not be overlooked as a main driver for where shipping lines want to call
- Continuing increase of number of vessels >24,000TEU deployed will see an increase in the size of feeder vessels, meaning that feeder volumes will increase and be more attractive proposition for ports that can handle them and short-sea services efficiently