
Modernisation of Container Ship Fleets: State of Play and Consequences for the Baltic Sea

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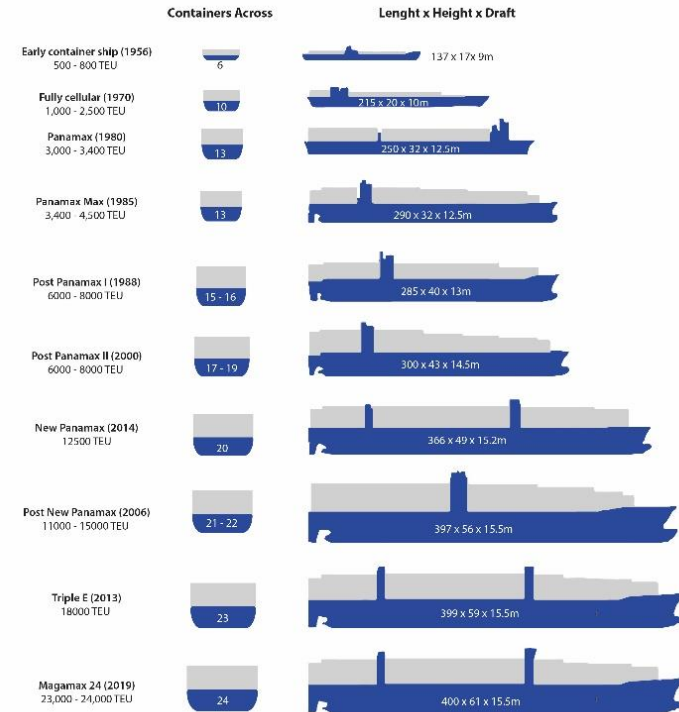
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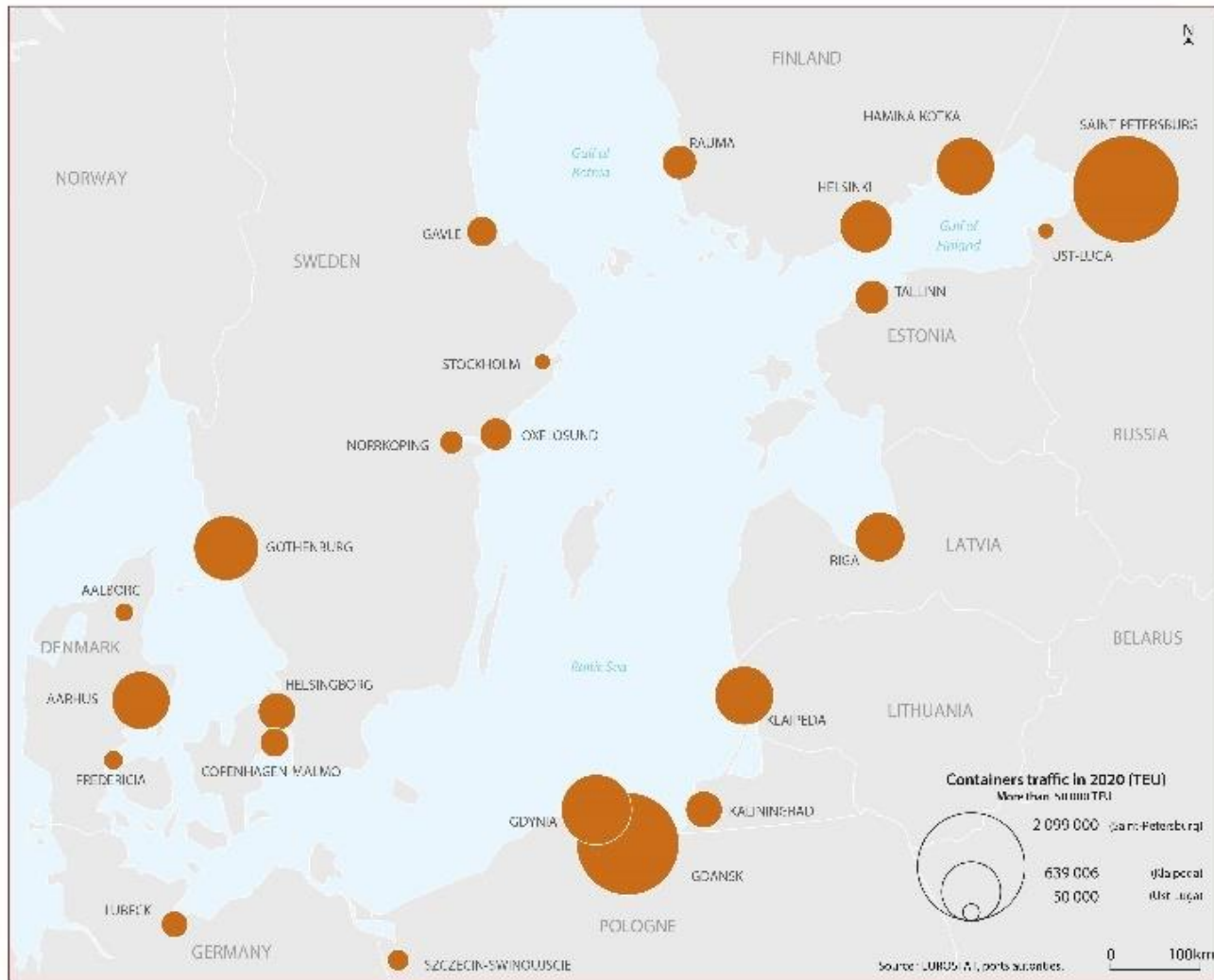
Introduction

- Since the 2000s, the size of container ships has grown exponentially (8,000 TEU max in 2000 and 24,000 TEU now),
- The economic and industrial development of Southeast Asia, and China in particular, has placed this region at the heart of world trade.
- Passage through the Panama Canal was no longer necessary, and many container ship operators adapted their services.
- Containerised maritime transport has therefore developed very speedily and has undergone major upheavals in maritime organisations and operators' strategies in recent years
- Cascading and impact on the Baltic Sea ?

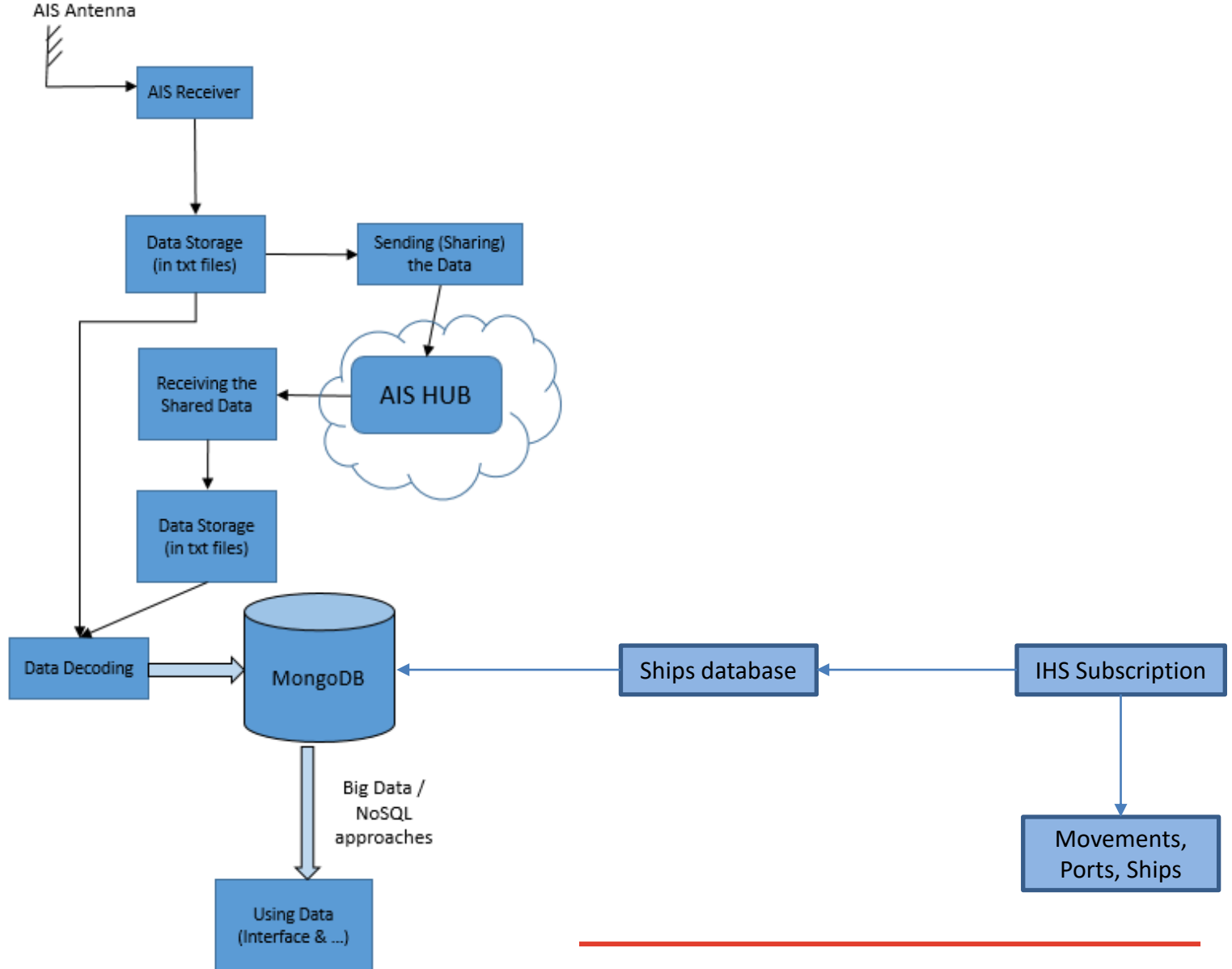
What impact has the growth in container ships had on the Baltic Sea shipping network and port calls?



Study framework



MARitime CIRculation (CIRMAR)

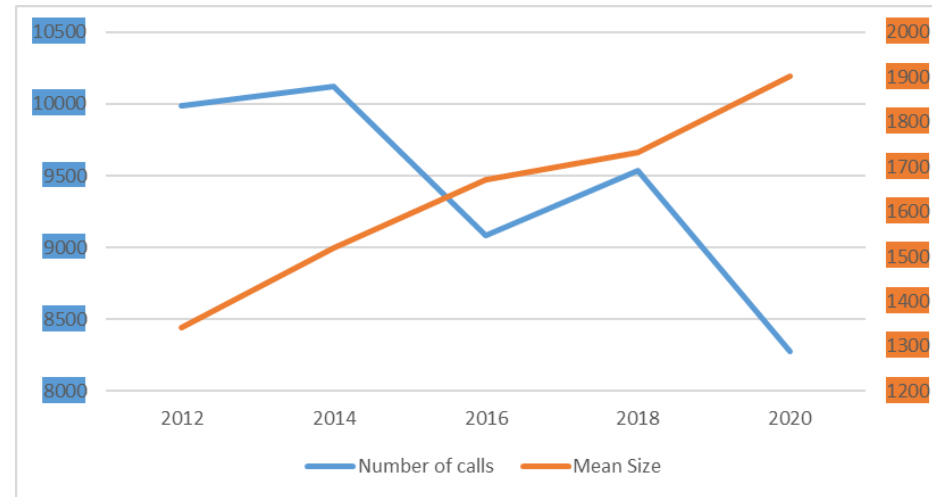


Results

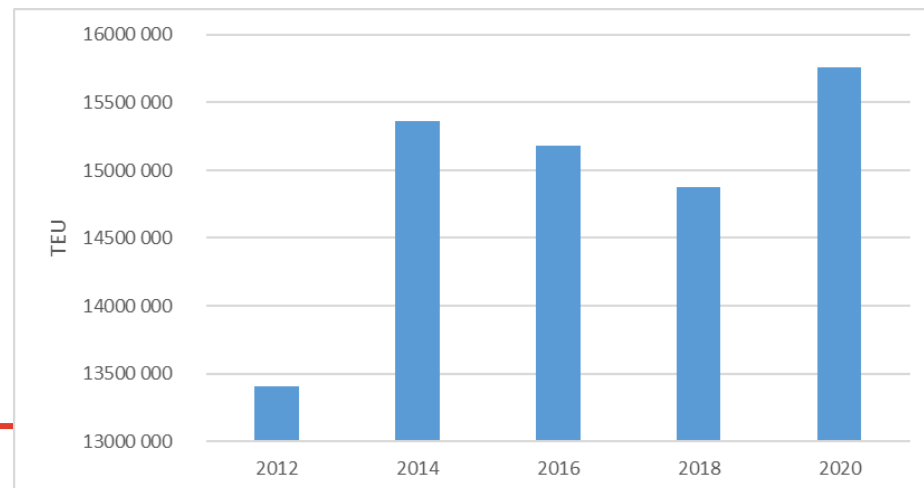
Overall approach

- Increase in the general size of container ships calling in the Baltic Seas Ports → +42% from 2012 to 2020
- Decrease of the total number of calls → -17% from 2012 to 2020
- Increase of the capacity offered at port → + 17,5 % from 2012 to 2020
- The number of shipping operators has also contracted. The number of container ship operators has fallen from 94 in 2012 to 69 in 2020

Evolution of the number of calls and the average size of container ships calling from 2012 to 2020.



Evolution of the number of shipping companies operating in the Baltic Sea from 2012 to 2020.



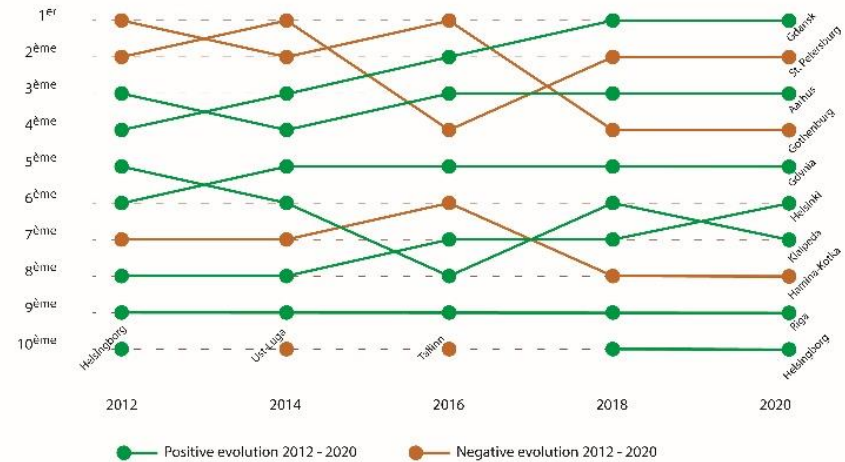
Results

Analysis of port passage

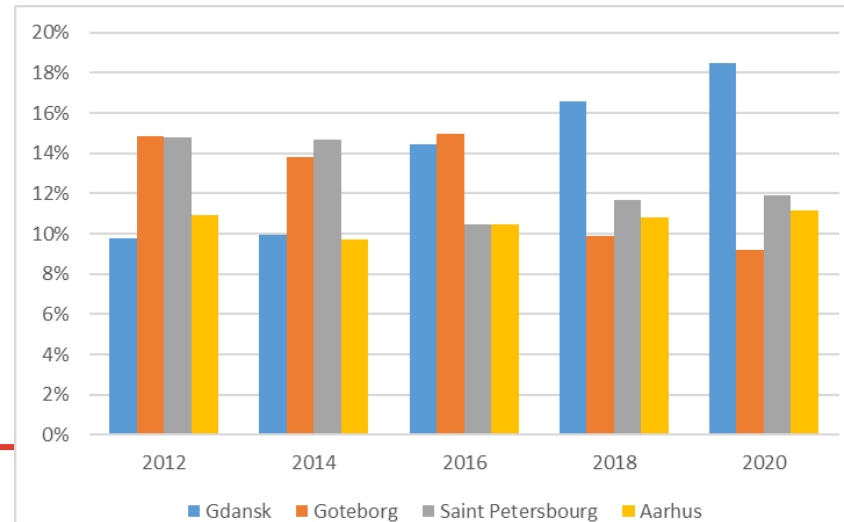
- Increase of the port of Gdansk in the classement according the total capacity offered → Ranking 1
- Rebalancing of the distribution of capacities offered at ports of call → Important increase of the importance of the port of Gdansk.

➔ These analyses make it possible to highlight the growing importance of the Polish ports, and more particularly Gdansk, in the containerised maritime networks.

Top 10 Baltic Sea ports by unit transport capacity from 2012 to 2020



Relative weight in offered capacity of the 4 main ports.

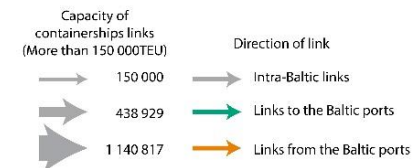
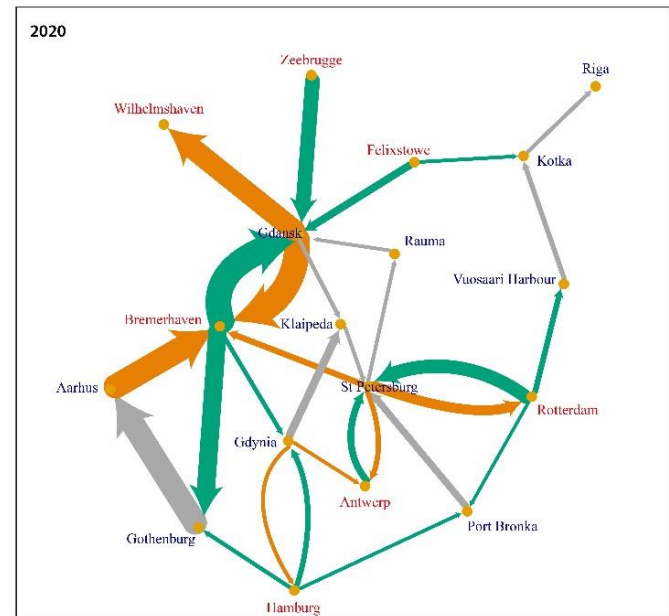
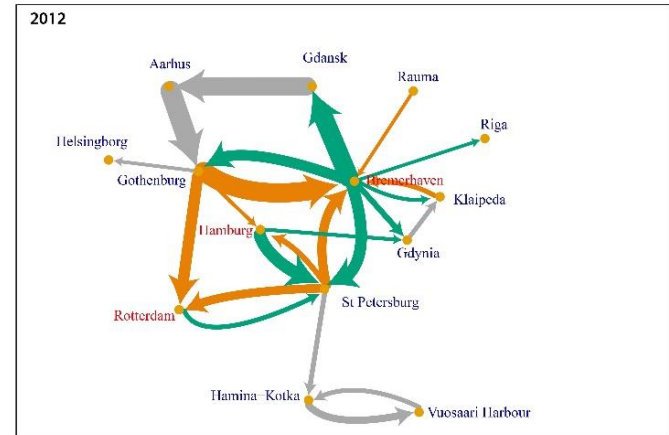


Results

Analysis of maritime network

- Development of maritime connections to external ports (From 3 main ports to 7).
- Decrease of the importance of the port of Hamburg and development of relations with the port of Bremerhaven.
- Between the Baltic Sea ports, the unit transport capacities offered are relatively low.
- The position of the port Gothenburg has been overtaken by the port of Gdansk.

➔ **The port of Gdansk is emerging as the main regional hub that interconnects with external ports**



Conclusion

Main conclusion of our analysis :

- The average size of ships calling has increased and at the same time the number of calls has decreased, concentrating and contracting the transport offer on larger ships;
- Many small shipping companies have disappeared from the Baltic Sea port landscape, concentrating the transport offer around a smaller number of operators (27% decrease);
- Emergence of the port of Gdansk (increase in the number of calls, average size of container ships, etc.) as a new regional hub;
- Development of the maritime network and interport relations with external ports and with the port of Gdansk as a relay;
- The strategic position of the ports of Goteborg and St. Petersburg is declining and becoming more secondary;
- The port of Bremerhaven is positioning itself as the main port hub between the main world trades and the Baltic Sea ports and at the same time the position of the port of Hamburg has been marginalised.

Thank you for your attention !

Dziękuję !



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