



# Global View on Container Transportation

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# Perspectives on container transportation market

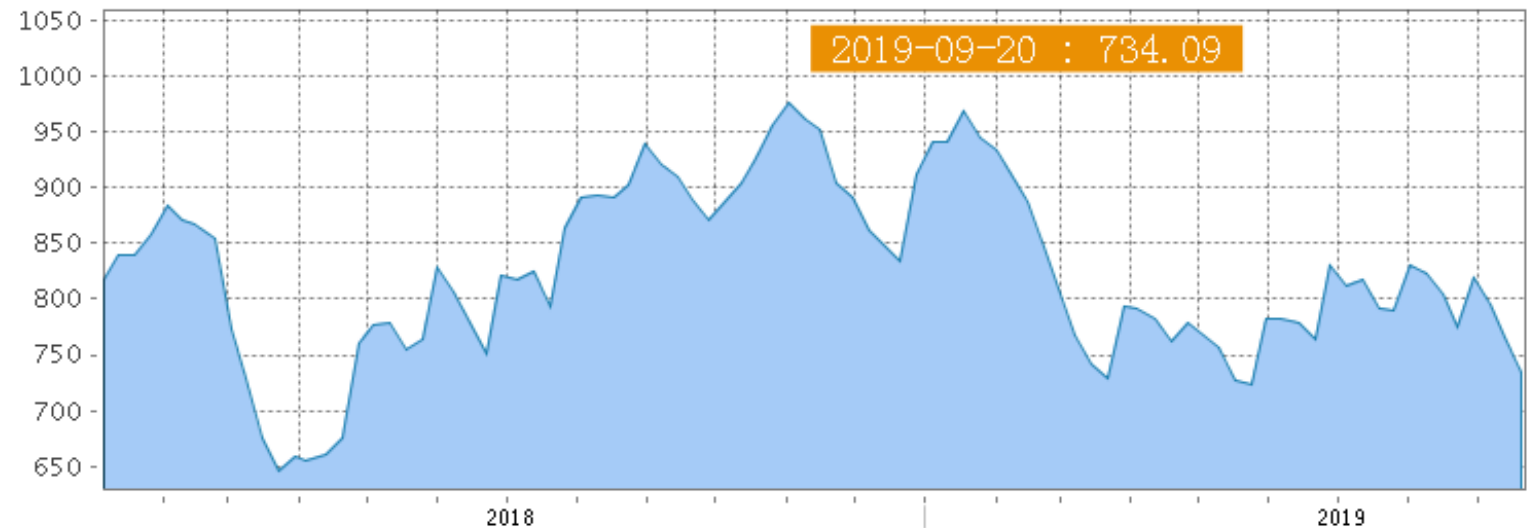
- The share of the containerized goods in the total freight was 15,7 % of total tkm s (20 16)
- Global Shipping Container Market is valued at USD 6 742.2 Million in 20 18 and expected to reach USD 11 406.0 Million by 20 25
- Volume development follows the trade volume of the world →3-5 % growth/year?
  - *The container industry is facing more challenging times with unstable economic outlooks and rising protectionism adding unpredictability to the market*
- Containerized transports are 60 % of total sea-borne trade
- Refrigerated container transports are estimated high growth
  - *Containers offers flexibility in transshipment in the multimodal transport chains for temperature -controlled cargo*
- Container transports by rail are estimated also high potential
- China dominates both the global container production (more than 90 %) and the container trade

# Pricing and cargo volumes

- Forecasted a slight decrease in prices (SCFI and CCFI)
- Container volume from Asia to Europe +5,2 % (1-6/20 19) →surprisingly high in slowing economies in Europe
- Asia–North Europe -14 % from 20 18 to 20 19
- More mega ships (20 000+ TEU) coming this year →more capacity available →cost levels?

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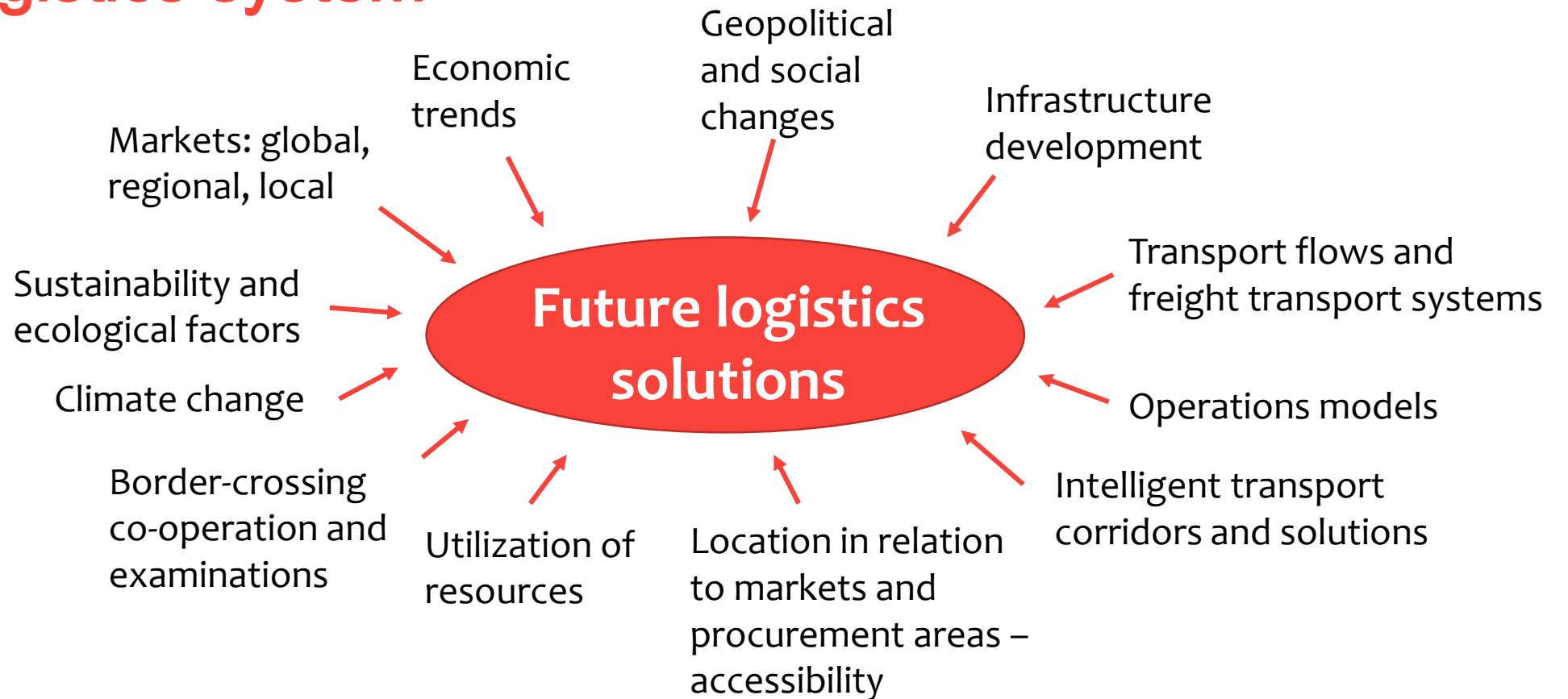
## Shanghai Containerized Freight Index



# Driving forces in logistics

- Logistics performance and efficiency are both nationally and internationally key success factors to the economic growth and global competitiveness of nations (World Bank 2016)
- Effective and fluent supply chains are one of the key drivers in economic growth
- Global value chains and supply networks are operations environment for all the companies regardless of location, digitalization will support the development
- Transparency of markets, customer driven operations and complexity of supply chains are increasing → search for efficiency for example by using transport units and automatization (container transports)
- In addition demand forecasting, cost-efficiency and customer service capabilities are crucial in logistics

# Main factors in development of complete logistics system



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**➔ The growth and competitiveness of businesses in diverse areas, basis for sustainable industrial future and positioning in the markets**

# Main requirements for logistics

1) **Cost efficiency**

— *The most cost efficient solution is often also the most energy efficient*

2) **Safety and security, reliable deliveries, high service level**

3) **Ecologically sustainable solutions**

— *Carbon neutrality as a target*



Development of transportation and logistic systems at different levels

— *Companies, regions, local infrastructure, national infrastructure, international operations environment, corridor level development, service supply, politics, at present and in the future,...*

Local and regional

National



European



Global



**TRANSPORT NETWORKS**

**SUPPLY CHAINS AND FREIGHT FLOWS**

**MARKETS AND PROCUREMENT**

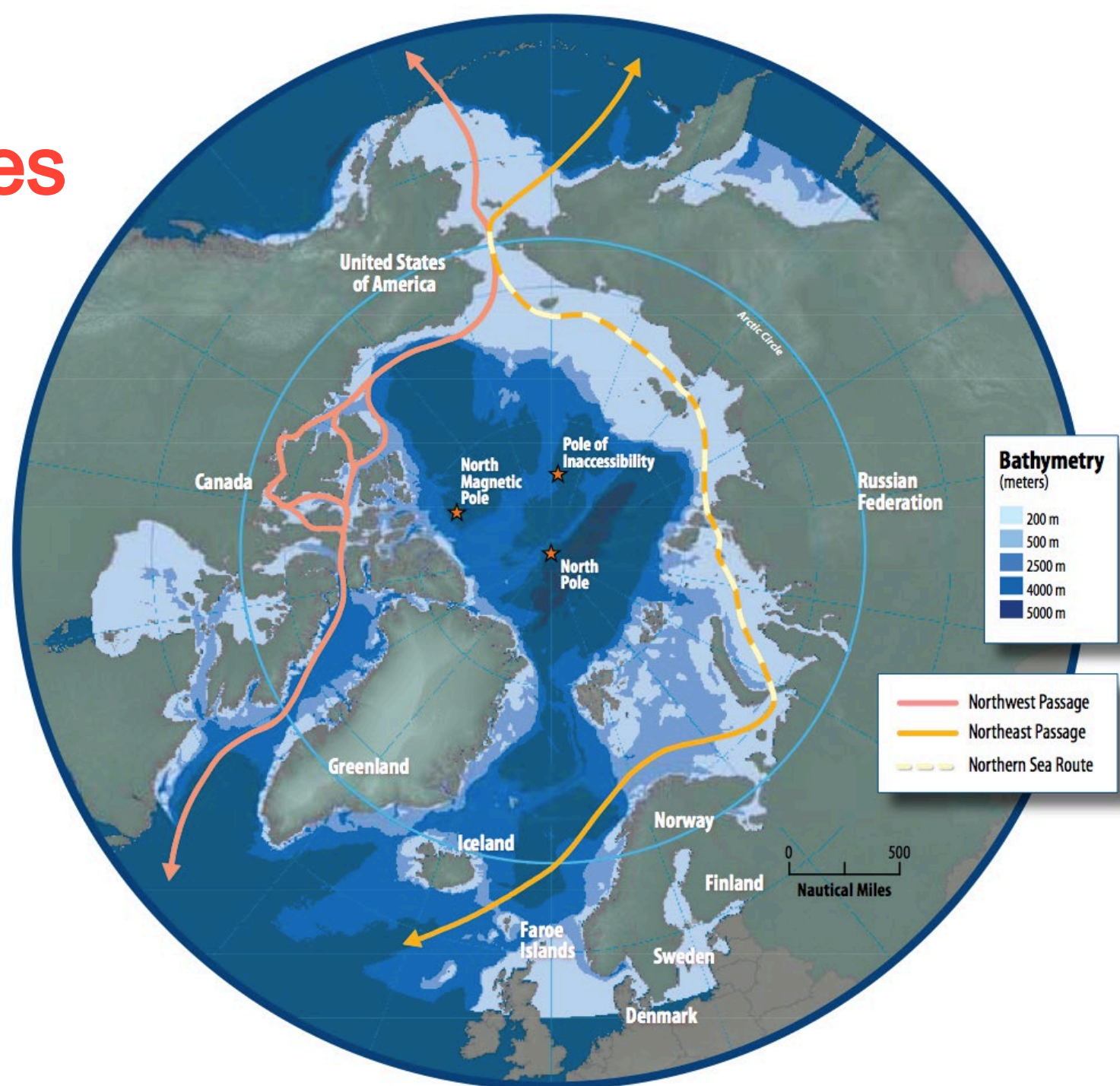


# New routes for container transportations

- One belt, one road approaches – container and block trains
  - *Increasing volumes*
  - *Including many routes and markets*
  - *New routes, future potential for northern routes*
- Northern Sea routes
  - *New phase: project shipping → LNG, containers, mining products,... to markets*



# Northern Sea Routes



# Estimated transport volumes in the North passage

-East

- 5–15 % of trade value of China by 2020 (China)
- 25 % of all the cargo transports by 2030 (South Korea)
- 15 % of global transports by 2030 (EU commission)
- 25 % of trade between Europe and Asia by 2035 (Polarisk)
- 40 mill. t 2020, 67 mill. t 2025, 72 mill. t 2030, of which 50 % LNG and a great deal of transports to the eastern markets (Ministry of Natural Resources in Russia)
- Within predictable next few decades there is not any significance in commercial traffic (Turku School of Economics)

## Notice:

- A lot of ongoing investments to infrastructure and diverse fleet, also ice breakers → Transport volumes are growing in line with improvement of service levels, reliability and safety
- Not only competitive route to traditional transport routes, more like new growing and very potential market → Needs a change of paradigm
- The role of political decisions → future development is not possible to estimate based on past data
- New industrial ecosystems in the Arctic → generates more freight transport flows

# Conclusions

- Uncertain forecasts in container transport volumes vs. development of European economy and protectionism
- A lot of capacity is going to be delivered to sea container market
- Low cost level at sea container rates is challenging for launching new alternative container based services (for example rail concepts)
- New transport routes potential for new transport segments, products and certain markets
- Need for system level approaches in development

