

# ONTWIKKELINGEN WERELDWIJDE GOEDERENNETWERKEN

LORI TAVASSZY

INTERNATIONAL TRADE | December 25th, 2017 | Written by Gary Barraco

## SIX GLOBAL SUPPLY CHAIN TRENDS TO WATCH IN 2018

THE COMPLEXITY OF CONDUCTING GLOBAL TRADE IS EXPLODING



### SHARELINES

[f](#) [t](#) [in](#) The number of new free trade agreements enacted by the EU has been substantial in the past two years.

[f](#) [t](#) [in](#) The US is seeing little to no action on the trade agreement front.

[f](#) [t](#) [in](#) FTAs are helping European businesses export more to countries and regions outside of the

Global trade continues to accelerate both in volumes and complexity, with the WTO's most recent trade forecast revised to show improved growth in world merchandise trade volume. Just look at the numbers from Alibaba and their most recent Singles Day, where products were purchased from 192 countries. The number of tons shipped by ocean containers has multiplied many

### TOP STORIES



[TOYOTA/MAZDA \\$1.6-BILLION INVESTMENT IN ALABAMA: FOUR TAKEAWAYS](#)



[GLOBAL LOGISTICS PLANNING GUIDE: POLITICAL FUTBOL](#)



[TEXAS ELITE CITIES FOR BUSINESS](#)



[MEET THE ELITE!](#)

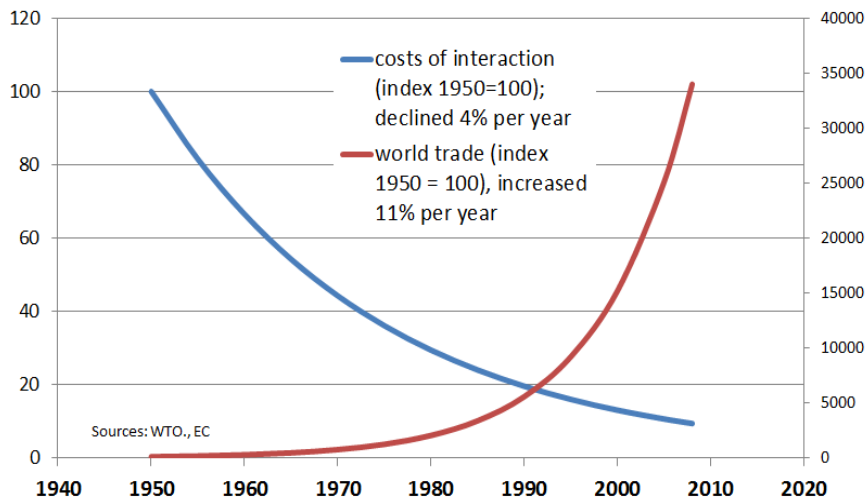
### FEATURES & LISTS

[WHO'S WHO - THIRD PARTY LOGISTICS](#)

# CONTEXT

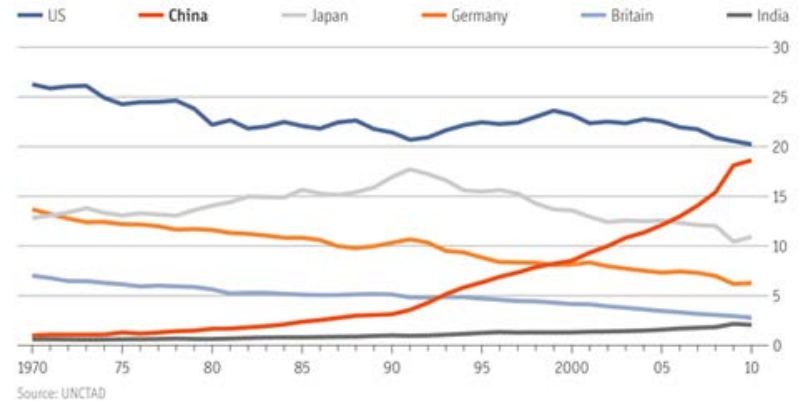
- Globalisering; verschuiving zwaartepunten; nieuwe supply chains; off- en reshoring ervaringen; BRIC en Afrika

Costs of interaction and world trade 1950-2008



## The new world order

Manufacturing, 2005 prices, % of world output



## The world's population

Regional % change, 2013-2050 forecast



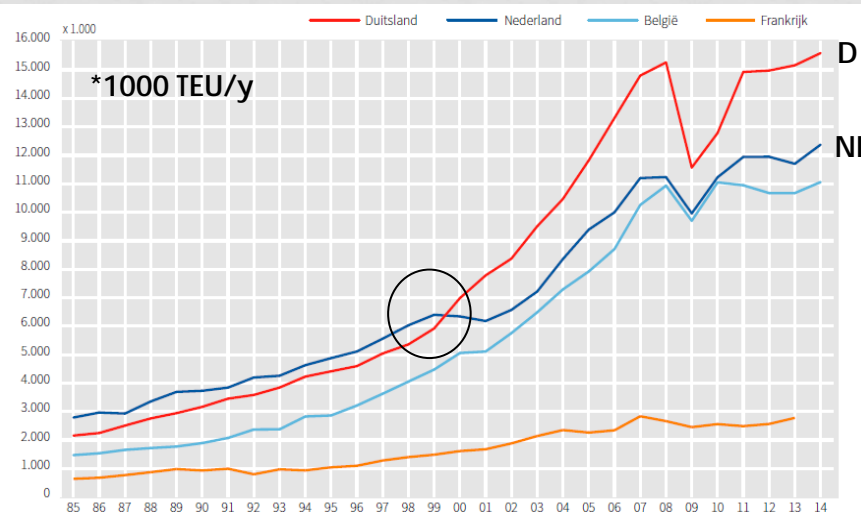
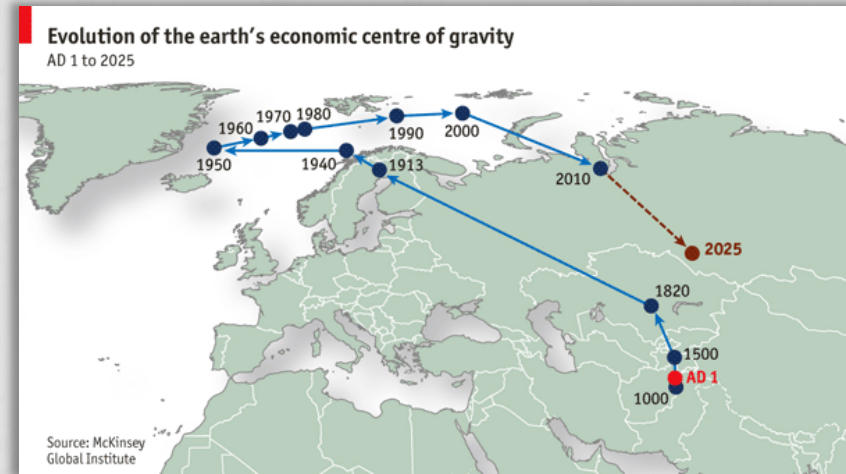
Total population, bn



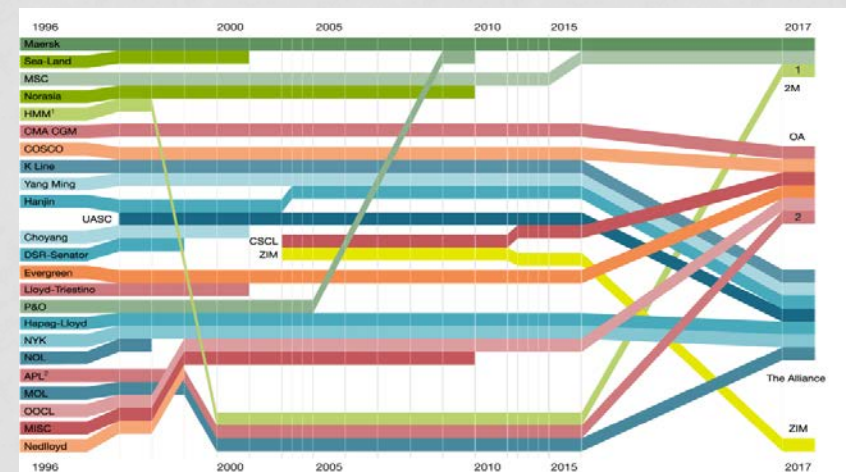
The Economist after UN, 2015

# NL IN HET WERELDWIJDE NETWERK

- Zwaartepunt wereldeconomie terug naar China na 1000 jaar
- China investeert in schepen; ondanks consolidatie nog enorme overcapaciteit
- Rotterdam: sterke hubpositie, maar...
- Zwaartepunt overslag verschuift naar Noord-Europa;
- Positie NL overslag al lang onder druk



Bron: Port of Rotterdam

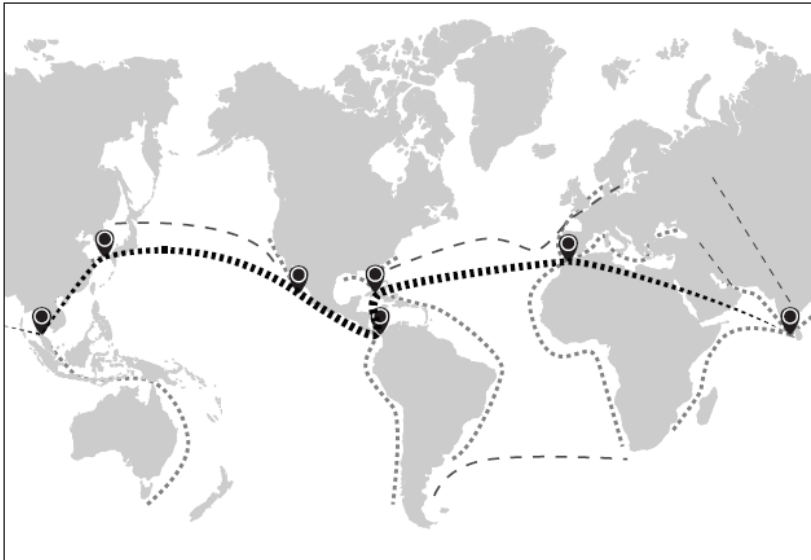


\*HMM not yet confirmed.  
\*APL to merge with CMA CGM.  
McKinsey&Company | Source: Alphaliner

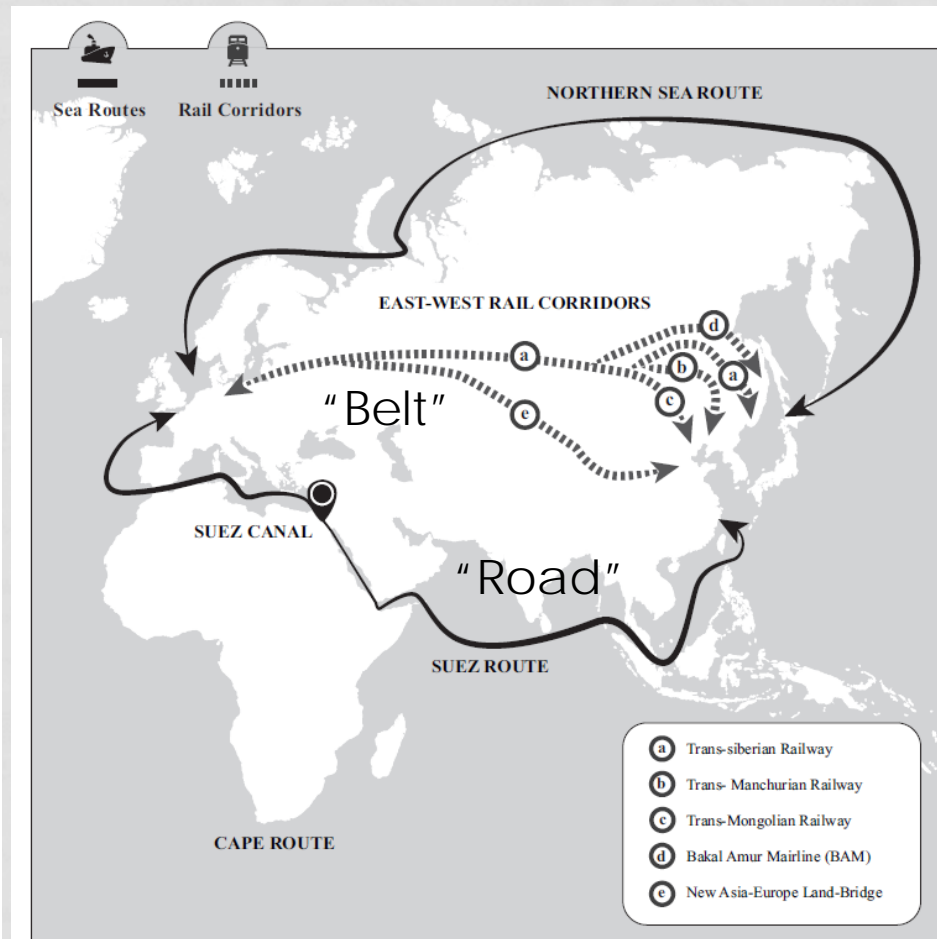
# OBOR = ONDERDEEL VAN EEN “GLOBAL CONVEYOR BELT”

- Panama en Nicaragua; Transsiberische spoorlijn; Arctische route; Wereldwijde fysieke internet.
- One Belt One Road vnl. gericht op Eurazie

*Does China intend to develop OBOR into an Around-the-World Transport Network?*



INFOGRAPHIC 4 - SOURCE: SRM on Haralambides (2017)



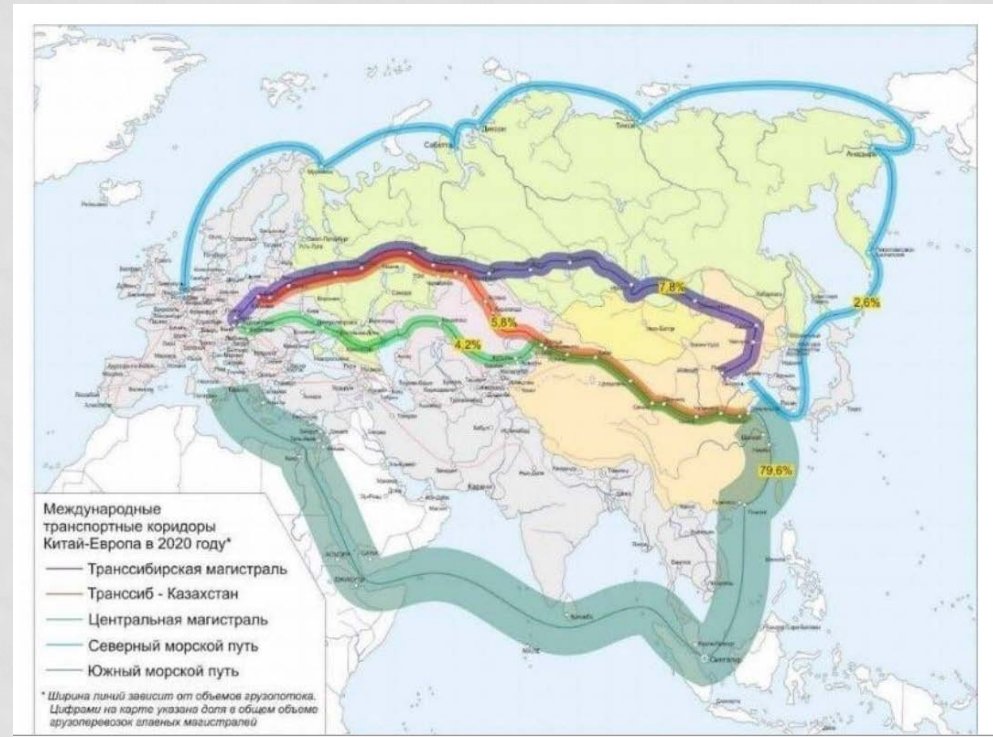
INFOGRAPHIC 1 - SOURCE: SRM on Tavasszy *et al.*, 2011

# “DIEPE ONZEKERHEID” IN MARITIEME NETWERKEN



# OBOR: MAN OP DE MAAN OF LEGE HULS?

- Overzicht stromen en prognoses
- Ontwikkeling van de markt
- Chinese financiële- en geopolitiek
- Uitwisselbaarheid modaliteiten
- Effect op havens en netwerken achterland



# INVESTERINGEN

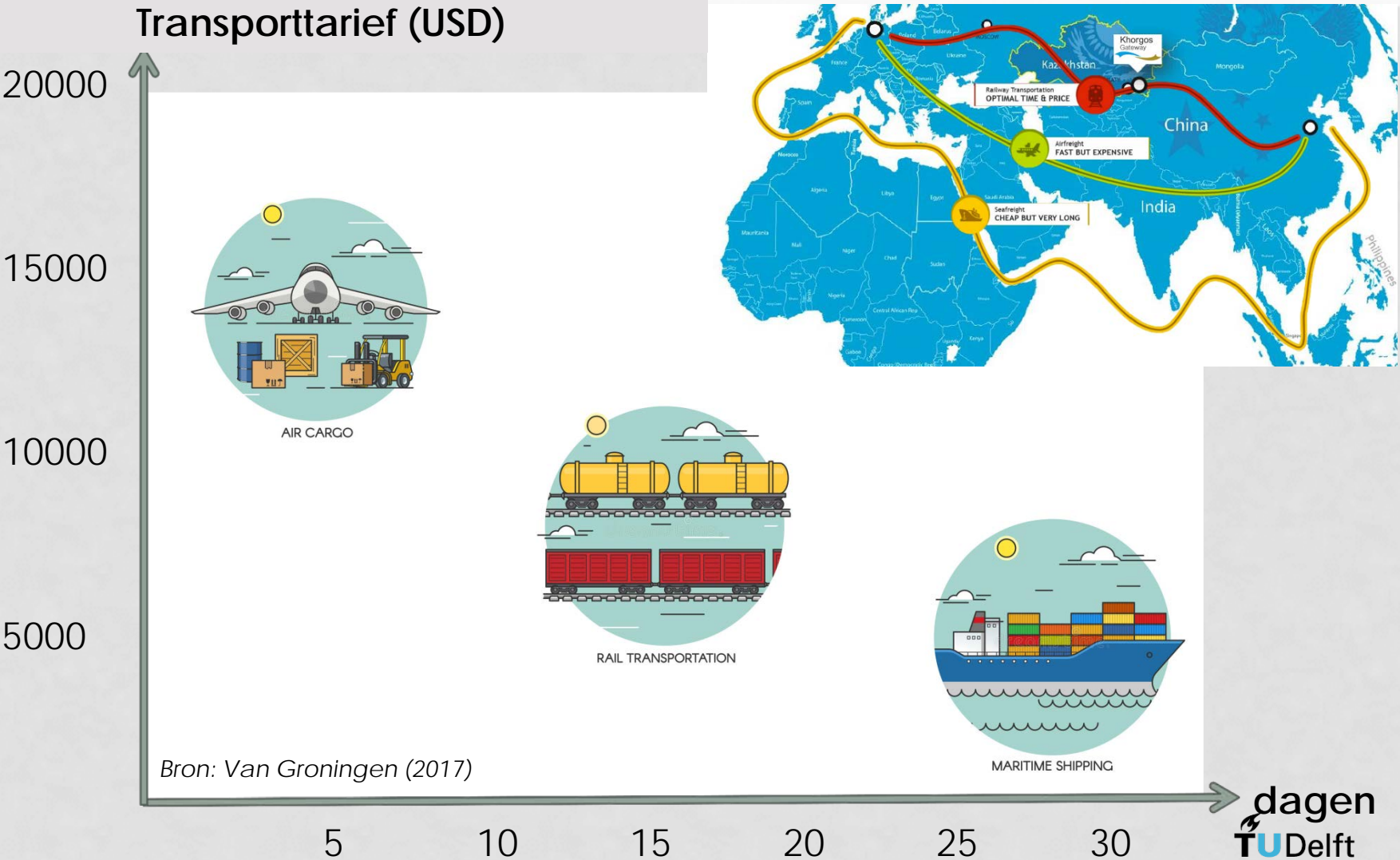


- Uiteindelijke investering >USD 1000 mld
- Betrokkenheid van 65 landen
- Oerwoud van projecten
- Top-down regie op implementatie?

Actual projects see  
<https://reconnectingasia.csis.org/map/>

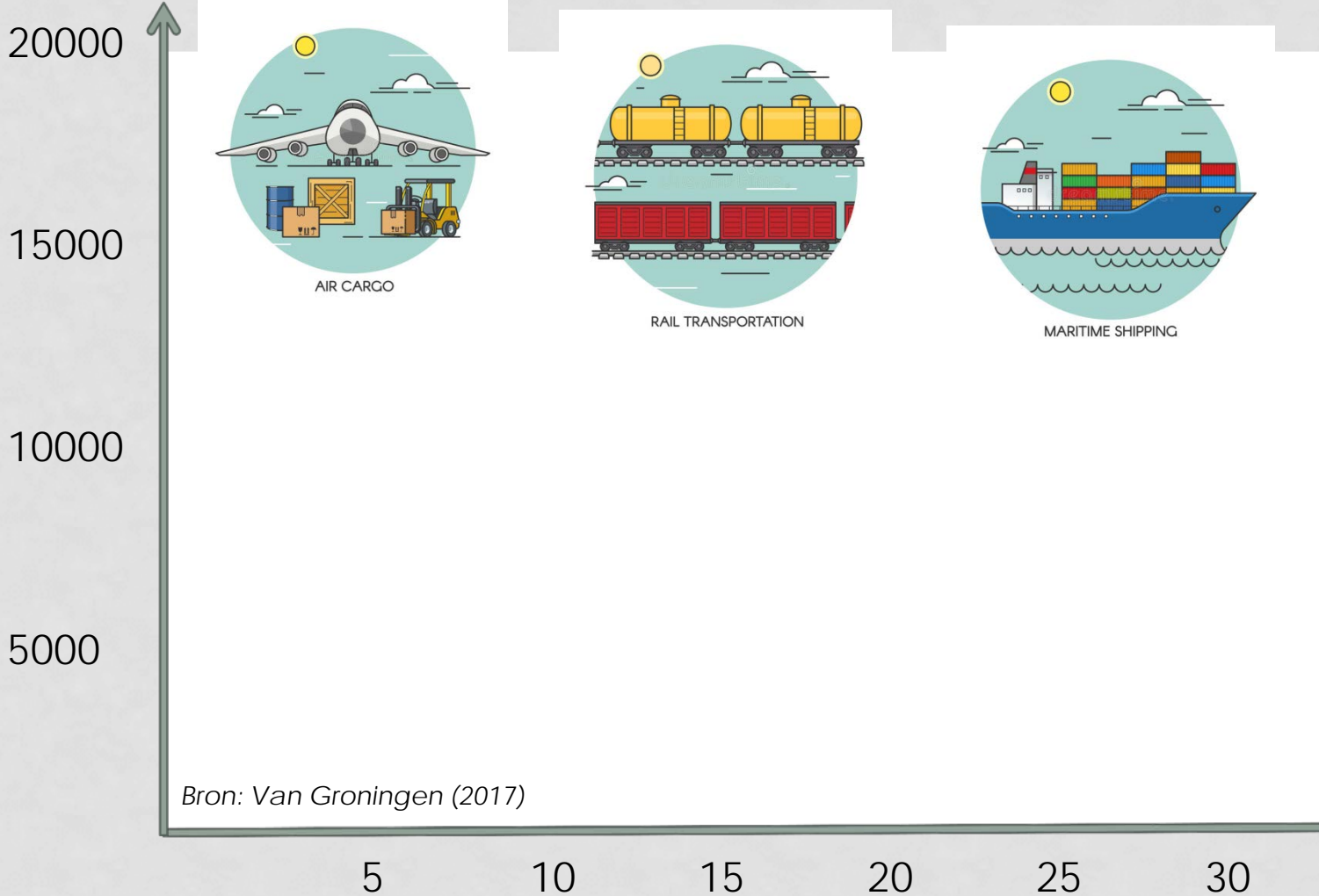


# UITWISSELBARE MODALITEITEN?



# UITWISSELBARE MODALITEITEN?

Totale logistieke kosten (USD)



Bron: Van Groningen (2017)

# VOORRAADKOSTEN IN DE PIJPLIJN

Totale Logistieke Kosten = transportkosten  
+voorraadkosten + handlingkosten

Case: container met 1000 laptops, waarde 500.000 \$

- Transport + handling
  - Luchtvaart 6000\$ (2\$/kg x 3kg/laptop)
  - Zeevaart: 1500\$
- Pijplijnvoorraad
  - Luchtvaart: 3 dagen  $\approx$  plm. 0,1% waarde = 500\$
  - Zeevaart: 30 dagen, 10% rente  $\approx$  plm. 1% waarde = 5000\$
- Totale logistieke kosten: beide 6500\$

VOOR

LIJN

Totale  
+VOOR

Case:

- Trans
- Luc
- Zee
- Pijplijn
- Luch
- Zeev
- Totale

# THE LOADSTAR

MAKING SENSE OF THE SUPPLY CHAIN

HOME AIR LAND SEA SUPPLY CHAIN LOADSTAR LEADS WIKILEAKS COM

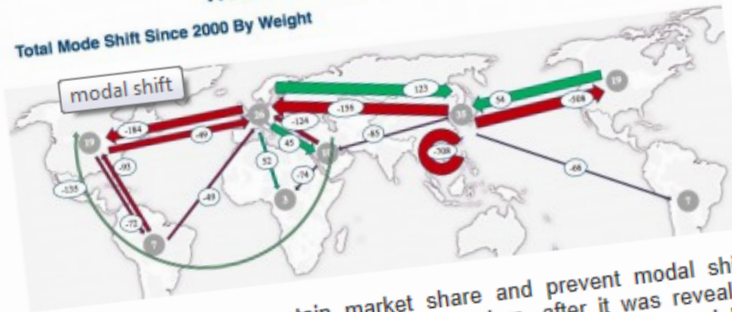
## Shipping has won a tenth of global air cargo volumes

By Alex Lennane in Doha

03.14.2013 · Posted in Air, Loadstar posts, Sea, Topics Add to favorites

### Mode Shift Is Real

Total Mode Shift Since 2000 By Weight



If air freight wants to retain market share and prevent modal shift, innovation will be critical, said industry leaders, after it was revealed today that air cargo lost 2.6m tonnes – equivalent to 10% of its global volumes – to sea freight since 2000, according to analysis from Seabury Group, as the maritime industry improved its products and services.

"Innovation will be our key challenge in the short term, and we need to accelerate our transit times." Robbie Anderson, president, United Cargo.

### Company news

ILA members overwhelming six-year master contract

Kuehne + Nagel provides solutions for Royal Caribbean

United Cargo launches 76 between SFO and CDG

ITF president meets with H dockers during solidarity m

Evergreen Line strengthens service network

swisspo cargo 000\$

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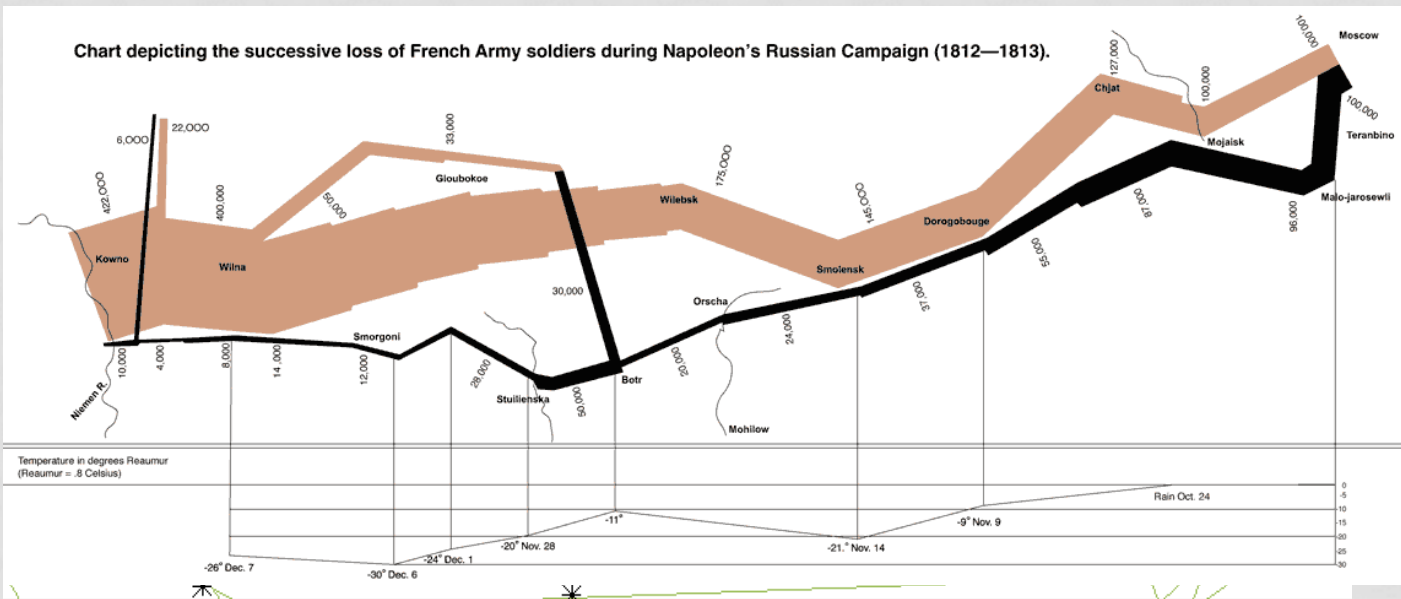
# STROMEN OP HET SPOOR

- Dienstverleners: COSCO, DHL, DB Schenker, Samskip, KTZ Express, RZD, Chongqing Logistics, Far East Landbridge, Weiss-Rohling, Rail Cargo Group
- Verladers: HP, Fujitsu Siemens, Mazda, BMW, Volkswagen, Audi, Skoda, Peugeot, e.a.

(Unece, 2015)

- Producten: hoogwaardige goederen
- Machines, auto's en onderdelen
- Food en landbouwgoederen
- Chemie
- Stromen dunnen snel uit van west naar oost

Chart depicting the successive loss of French Army soldiers during Napoleon's Russian Campaign (1812—1813).

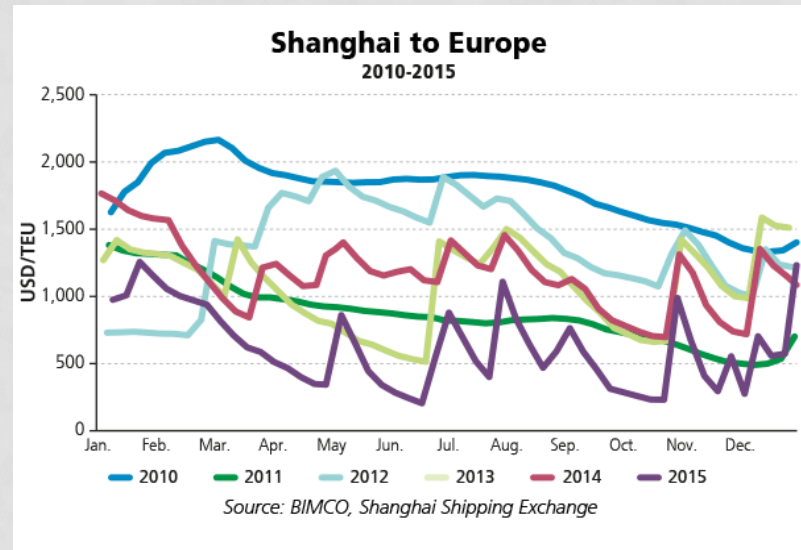
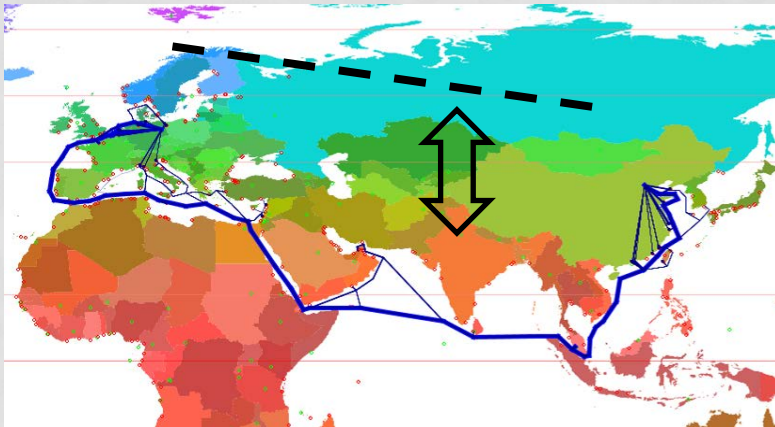


## Potential container volumes

- stackedLoads
- 1: AgriculturalProducts
- 2: Foodstuffs
- 3: SolidMineralFuels
- 4: PetroleumProducts
- 5: OresAndMetal
- 6: IronSteelMetals
- 7: Minerals
- 8: Fertilizers
- 9: Chemicals
- 10: VehiclesMachineryOther
- 11: EmptyContainers

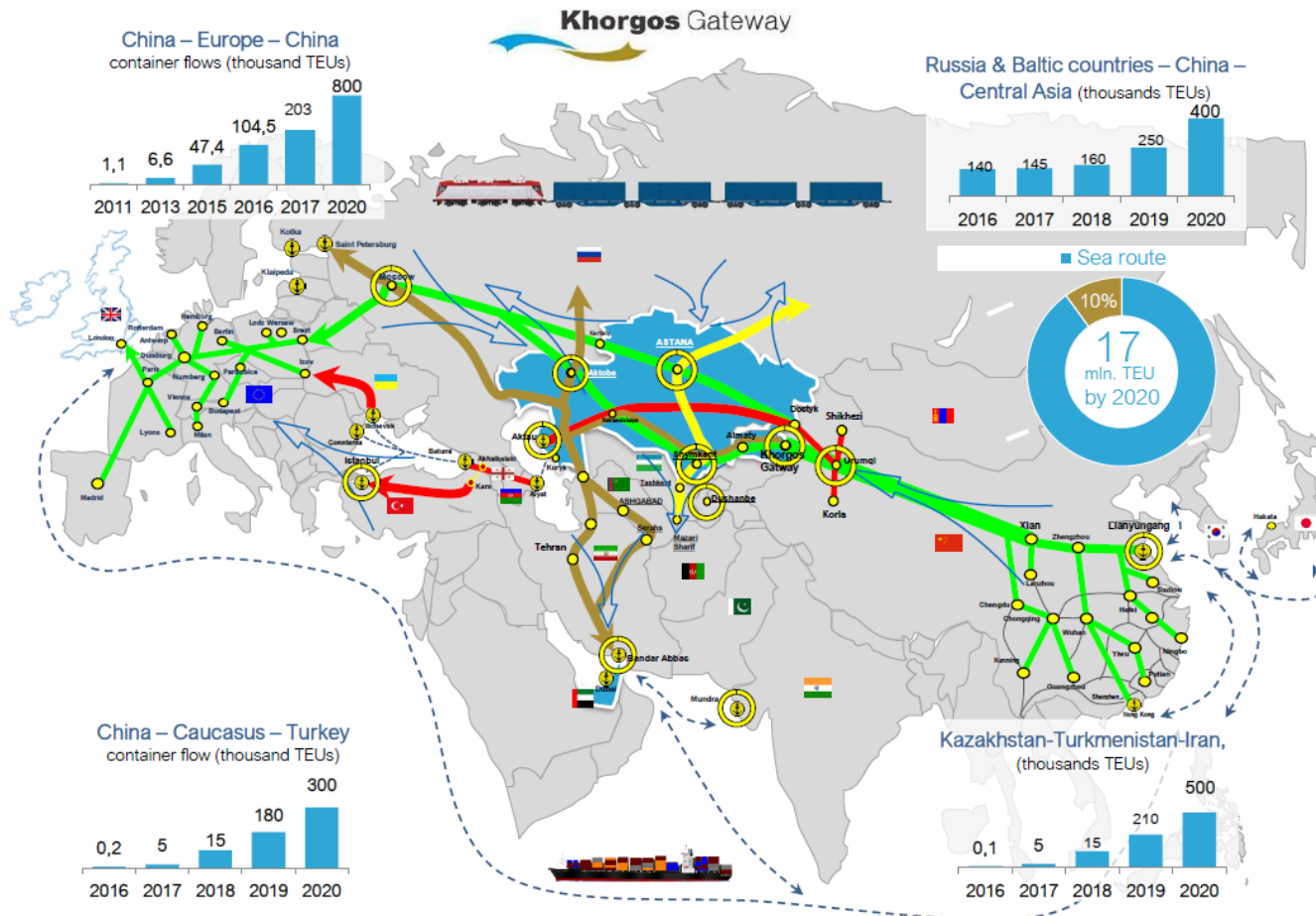
Volumes (million TEU/year)

# VOLUMES TSR GEVOELIG VOOR TARIEFSCHOMMELINGEN ZEERROUTE

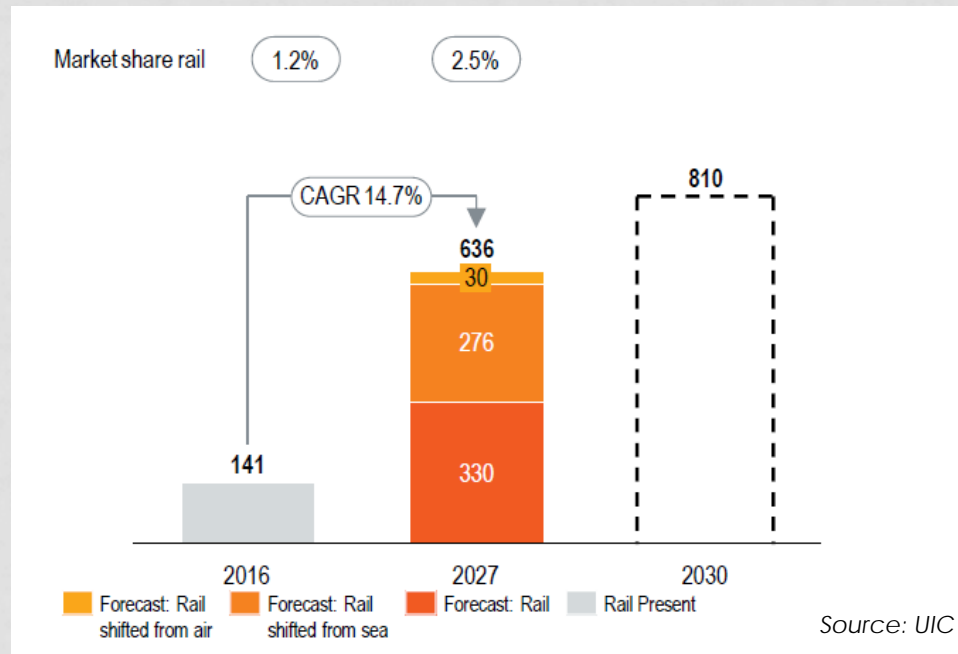


- Stroomen TSR vooral gevoelig voor tariefschommelingen zeevervoer;
- Voornamelijk vanwege grote volumeverschil
- Zeer elastisch: 10% verlaging zeetarief kost TSR 30% van stroomen

# POTENTIEEL



# POTENTIEEL





# VERWACHT EFFECT NL



- VOLUME-EFFECT BEPERKT
  - Aandeel op China-EU stroom < 5%
  - Capaciteit kan opgerekt tot 1-1,5 MTEU/j.
  - Onbalans: EU export 10-30% van import
  - China-NL < 10.000 TEU (import, 2016)
  - Netwerk geplaagd door veel barrières
- ALS KWALITEITSPROJECT BIEDT OBOR KANSEN
  - Kleine, hoogwaardige stromen
  - Slimme logistieke concepten
  - Aanvulling luchtvaartsysteem

# DE ZIJDE VAN DE 21E EEUW?

## Free shipping



One of the biggest advantages of AliExpress is the free shipping that is offer on 99% of the products that you can order.

Free shipping ? But the products are being sent from China... How is this possible ?

Yes, this can look strange, especially because we know that most local e-commerce sites ask you to pay for the shipping costs, even though the product you're ordering is sometimes only a few miles away from your home.

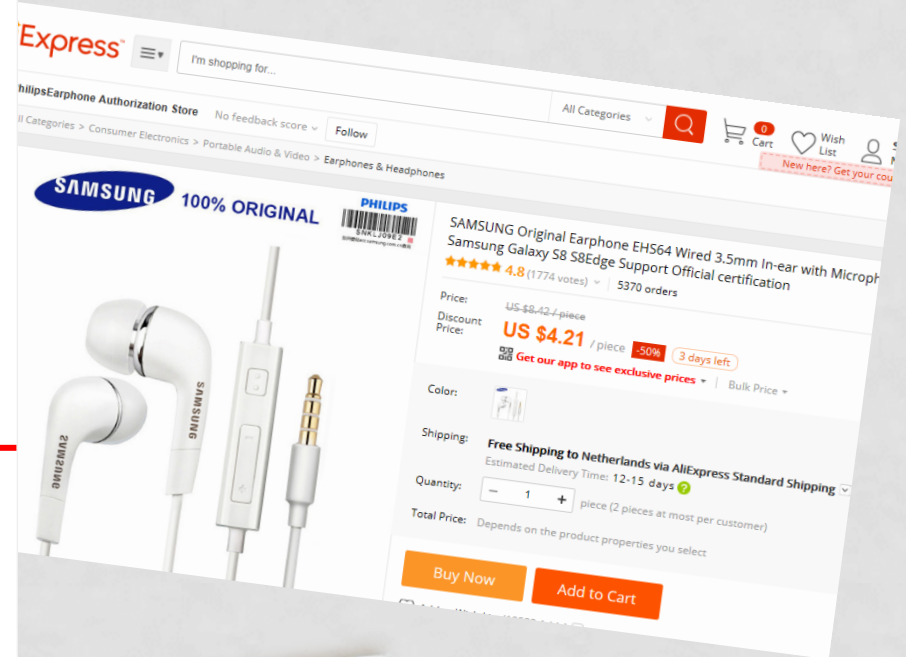
Be careful though, **because it can take a little time** : you may have to wait from 2 to 5 weeks in order to receive your products.

If you can't wait, you can choose to use a paid delivery, where you ask a western carrier like DHL or Fedex. However, be careful : if you do so, you should take in account the potential custom fees you may have to pay.

## Finding a reliable seller

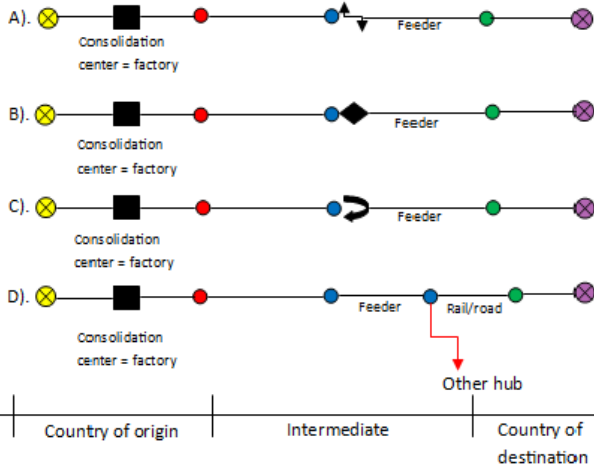
You should know that **AliExpress is uncompromising with bad sellers.**

This is way the marketplace only pay the sellers when the customer has effectively received the products he has ordered in their store. This is a way for AliExpress to ensure a good service, and to prevent scammers looking to deceive you.

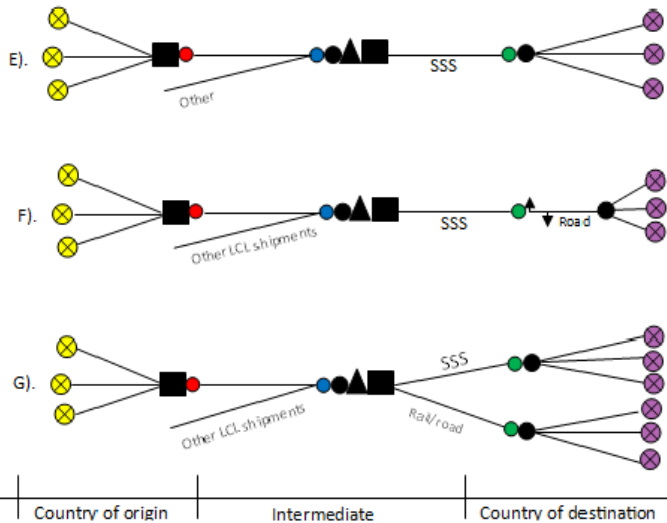
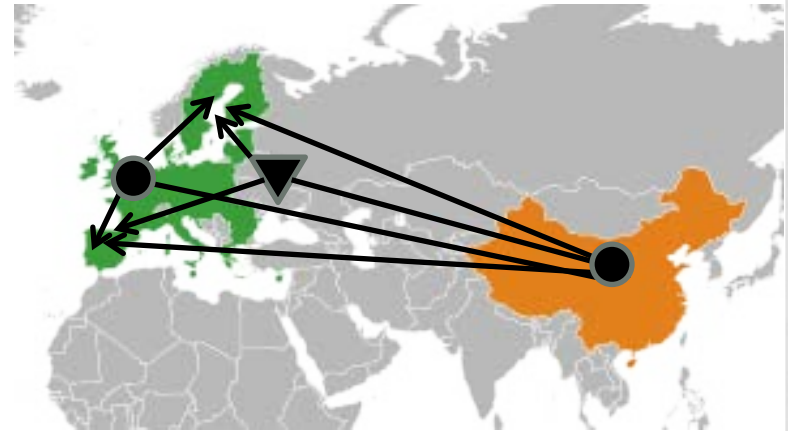


# HUB-STRATEGIE VOOR HOOGWAARDIGE GOEDEREN

China EU hub EU dest



FCL configurations

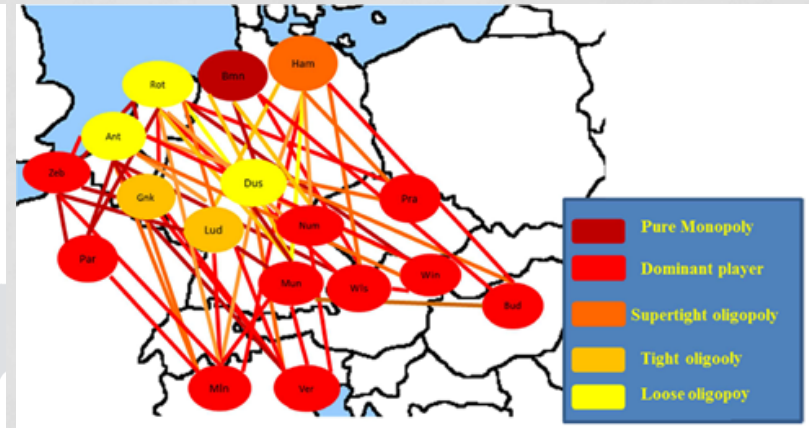
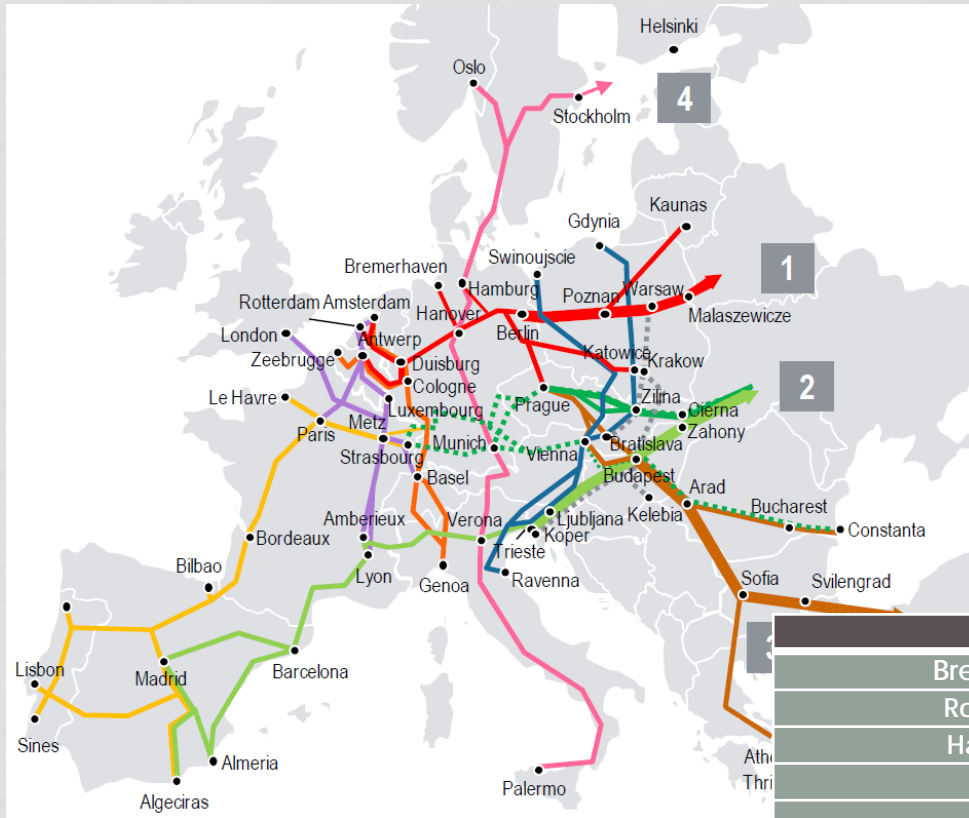


LCL configurations

## Legend:

- Consolidation/stuffing
- ▲ Warehousing
- Deconsolidation/stripping
- ↔ Transshipment/crossdocking (within terminal)
- ◆ Transshipment with stacking
- ↻ Transshipment with interterminal transport
- Port of departure
- Hub
- Port of arrival
- ⊗ Supplier
- ⊗ Customer

# IS ONS “KERNNETWERK” ER KLAAR VOOR?



Source: Saeedi, TU Delft 2018

CORRIDOR	EFFICIENCY	MARKET
Bremen - Wels - Wien	1.00	<b>Monopoly</b>
Rotterdam-Köln-Wien	0.91	Oligopoly
Hamburg – Budapest	0.82	<b>Dominance</b>
Bremen-Praha	0.71	Monopoly
Zeebrugge-Milano	0.70	Oligopoly
Antwerp - Milano	0.64	Oligopoly
Hamburg-Ludwigshafen-Verona	0.60	Oligopoly
Zeebrugge - Rotterdam- Praha	0.57	Monopoly
Rotterdam-Ludwigshafen-Verona	0.51	Oligopoly
Antwerp-Paris	0.47	Dominance

# SAMENVATTING

1. Stromen verleggen zich wereldwijd - al decennia
2. Verschuiving zwaartepunten belangrijkste oorzaak
3. OBOR faciliteert dit op wereldschaal
4. Geen directe bedreiging R'dam qua volume
5. Kans of bedreiging voor hoogwaardige logistiek?
6. Onderzoek naar
  - Economische betekenis kleine stromen
  - Nieuwe logistieke structuren op OBOR schaal
  - Substitutie met luchtvracht
  - Mogelijkheid VAL & borging stromen door slimme ICT
  - Performance meting en beleid kernnetwerk

# STELLINGEN

1. OBOR is slechts een symptoom van het bredere fenomeen van langzaam verschuivende stromen en netwerken.
2. OBOR zelf is geen bedreiging voor overslag Rotterdam, het bredere fenomeen wel.
3. Inzicht en bewustzijn over marktkansen OBOR voor hoogwaardige logistiek is onvoldoende.
4. Kernnetwerk EU is onvoldoende ingericht op relaties met het Oosten.