



Clusters 2.0



Presentation

- › Introduction of CLUSTERS2.0; Dirk 't Hooft, Argus I
- › CargoStream; Marc Verelst, P&G
- › Connecting flows between European Logistics Clusters; Frans Cruijssen, Argus I
- › Rail massification: Challenges and opportunities for Physical Internet; Elvina Nowak, Euralogistics



Clusters 2.0

Open network of hyper connected logistics clusters
towards Physical Internet



What is CLUSTERS 2.0 about

Mega cities: Clusters of economic activities

Silicon valley: Cluster/corporate functions for information technology

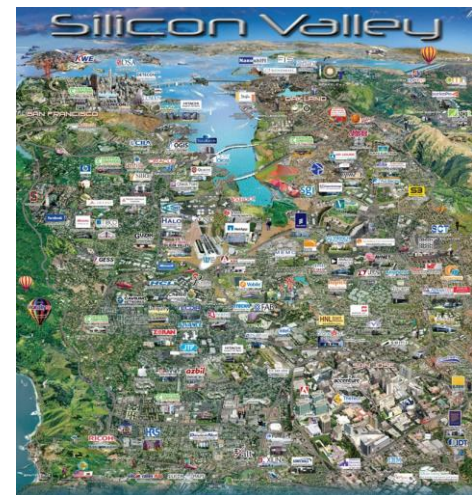
Logistics Clusters: agglomeration of several types of firms and operations

- Logistics Service providers (transportation, 3PL)
- Logistics operations (warehousing, cross docking)
- Linked logistics industries (IT, maintenance)

For all clusters advantages:

- Simplified creating trust
- Tacit knowledge exchange
- Incubates collaboration
- Attracts R&D
- Attracts suppliers

Well established clusters allow each member to benefit “as if it had a greater scale” (Porter)



CLUSTERS 2.0

Clusters 2.0. Vision is to leverage the full potential of European Logistics Clusters for a sustainable, efficient and fully integrated transport system:

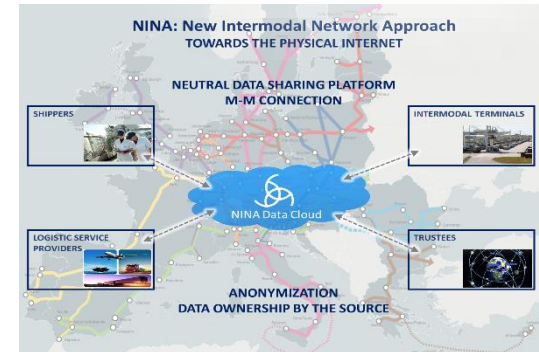
- › making optimal use of an Open Network of Logistics Clusters
- › enhance and advance towards a better co-ordination between logistics actors in clusters
- › and to improve co-ordination and connectivity between European logistics clusters.

Table 19.2 Boile et al. list of reviewed logistics clusters

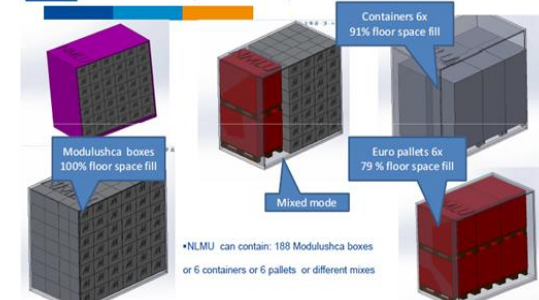
Europe	
Denmark	Denmarks Transport Center, Hoeje-Taastrup Transport Center, Nordic Transport Center, Skandinavisk Transport Center, Taulov Transport Center
France	Rungis-Sogaris
Germany	GVZ-Dresden, GVZ-Bremen NW, GVZ Weil am Rhein, GVZ Nuremberg, GVZ Frankfurt/Oder (ettc), GVZ Osnabruck, GVZ Herne-Emscher, GVZ Kiel, GVZ Kassel, GVZ Hamburg, GVZ Bremen SW, GVZ Rostock, GVZ Koblenz
Greece	Promachon S.A
Hungary	Budapest Intermodal Logistics Center
Italy	Interporto di Bologna, Interporto Marche, Interporto di Novara, Interporto Quadrante Europa, Interporto di Padova, Interporto di Parma, Interporto Rivalta Scrivia, Interporto di Rovigo, Interporto di Torino, Interporto di Venezia, Interporto di Verona
Portugal	Terminal Multimodal Do Vale Do Tejo S.A
Spain	Bilakobo-Aparcabisa, Centro de Transportes Aduana de Burgos, Centro de Transportes de Coslada, Centro de Transportes de Irun, Centro de Transportes de Madrid, Centro de Transporte de Vitoria, ZAL Port de Barcelona, Zona Franca de Barcelona, ZAL Gran Europa, Centro De Transportes de Benavente, Cimalsa, Ciudad del Transporte de Pamplona, Ciudad del Transporte de Zaragoza, Plataforma Logistica de Zaragoza
Ukraine	Liski-Ukrainian State Centre of Transport Service
United Kingdom	DIRFT Logistics Park, Key point: Swindon's premier logistics park, Kingmoor Park, Port of Tyne, Wakefield Europort, Birch Coppice business park
Asia	
Singapore	Keppel Distripark, Pasir Panjiang Distripark, Anexandra Distripark
China	ATL Logistic Center Hong Kong, Beijing Airport Logistics Park, Shenzhen Pinghu Logistics, Hushi Integrated Logistics Park Shanghai North-West ILP, Nanjing Wangjiawan ILP, Tradeport Hong Kong
Korea	Gwangyang Port Distripark, Busan New Port Distripark, Gamcheon Distripark
Taiwan	Far Glory FTZ, Taisugar Logistics Park
Malaysia	Northport Distripark-Port Klang
North America	
US	CenterPoint development in Joliet IL, Alliance TX, Pureland Industrial Complex NJ, Raritan Center NJ, Heller Industrial Park NJ, Hunts Point NY, Winter Haven FL, Mesquite Intermodal Facility/Skyline Business Park TX, Guild's Lake Industrial Sanctuary, Oregon, Dallas Intermodal Terminal/Dallas Logistics Hub TX, Rickenbacker Intermodal Facility OH, California Integrated Logistics Center Shafter CA, Salt Lake City Intermodal Facility UT, Cumberland Valley Business Park PA
Canada	Atlantic Gateway-Halifax Logistics Park

What will CLUSTERS 2.0 provide?

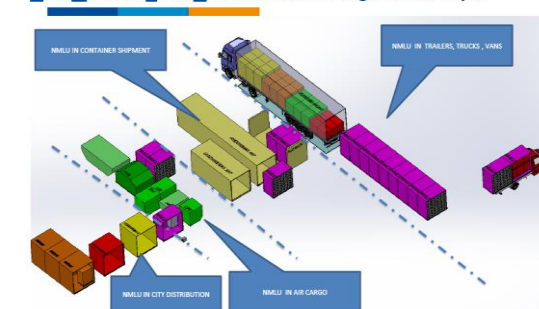
- › Establishing CargoStream a European wide community for freight sharing and collaboration (demand side)
- › Developing New Modular Loading Units and innovative handling and transshipment technology to accelerate handling processes within clusters for road and intermodal modes enabled by
- › Enhanced services on the supply side introducing the concept of Proximity Terminal Networks (PTN) enabled by enhanced information and asset management
- › Optimised handover and asset management through real time services at depots and terminals
- › Newly developed governance models introducing the role of a neutral agent forming the basis for new business models
- › Regulation and policy enhancing the set-up of collaborative cluster environments



NMLU with boxes, containers, euros or mixed



New Modular Load Unit overview of logistic concepts

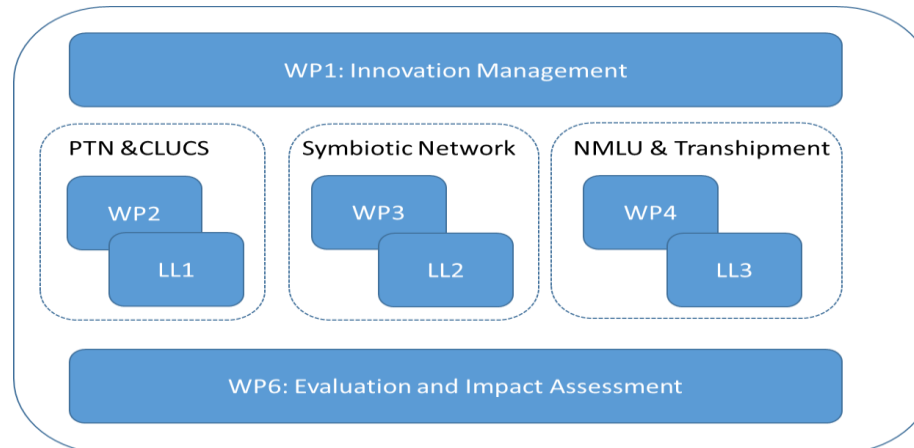
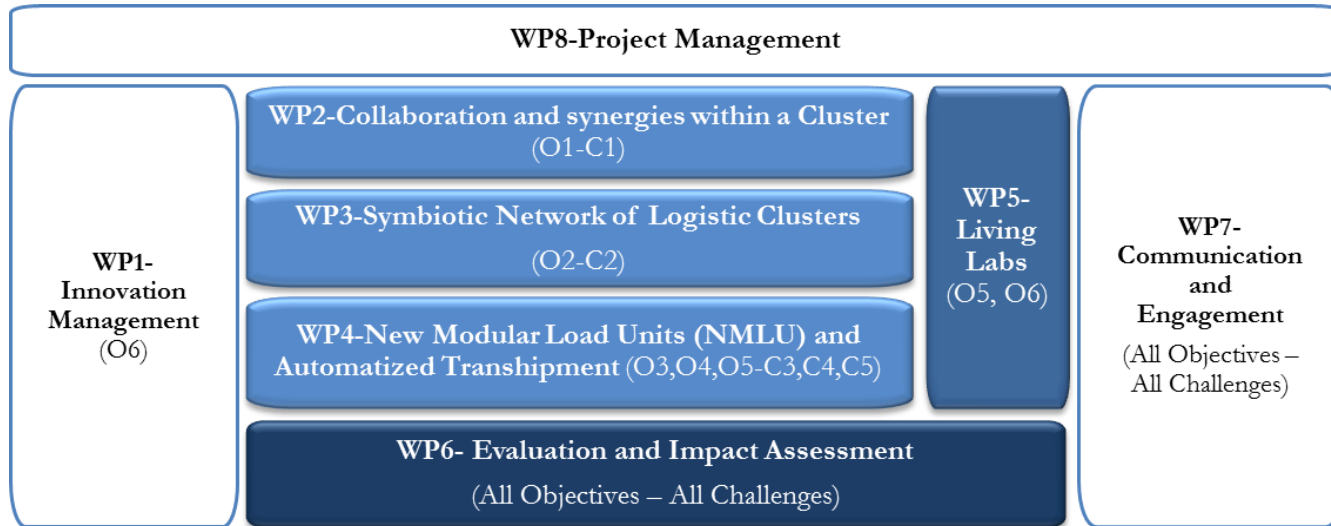


What is new?

- › IT can be an enabler to establish and facilitate collaboration
- › New approach on D2D/Network level rather than geographically centered
 - Adding horizontal collaboration to the clustering concept
 - Addressing collaboration on local level (within clusters) linked with network wide community approach
- › Include technological developments such as NMLU and related transshipment technology towards automatisisation of transshipment processes

CLUSTERS 2.0 a toolbox for future logistics!

CLUSTERS2.0 Working structure



Key Management roles

WP	Responsible
WP1: Innovation Management	BlueGreen
WP2: Collaboration and synergies within Clusters	IBI
WP3: Symbiotic Network of Logistics Clusters	Nallian
WP4: New Modular Loading Units (NMLU) and automatised transshipment	IML
WP5: Living labs	Mosaic
LL1: Proximity Terminal Network & Cluster Community System.	IBI
LL2: Symbiotic Network of Logistics Clusters	P&G
LL3: Innovative Cluster Handling Technology	JDR
WP6: Evaluation and Impact Assessment	FIT
WP7: Communication and Engagement	ENIDE
WP8: Project Management	PTV

Financial

Overall project budget: 6,329,618.75 €

Maximum grant: 5,998,743.75 €

Running May 1, 2017 - April 30, 2020

29 PARTNERS CLUSTERS 2.0

PTV GROUP
the mind of movement

enide

mosaicfactor

P&G

CONSORZIO IB INNOVATION

Fraunhofer IML

bluegreen

MIT GLOBAL SCALE NETWORK

Euralogistic

DCI

SEAbility

nallian

innovatrain
COACH CONTROL SYSTEMS

ECK

ARMINES

PCT

Heathrow
Making every journey better

AirCargoBelgium

WFS
Manufacture Flight Services

JAN DE RIJK
LOGISTICS

DHL

BOUWHOF

argus I

UIC

airport agency

TPR
Department of Transport and Regional Government
Tactical Planning

A decorative background graphic consisting of several large, semi-transparent circles in various colors (purple, light blue, yellow, red, green) connected by grey lines and arrows, suggesting a network or flow.

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A map of Europe with a network of grey lines representing intermodal transport routes. The lines connect various cities across the continent, including London, Paris, Berlin, Rome, and Athens. The text 'CargoStream' is overlaid in large blue letters.

CargoStream

The independent Pan-European platform for intermodal transport

Content

1. **WHY** do we need a change in the intermodality approach?

2. **HOW** will we drive this change in the intermodality approach?

3. **WHAT** are the next steps to drive this change in the intermodality approach?


WHY DO WE NEED A CHANGE IN THE INTERMODALITY APPROACH?

CONGESTION HAS A HUGE SOCIAL AND ECONOMIC IMPACT

CONGESTION



IMPACT OF CONGESTION

	COSTS			CO ₂
	DIRECT	INDIRECT	TOTAL	TOTAL
2013	47.3	29.3	76.6	6858
2020	54.9	33.4	88.3	-
2025	60.2	36.9	97.1	-
2030	65.8	41	106.8	7608
% Change	+39%	+40%	+39%	+11%

* Costs in \$ BN
** CO₂ in Kiloton Equivalent

Source : CEBR - Cost of Congestion Report

WHY DO WE NEED A CHANGE IN THE INTERMODALITY APPROACH?

A DRIVER SHORTAGE IS EXPECTED

250000 truck drivers, representing 40 percent of Germany's professional truckers are due to retire by 2027, according to a study by ZF Friedrichshafen AG.

Source : Bloomberg, August 2013
Source : WSJ, November 2012

The US industry is short about 35,000 truck drivers, according to industry lobby group the American Trucking Associations (ATA). The shortfall could grow to around 240,000 drivers by 2020 if it is not addressed, the ATA said.

Source : Reuters, October 2014



HGV driver shortage is 'a ticking time bomb' for UK logistics sector, say MPs

13/01/2015

 Add to favorites



The problems of recruiting younger people into the haulage industry, as a way of solving the driver shortage crisis, was revealed by a new report released by a UK Parliamentary group yesterday.

The all-party Parliamentary group for freight transport yesterday published Barriers to Youth

Employment in the Freight Transport Sector, its final report before the country votes in a general election in May, after which the group could comprise different personnel.

WHY DO WE NEED A CHANGE IN THE INTERMODALITY APPROACH?

WHILE RAIL INFRASTRUCTURE IS UNDERUTILIZED



EU 27 - FREIGHT TRANSPORT STATISTICS						
	ROAD			RAIL		
	NETWORK ⁽¹⁾	VOLUME ⁽²⁾	INTENSITY ⁽⁴⁾	NETWORK ⁽³⁾	VOLUME ⁽²⁾	INTENSITY ⁽⁴⁾
1995	47970	1289	26.9	227139	386	1.7
2000	54719	1519	27.8	217857	404	1.9
2005	62218	1794	28.8	212384	413	1.9
2009	66814	1690	25.3	212693	361	1.7
% CHANGE	+ 39%	+31%	-6%	-6%	-6%	0%

(1) Length of EU-27 Motorway Network in Kilometer
 (2) Freight volume shipped in EU-27 in Ton-Kilometer
 (3) Length of EU-27 Railway Network in use in Kilometer
 (4) Million Ton-Kilometer per Network Kilometer

WHY DO WE NEED A CHANGE IN THE INTERMODALITY APPROACH?

WE ARE NOT ABLE TO SET UP AND SUSTAIN INTERMODAL CONNECTIONS

**NOT ENOUGH
CONNECTIVITY**



**NOT ENOUGH
VOLUME**



**NOT ENOUGH
FREQUENCY**



HIGH COSTS



LONG LEAD TIMES



HOW WILL WE CHANGE THE INTERMODALITY APPROACH ?

GLOBAL P&G SUSTAINABILITY REPORT



Truck Transportation

As one of the world's largest consumer products companies, we ship a significant amount of product. To help ensure we are driving efficiency, our 2020 goal is to reduce truck transportation kilometers by 20% per unit of production versus our 2010 baseline. Our global teams have made great progress and we have reduced over-the-road truck transportation by approximately 25% since 2010 by improving vehicle fill rate, optimizing distribution routes and driving increased use of multi-modal transportation.

As P&G completes work on significant supply chain transformations in North America, and innovative efficiency projects in other regions, we will look for additional opportunities to improve our transportation footprint.



New Intermodal Network Approach

One example of improvement is P&G's innovative New Intermodal Network Approach (NINA) program in Europe. P&G launched a focused group of projects in 2008 with an ambitious goal of moving 30% of our Western Europe freight transportation from over-the-road trucks to intermodal rail and shipping lines by 2015. The team worked to find or often create new rail networks between our manufacturing plants and distribution centers across the region, reducing both emissions and congestion on local roads.

The regional program exceeded our initial target, reaching its 30% goal two years early in 2013. To continue building on our progress, we have expanded our intermodal rail networks across Europe. To drive efficiency, we also continue to add additional manufacturing and transportation partners to improve collaboration and amplify the sustainability impact to not only P&G, but also other companies in the area.

Some of our newest partnerships include:

- An innovative overnight shuttle train between our main manufacturing and distribution hubs in France and the U.K., using the Eurotunnel and available capacity on the U.K. High Speed (HS1) line. This highly efficient approach is one of our most sustainable and fastest rail connections to date, combining freight and reducing emissions for P&G and other companies.
- A high-frequency connection for customer deliveries along the main Italian North-South trade axis. This collaborative approach with [TCS Europe](#) provides enough volume for up to five intermodal trains per day, making transit and delivery times competitive with traditional over-the-road options while providing lower emissions per case.



New intermodal shipping routes implemented as part of the NINA program.

Content

1. **WHY** do we need a change in the intermodality approach?

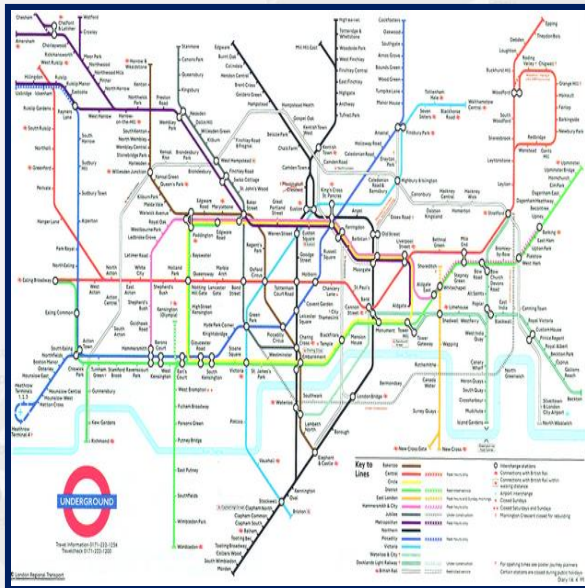
2. **HOW** will we drive this change in the intermodality approach?

3. **WHAT** are the next steps to drive this change in the intermodality approach?

HOW WILL WE CHANGE THE INTERMODALITY APPROACH ?

THROUGH A NEW WAY IN WHICH WE LOOK AT INTERMODALITY.

OPEN NETWORK APPROACH



MULTIDIMENSIONAL COLLABORATION



SYNCROMODAL TRANSPORTATION



HOW WILL WE CHANGE THE INTERMODALITY APPROACH ?

MULTIDIMENSIONAL COLLABORATION - NEUTRAL DATA SHARING PLATFORM

SHIPPERS



INTERMODAL TERMINALS RAIL/BARGE OPERATORS



LOGISTIC SERVICE PROVIDERS



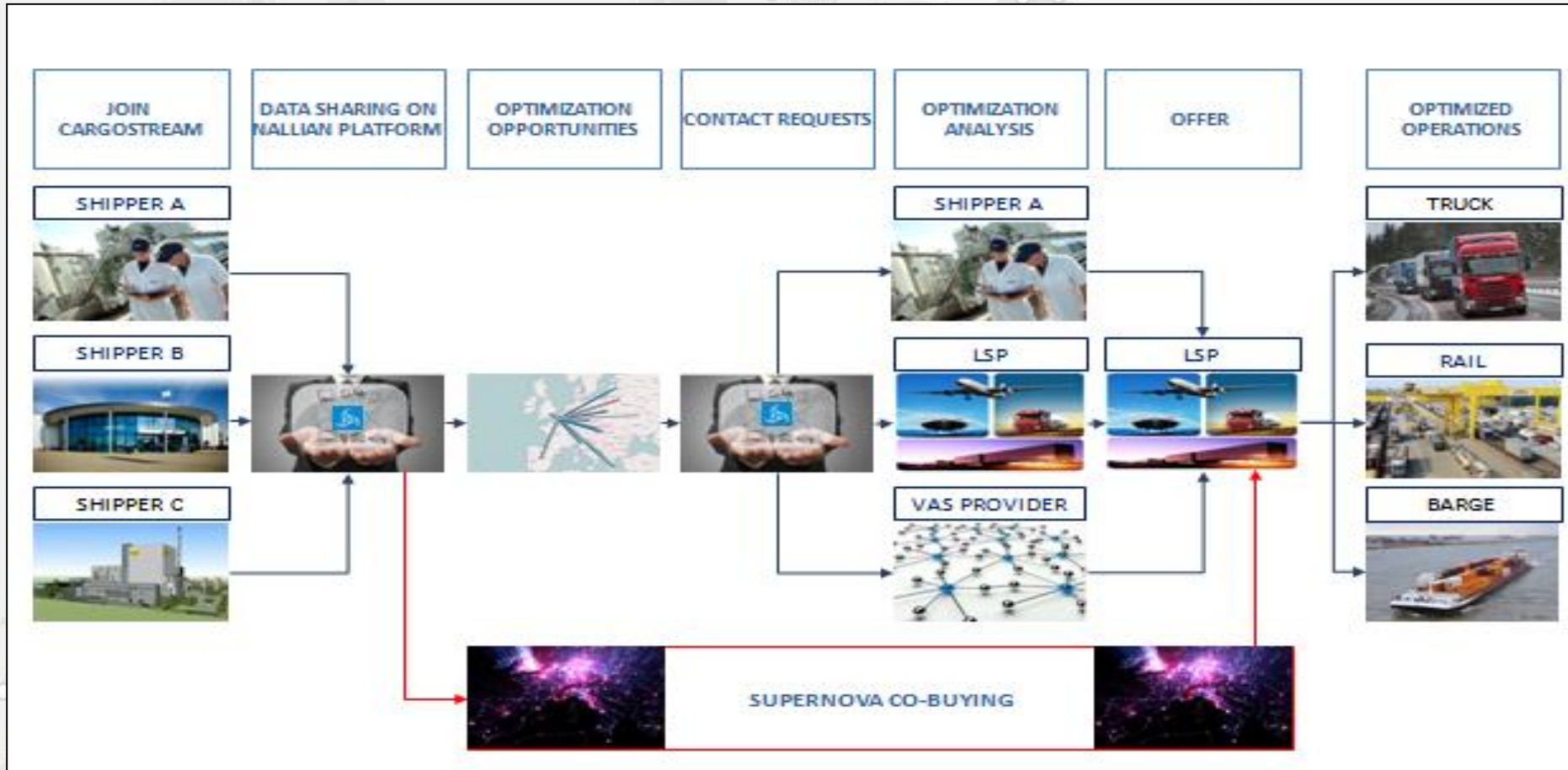
VALUE ADDED SERVICE PROVIDERS



**M-M CONNECTED, ANONYMIZED, NORMALIZED, SECURE
DATA OWNERSHIP BY THE SOURCE**

HOW WILL WE CHANGE THE INTERMODALITY APPROACH ?

MULTIDIMENSIONAL COLLABORATION - NEUTRAL DATA SHARING PLATFORM



WHAT IS DONE ALREADY TO CHANGE THE INTERMODALITY APPROACH ?

TESTS RUNS.

Opportunity 14

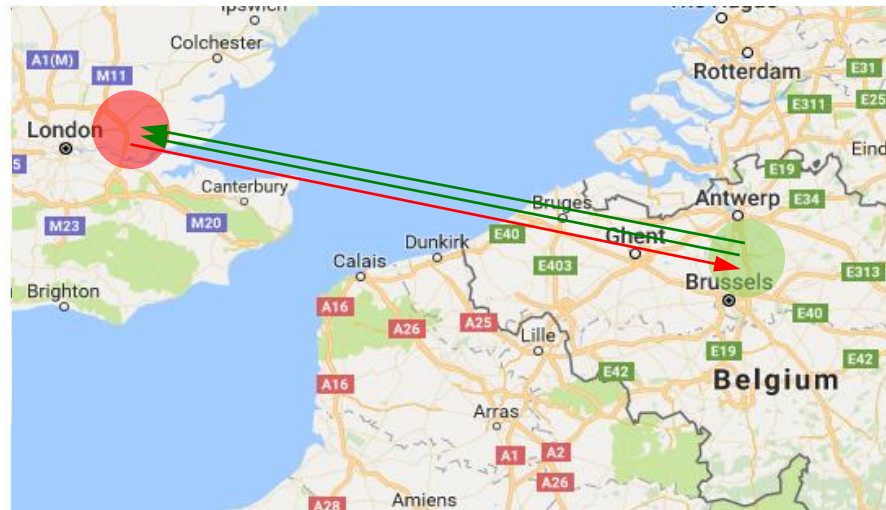
[BACK TO OVERVIEW](#)

BUNDLING:

Lane number	Shipper	FROM			TO			Lane distance	Volume
		City	Postal code	Country	City	Postal code	Country		
60584				BE			GB	379.5767	
66621				BE			GB	386.6509	

BACKHAUL:

Lane number	Shipper	FROM			TO			Lane distance	Volume
		City	Postal code	Country	City	Postal code	Country		
60277				GB			BE	376.9650	



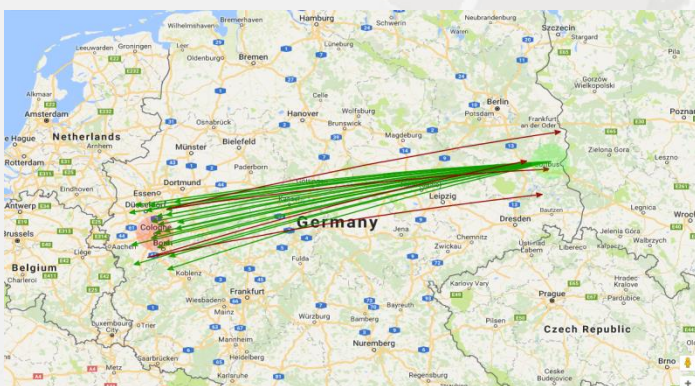
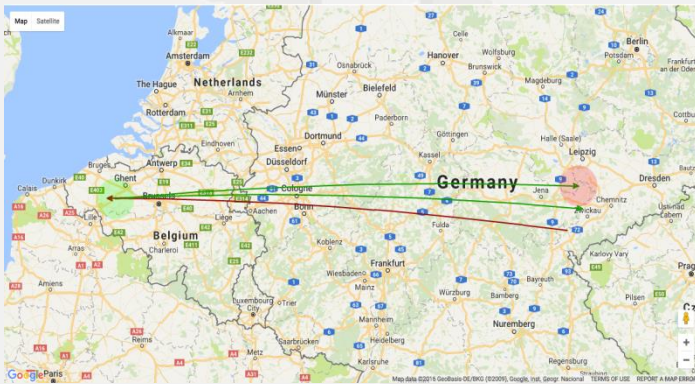
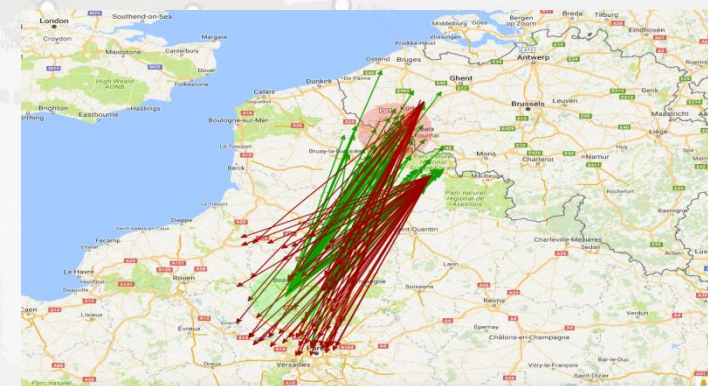
WHAT IS DONE ALREADY TO CHANGE THE INTERMODALITY APPROACH ?

TESTS RUNS.

Basic bundling
Road



Multiple bundling,
Intermodal



Content

1. WHY do we need a change in the intermodality approach?

2. HOW will we drive this change in the intermodality approach?

3. **WHAT** are the next steps to drive this change in the intermodality approach?

WHAT ARE THE NEXT STEPS TO CHANGE THE INTERMODALITY APPROACH ?

JOIN CARGOSTREAM AS A SHIPPER.

JOIN CARGOSTREAM AS A TERMINAL.

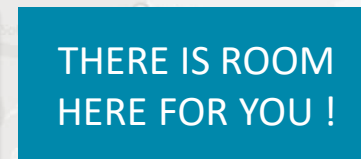
JOIN CARGOSTREAM AS A LOGISTIC SERVICE PROVIDER.

JOIN CARGOSTREAM AS A VALUE ADDED SERVICE PROVIDER.



WELCOME ON BOARD OF THIS **OPEN** NETWORK

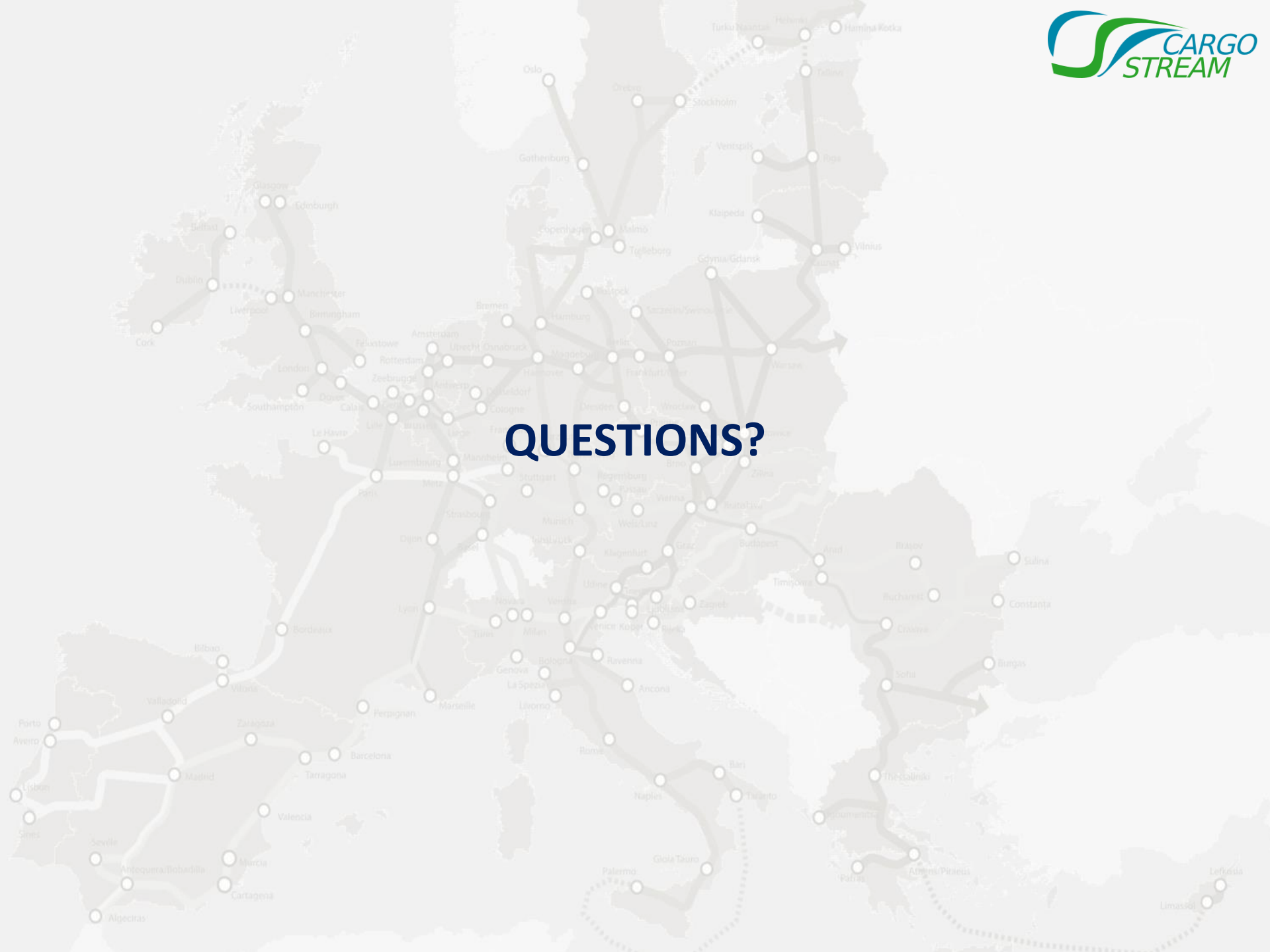
WHO HAS JOINED ALREADY?



Keep me in the loop!



QUESTIONS?



Clusters 2.0

Achieving an open, european-wide transport network

Physical internet| Graz | 7/6/2017

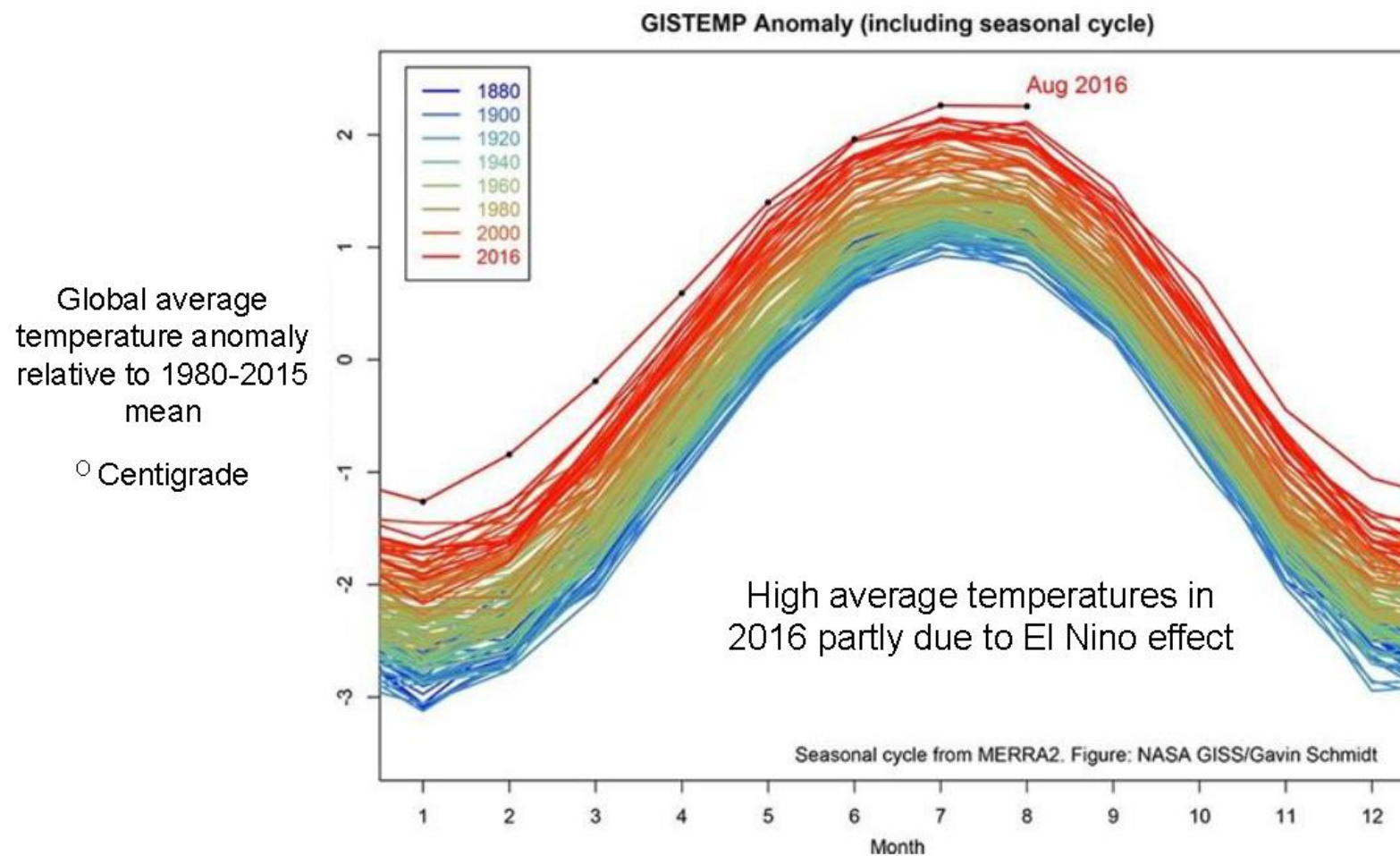


- Logistics advisory, specializing in:
 1. Tactical and strategic network design and optimization
 2. Horizontal collaboration
 3. Optimization in humanitarian sector
- Started in 2007
- Office in old Brewery in Breda, the Netherlands
- 15 optimization specialists, all with technical academic background
- Projects for 90% in business environment and for 10% governments and institutions

www.argusi.org



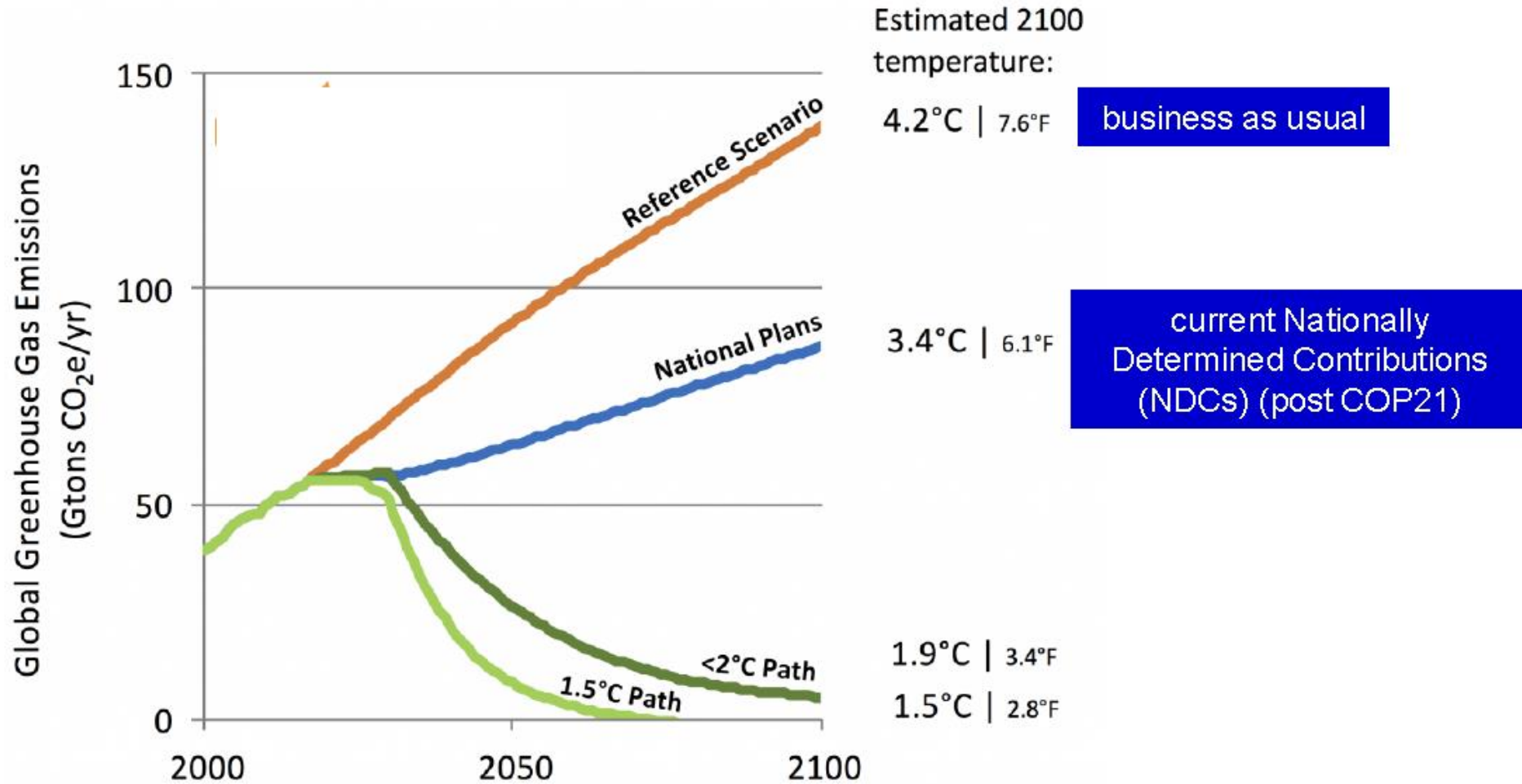
Increase in average global temperature 1880 - 2016



- average global temperature in 2016 was the highest on record
- 40th consecutive year of average global temperatures above the 20th Century mean
- Rate of increase of global average temperature unprecedented



Global Emission and Temperature Increase Scenarios



www.climatescoreboard.org (March 2017)



European Commission transport goals

- 60% reduction of GHG emissions from transport by 2050
- Optimising the performance of multimodal logistic chains, including by making greater use of more energy-efficient modes
 - 30% of road freight over 300 km should shift to other modes by 2030, and more than 50% by 2050
 - By 2050, complete a European high-speed rail network.
 - By 2050, connect all core network airports to the rail network
 - A fully functional and EU-wide multimodal TEN-T 'core network' by 2030, with a high quality and capacity network by 2050 and a corresponding set of information services.



Table of Content

1

Clusters 2.0

Specific project goals

2

Current state

European transport
Modal splits
Trade flows
CO2 footprint

3

The challenge

Macro-network
optimization



Clusters 2.0

Specific project goals



Network design and optimization in Clusters 2.0

- Design a European core network for main transport lanes and use it optimally
 - 'Hyperconnected' industrial and logistics clusters
- New Intermodal Network Approach (NINA, Cargostream)
 - Business models
 - Coordination and collaboration
 - Matchmaking
- Industry group for advice and guidance

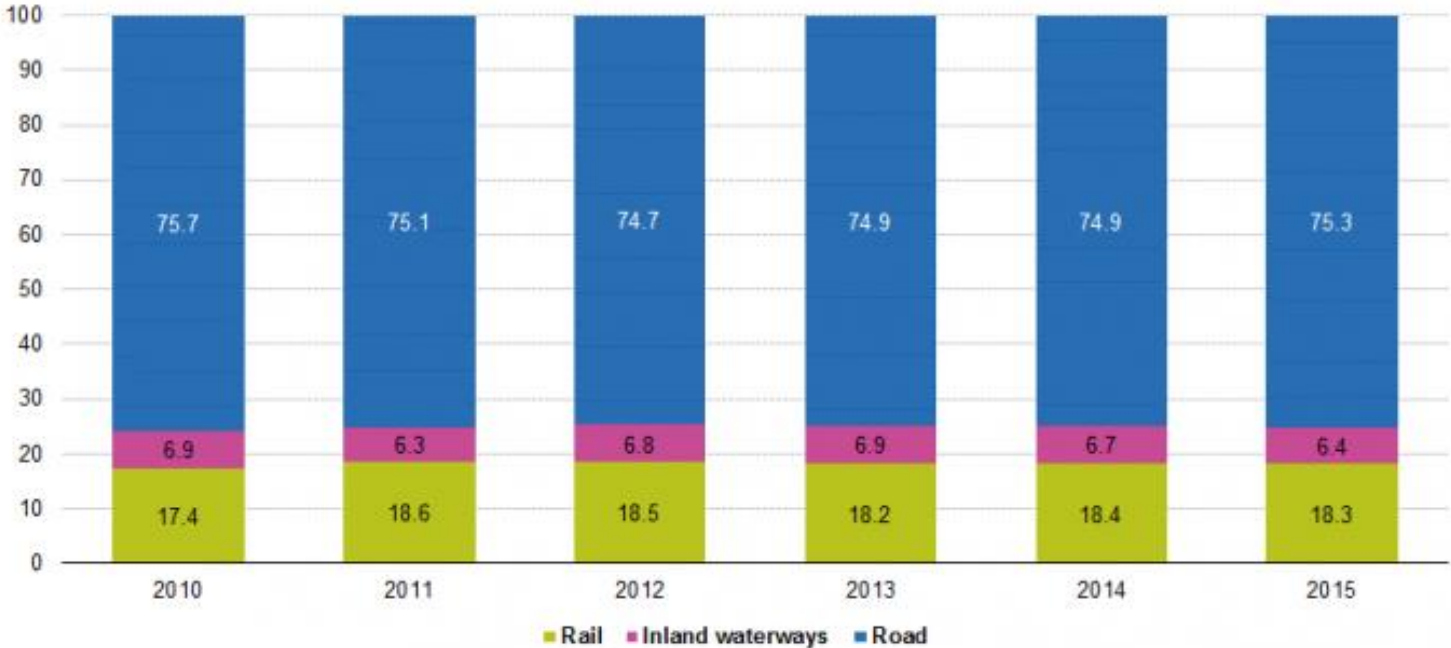


European transport

Current state



Freight transport in the EU-28, modal split of inland transport modes 2010-2015 (% of total tonne-kilometres)

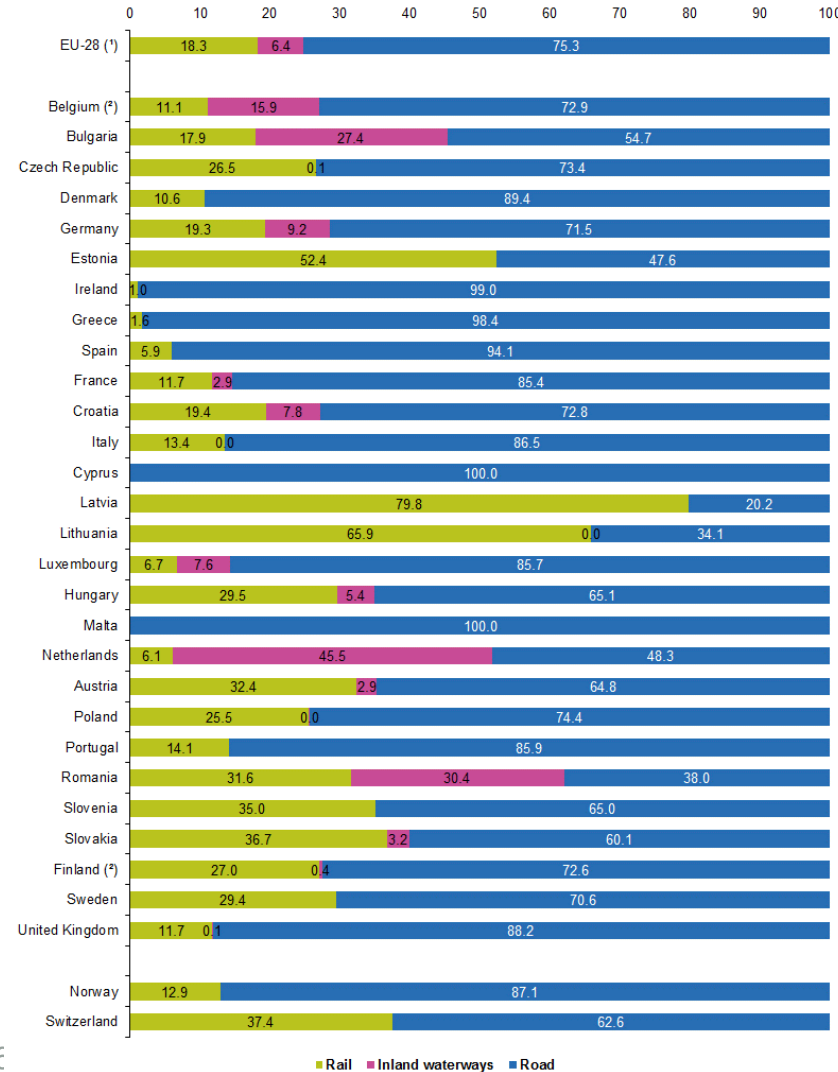


Note: EU-28 includes rail transport estimates for Belgium, inland waterways transport estimates for Finland and does not include road freight transport for Malta (negligible). Figures may not add up to 100% due to rounding.

[source: Eurostat](#)



Modal Split of inland freight transport, 2015 (% of total tkm)

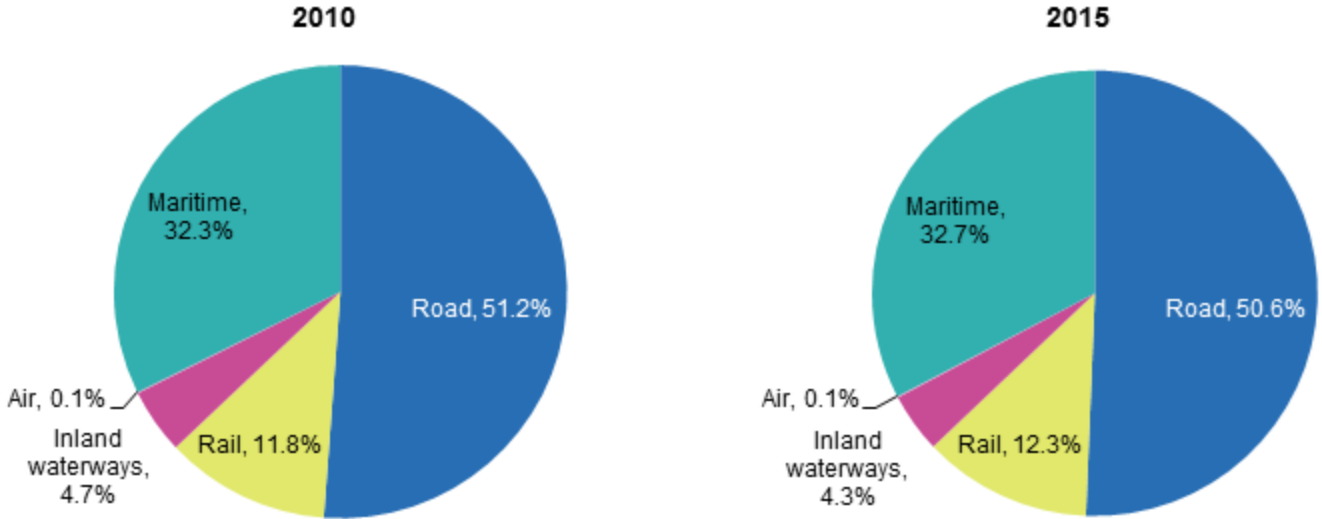


source: Eurostat



(*) EU-28 includes rail transport estimates for Belgium, inland waterways transport estimates for Finland and does not include road freight transport for Malta (negligible). Figures may not add up to 100% due to rounding.
 (*) Estimated values.

Freight transport in the EU-28 modal split based on five transport modes (% of total tonne-kilometres)



Note: Air and maritime cover only intra-EU transport (transport to/from countries of the EU) and exclude extra-EU transport

[source: Eurostat](#)



Freight Transport Billion TKM per mode

EU-28 Performance by Mode for Freight Transport – 1995–2014

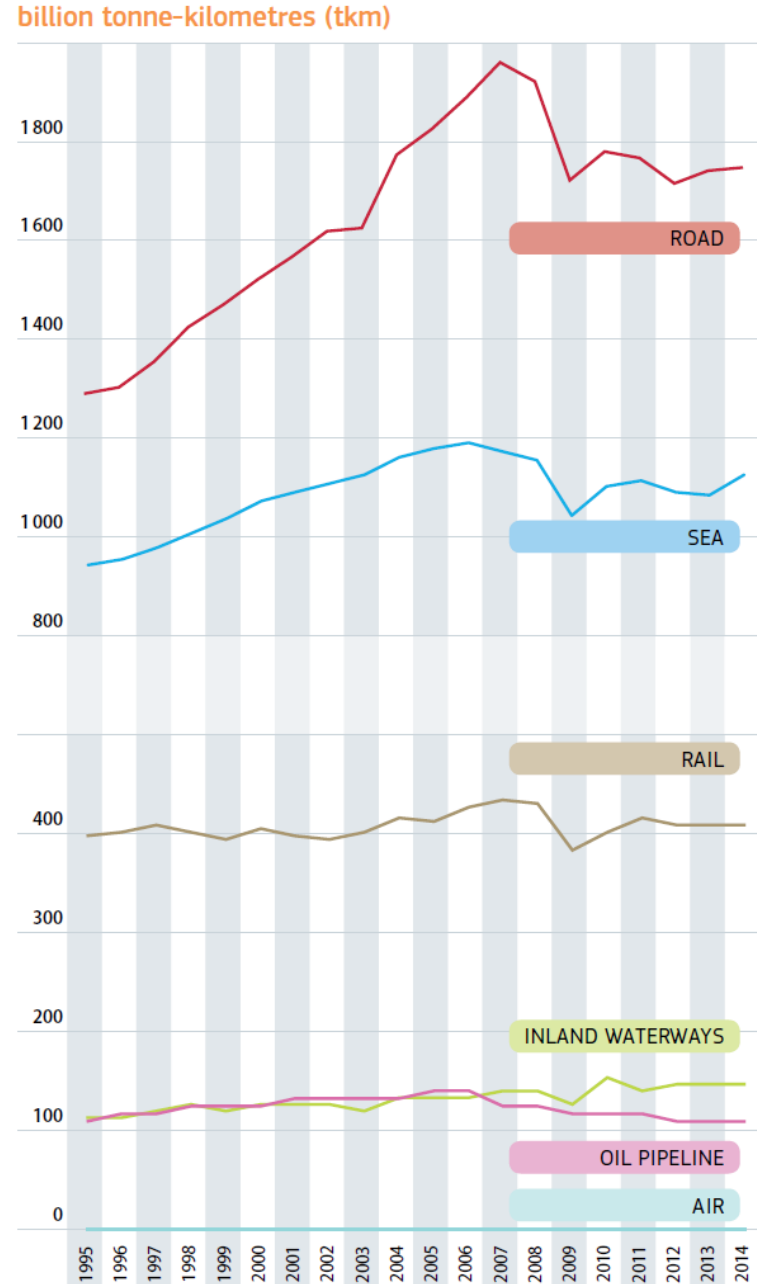
EU-28 Performance by Mode

FREIGHT TRANSPORT billion tkm

	ROAD	RAIL	INLAND WATERWAYS	PIPELINES	SEA (*)	AIR	TOTAL
1995	1289	388	122	115	930	2	2846
2000	1509	405	134	127	1067	2	3245
2005	1795	416	139	138	1178	2	3667
2006	1858	438	139	137	1191	2	3764
2007	1925	452	145	128	1174	2	3826
2008	1891	443	146	125	1153	2	3760
2009	1700	364	131	122	1035	2	3353
2010	1755	394	156	121	1094	2	3522
2011	1744	422	142	118	1111	2	3540
2012	1693	407	150	115	1085	2	3451
2013	1719	406	153	112	1082	2	3474
2014	1725	411	151	113	1122	2	3524
1995–2014 per year	33.9%	5.8%	23.5%	-1.8%	20.6%	27.0%	23.8%
2000–2014 per year	14.3%	1.3%	12.7%	-11.2%	5.2%	3.7%	8.6%
2013–2014	1.0%	0.1%	0.9%	-0.8%	0.4%	0.3%	0.6%
2013–2014	0.4%	1.1%	-1.2%	1.0%	3.8%	0.0%	1.4%

MODAL SPLIT (%)

	ROAD	RAIL	INLAND WATERWAYS	PIPELINES	SEA (*)	AIR
1995	45.3	13.6	4.3	4.0	32.7	0.1
2000	46.5	12.5	4.1	3.9	32.9	0.1
2005	48.9	11.3	3.8	3.8	32.1	0.1
2006	49.4	11.6	3.7	3.6	31.6	0.1
2007	50.3	11.8	3.8	3.4	30.7	0.1
2008	50.3	11.8	3.9	3.3	30.7	0.1
2009	50.7	10.8	3.9	3.6	30.9	0.1
2010	49.8	11.2	4.4	3.4	31.1	0.1
2011	49.3	11.9	4.0	3.3	31.4	0.1
2012	49.0	11.8	4.3	3.3	31.4	0.1
2013	49.5	11.7	4.4	3.2	31.1	0.1
2014	49.0	11.7	4.3	3.2	31.8	0.1



Source: Statistical Pocketbook 2016:EU Transport in figures



International road transport performance in the EU and EFTA countries, by territory on which the transport was performed, 2015

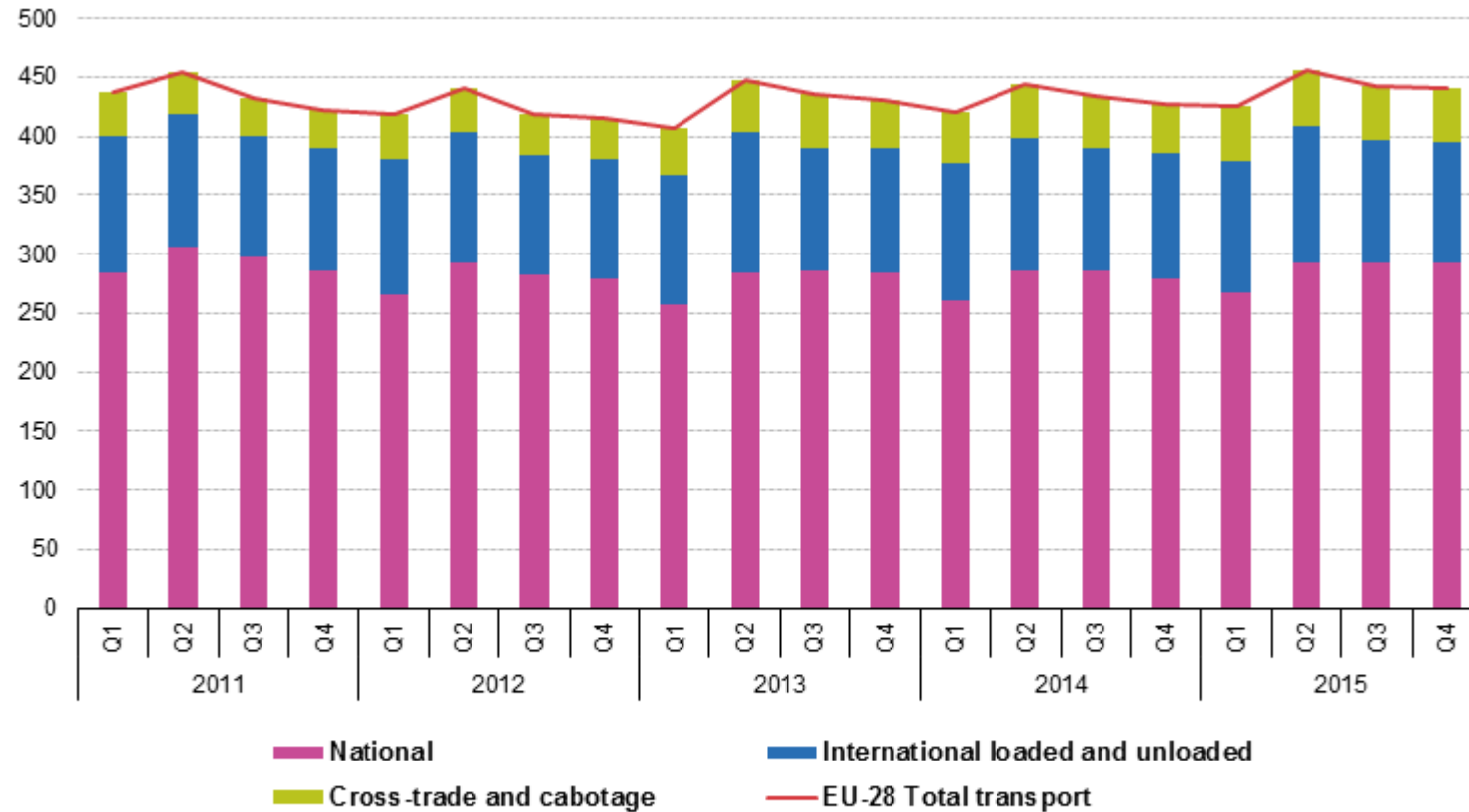
Rank	Country	Transport performance (million tkm)	Share in total (%)
1	Germany	150 337	27.2
2	France	100 973	18.3
3	Poland	42 592	7.7
4	Spain	39 460	7.1
5	Italy	27 905	5.0
6	Belgium	27 259	4.9
7	Austria	25 074	4.5
8	Czech Republic	20 818	3.8
9	Netherlands	18 646	3.4
10	United Kingdom	12 858	2.3
11	Hungary	11 649	2.1
12	Switzerland	10 352	1.9
13	Sweden	9 896	1.8
14	Slovakia	8 463	1.5
15	Denmark	6 238	1.1
16	Slovenia	5 675	1.0
17	Portugal	5 483	1.0
18	Lithuania	4 343	0.8
19	Romania	4 316	0.8
20	Croatia	4 162	0.8
21	Bulgaria	3 962	0.7
22	Norway	2 825	0.5
23	Greece	2 571	0.5
24	Latvia	2 031	0.4
25	Luxembourg	1 522	0.3
26	Estonia	1 299	0.2
27	Ireland	1 260	0.2
28	Finland	1 237	0.2

Note: Malta, Cyprus, Iceland and Liechtenstein are not available.

source: Eurostat



EU-28 quarterly road freight transport, 2011-2015 (billion tkm)



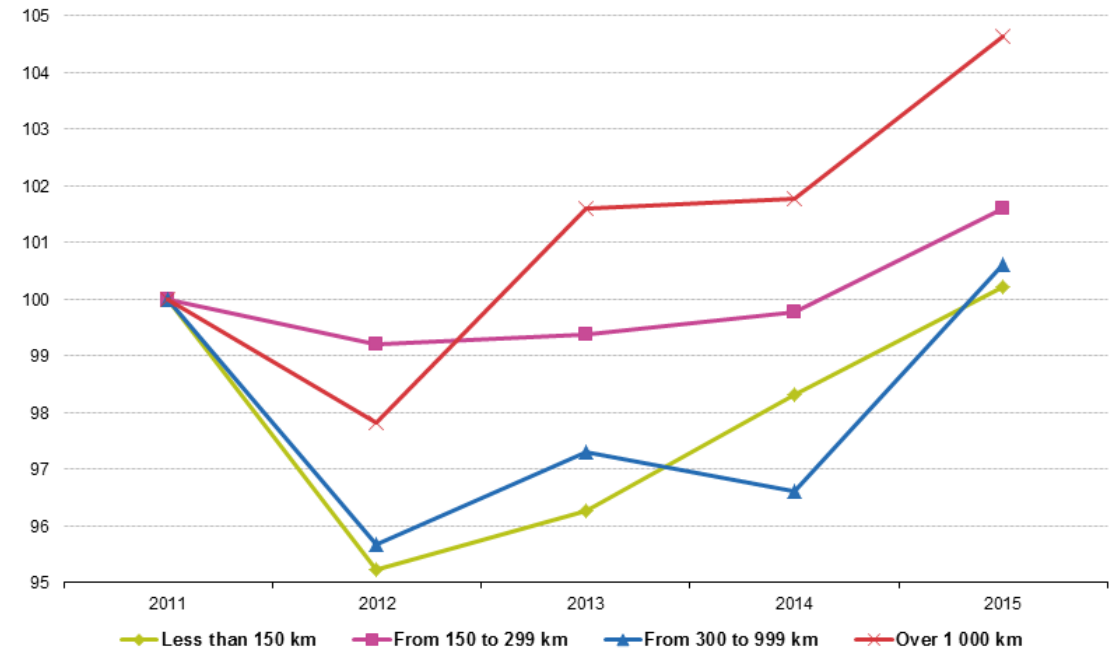
Note: EU-28 provisional data for reference year 2015; Malta excluded (see chapter "data sources and availability")

[source: Eurostat](#)



EU-28 total road transport by distance classes, 2011-2015 (2011=100, based on tkm)

- 55.9 % of freight volumes are carried on distances over 300 km. For journeys at these longer distances, there is more opportunity to substitute road transport with more environmentally friendly modes.
- Longer distance class recorded highest rise compared with 2011

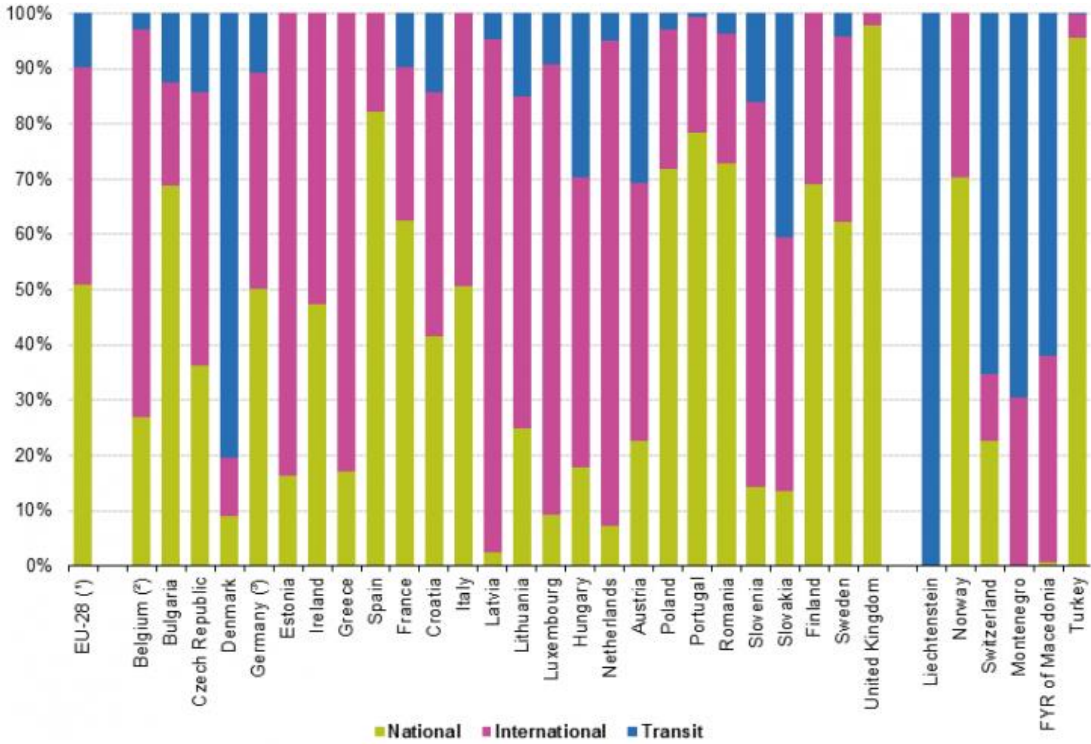


Note: EU-28 provisional data for reference year 2015; Malta excluded (see chapter "data sources and availability")

[source: Eurostat](#)



Rail transport by country and type of transport in 2015 - % of total TKM



source: Eurostat

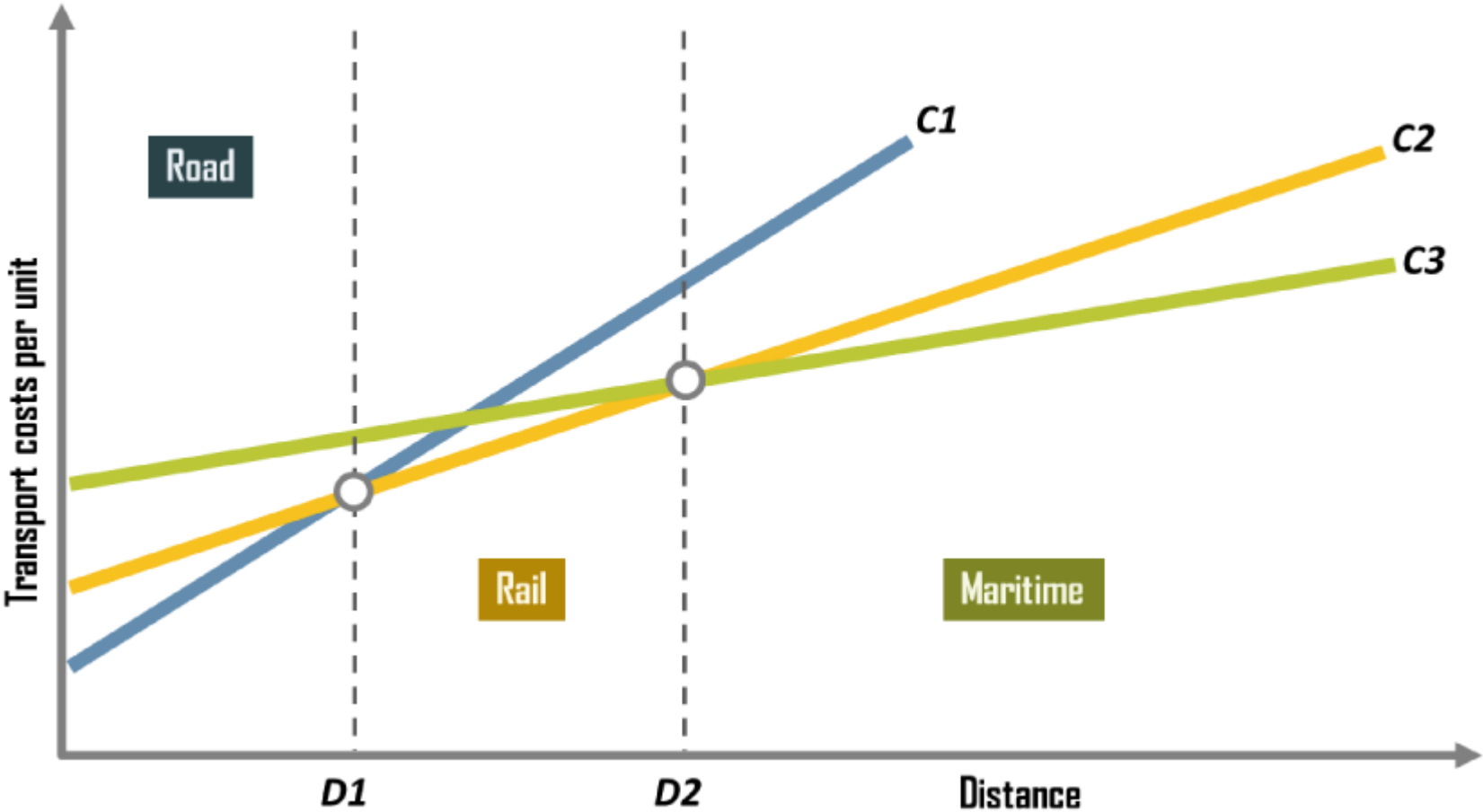
Note: Cyprus and Malta do not have rail transport.
 (*) Belgium and Germany not available (2011 and 2014 data used respectively).
 (†) 2011 data.
 (‡) 2014 data.



Intermodal transport potential

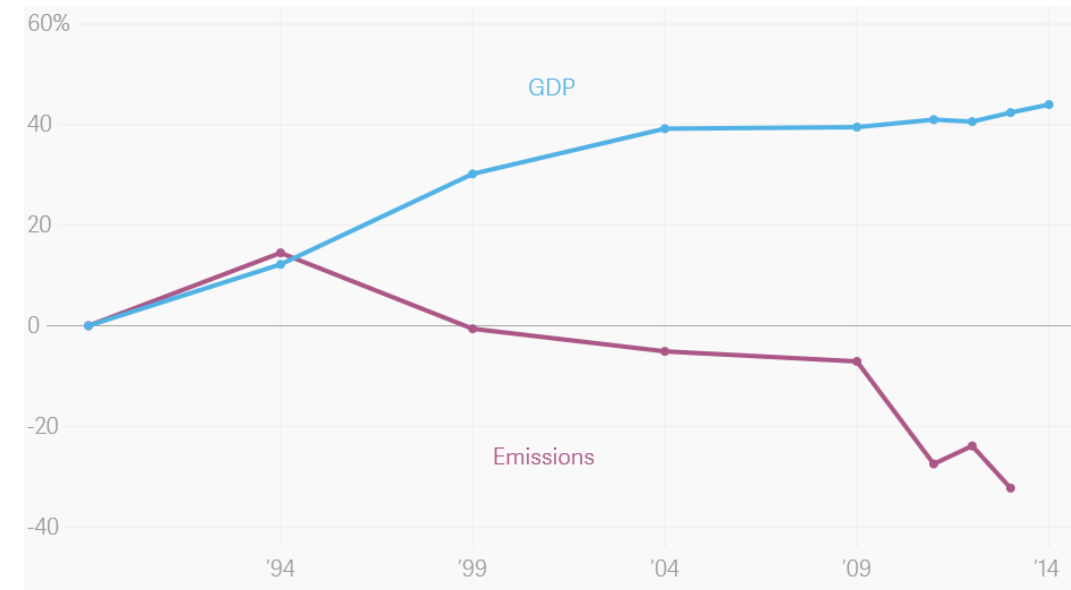


Modal choice wrt distance



Simplistic view – how to reduce CO2 footprint

- Reduce emission per tonnekm
 - Cleaner vehicles, modal shift,...
- Reduce the number of transported tonnes
 - Smaller products, 3D printing,...
- Reduce the number of kilometers travelled
 - Local sourcing, load factor optimization,....
 - Improved network design and collaboration...



Denmark: Growth in GDP and CO2 emissions since 1990

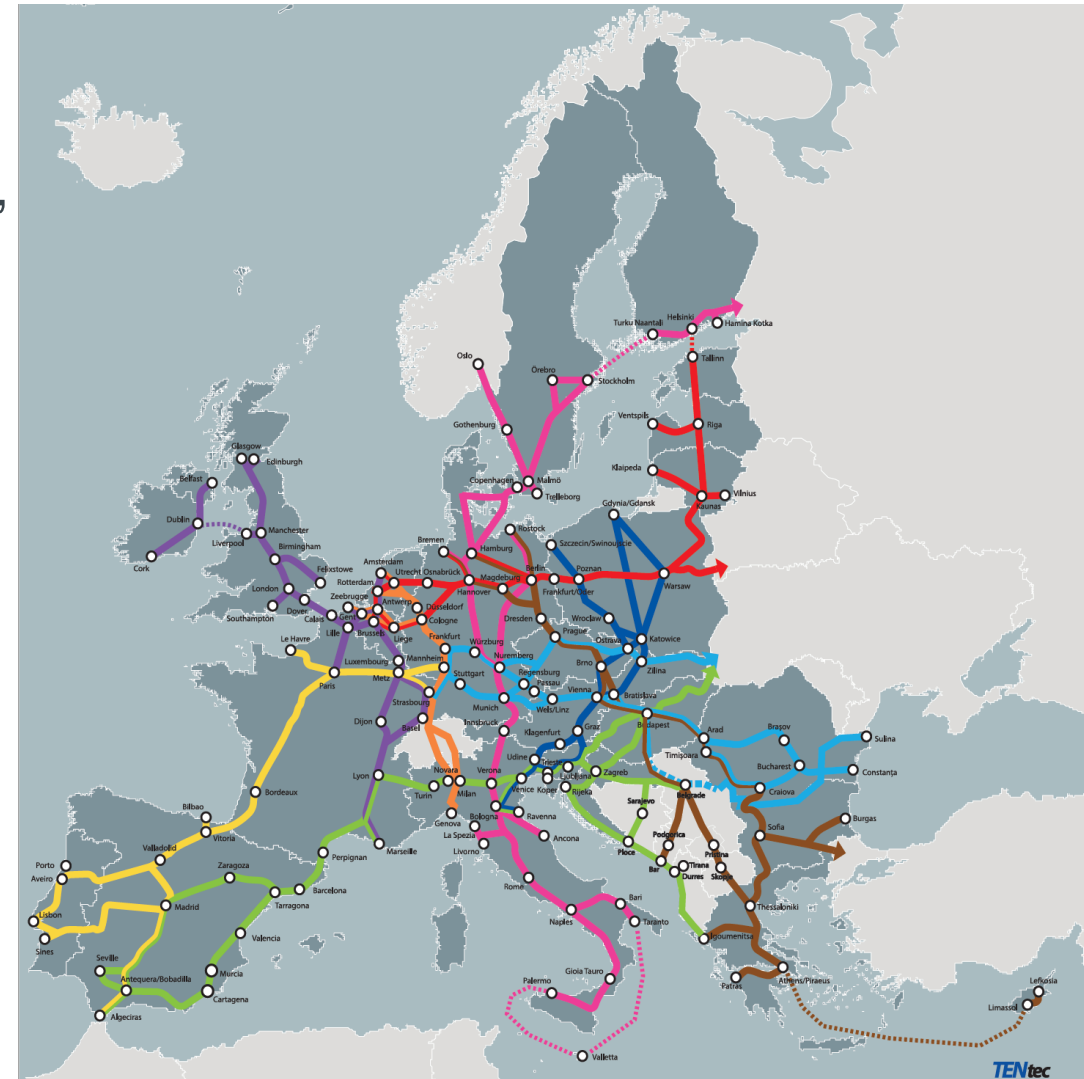


TRANS-EUROPEAN TRANSPORT NETWORK (TEN-T)

- 9 major transport corridors
- The new core network, to be established by 2030, will connect:
 - 94 main European ports with rail and road links
 - 38 key airports with rail connections into major cities
 - 15,000 km of railway line upgraded to high speed
 - 35 cross border projects to reduce bottlenecks



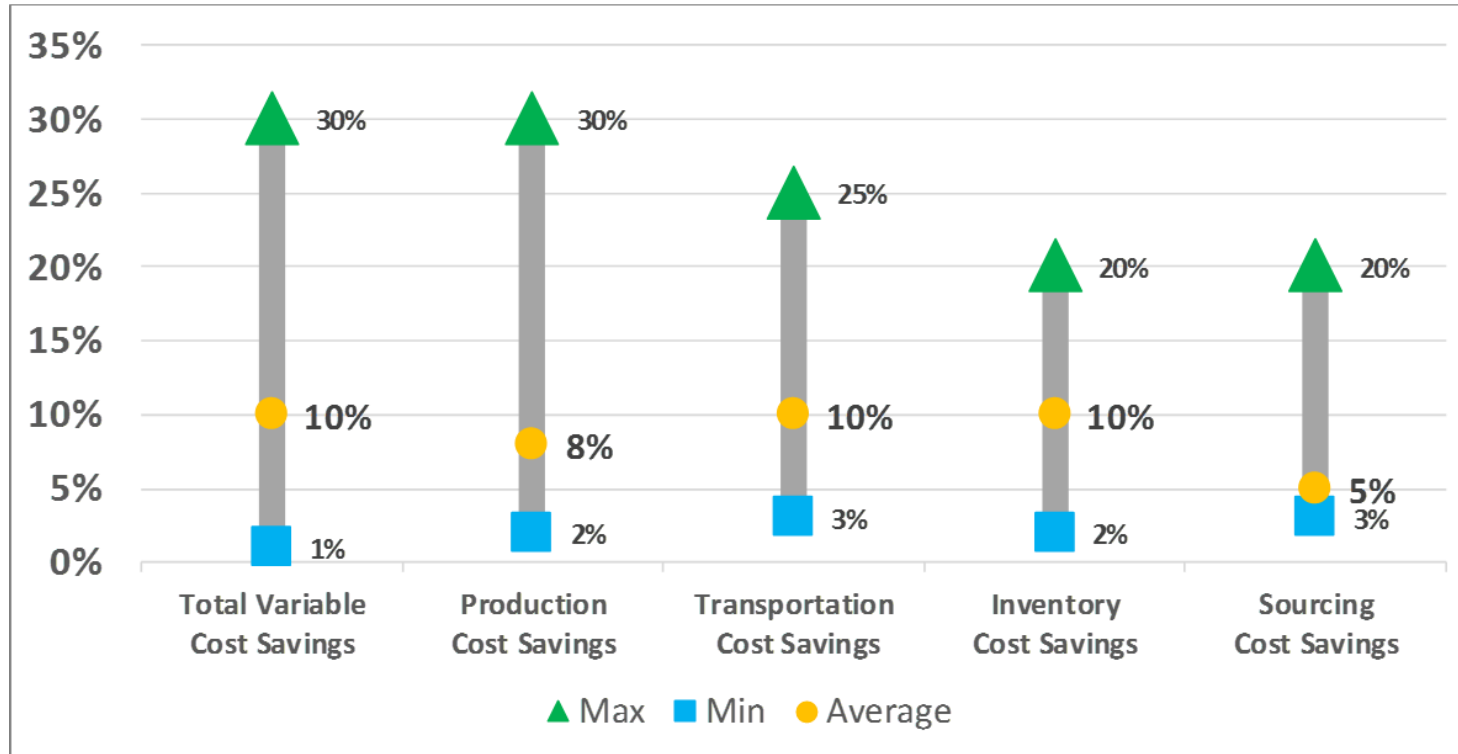
source: TENtec



The challenge



Network design impact



2016 SummerCon Survey
Percent Improvement from Llamasoft Projects
232 Respondents from 173 Companies



An improved European intermodal network

- The 'backbone' of the physical internet flows.
- Mapping all freight flows within the EU
- Conducting a greenfield study for best positioned terminals nodes
 - Green freight corridors
 - Checking for missing links in the TEN-T network
- Calculate possible savings in cost and CO2 in case of efficient use of intermodal freight transport for both the TEN-T network and the existing transport network
- Make sure that the resulting network is used effectively
 - Coordination
 - Collaborative model
 - Centralized VAS



Thank you

All questions and feedback very welcome!

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SESSION 12: PROJECT CONTRIBUTION – CLUSTERS 2.0

Rail massification: challenges and opportunities for Physical Internet

Pôle d'Excellence Euralogistic (french logistics cluster)
Elvina Nowak, European Affairs



Euralogistic

Pôle d'excellence logistique & supply chain
en Hauts-de-France

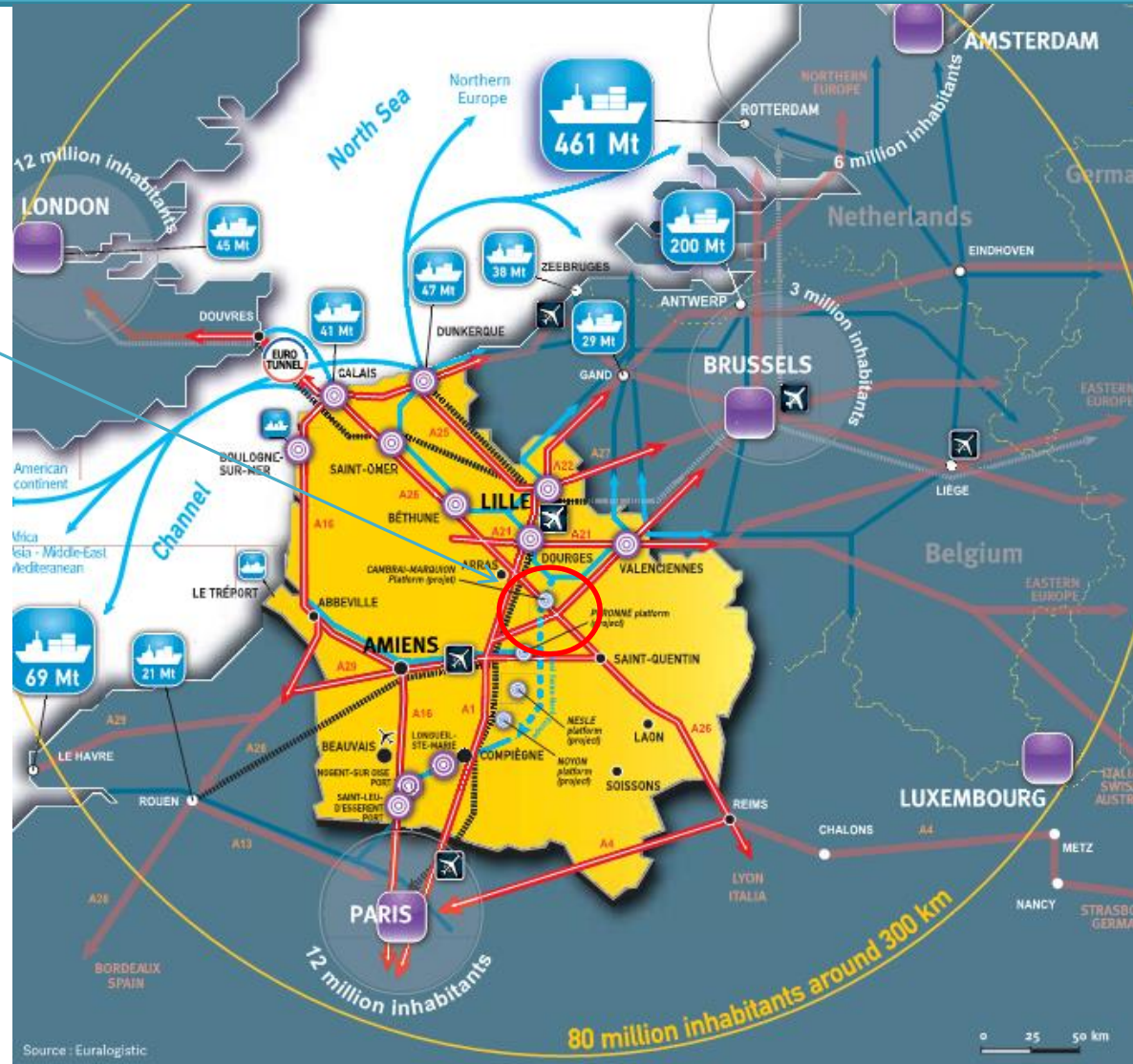
07/06/2017, Graz

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- II. RAIL MASSIFICATION CONCEPT
- III. OPPORTUNITIES
- IV. CHALLENGES
- V. CLUSTERS 2.0: MAKE A STEP FORWARD

I. EURALOGISTIC, IN A FEW WORDS

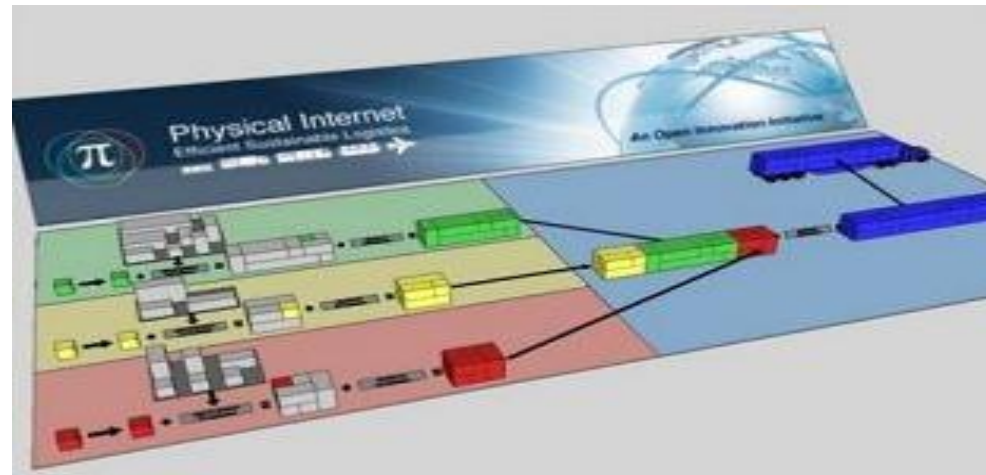
- Logistics cluster in Hauts-de-France, a strategic logistics region
- Chamber of Commerce: contracting owner
- Located nearby the Douges multimodal platform
- Several missions:
 - Dissemination of good practices in supply chain management and in logistics
 - Promotion of the field towards all Hauts-de-France companies
 - Tackle all economics and social issues
- Support the french government for a new national policy for the logistics field



II. RAIL MASSIFICATION CONCEPT

1. What's the massification?

The massification is about bundling flows via a modal shift (barge – rail) for **cost efficiency, reliability and sustainability** linked with the Physical Internet Concept:



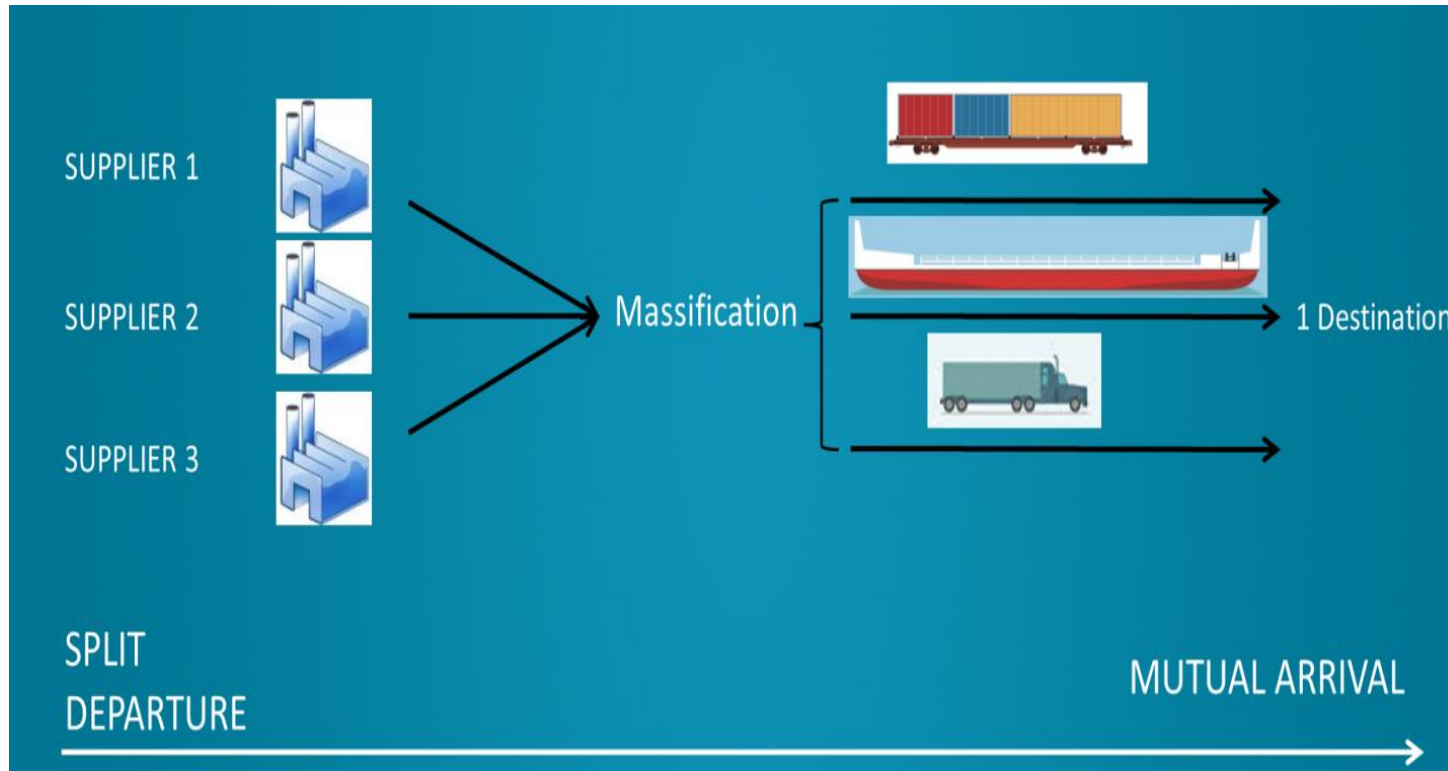
Introduction of the PI, Benoît MONTREUIL, 2012

In logistics organization, massification concept remains limited because of:

- Lack of knowledge of multimodal transport
- High cost of transshipments
- Rail freight seen as not enough reliable (organization, delay, control)

II. RAIL MASSIFICATION CONCEPT

General massification concept figure

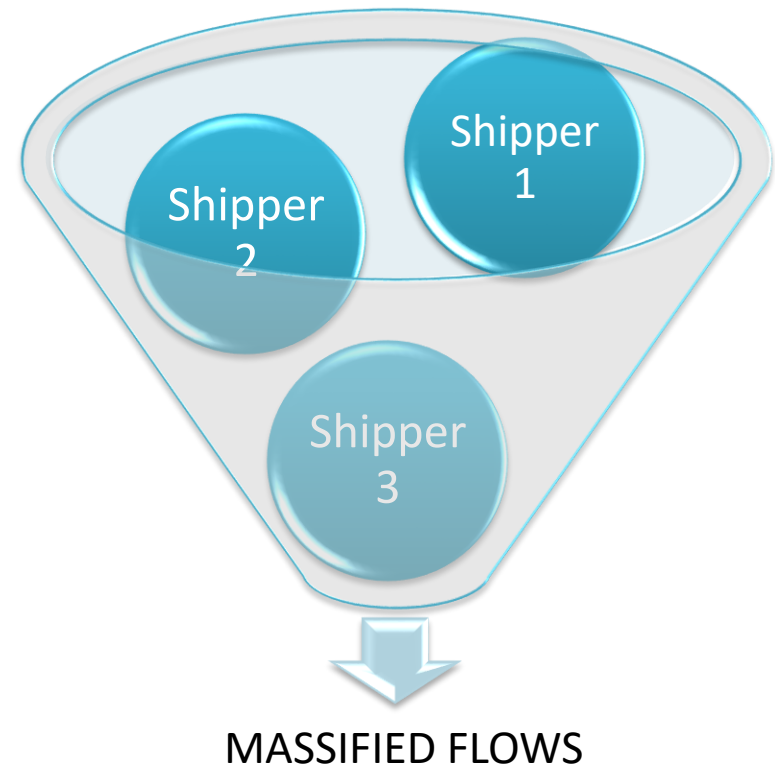


II. RAIL MASSIFICATION CONCEPT

2) Euralogistic approach: genesis and aims

- Main issue and stake for Euralogistic based beside a multimodal platform
- In 2015, P&G expresses to Euralogistic its interest (for its Amiens' plant) to use modal shift through « massification »
- Since 2015, around 10 main regional shippers have committed into a new project: bundling their goods on a train rather than shipping via road

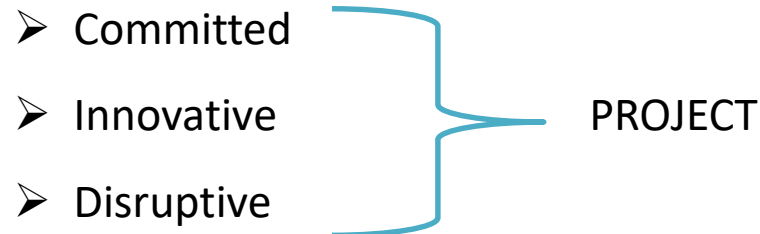
Innovation: From shippers initiative



II. RAIL MASSIFICATION CONCEPT

2) Euralogistic approach: genesis and aims

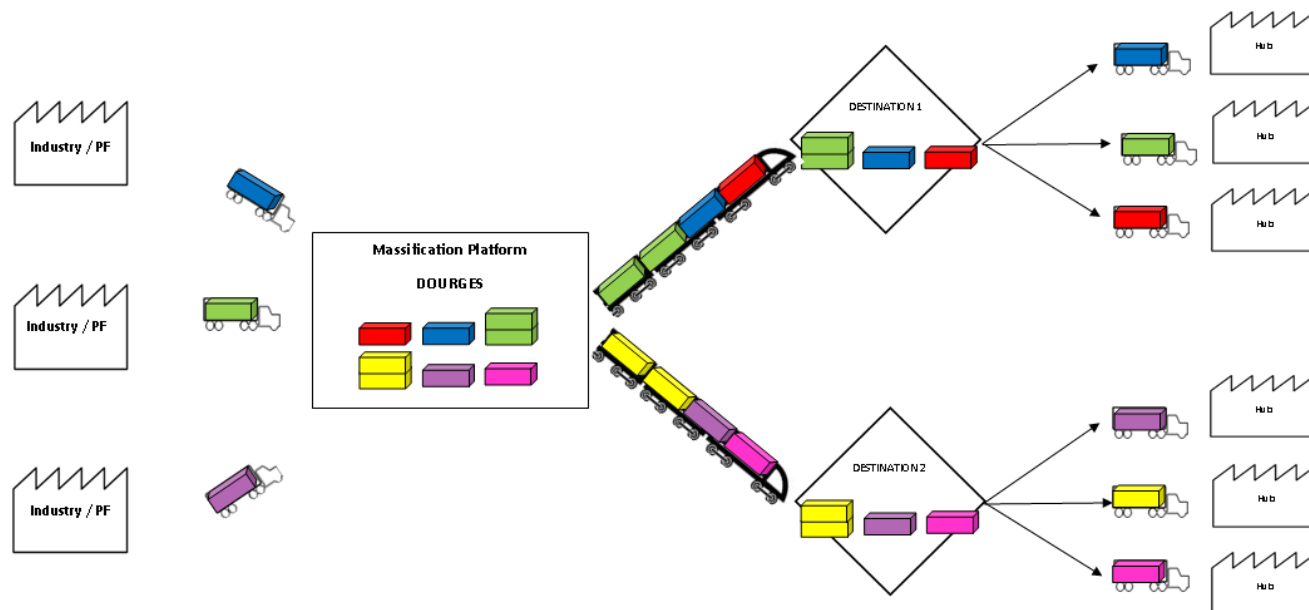
- Fostering the modal shift from existing multimodal platform
- Offering to regional shipper departures timed and optimized towards several European destinations
- Strengthening the regional attractiveness and spreading through a:



II. RAIL MASSIFICATION CONCEPT

3. Methodology

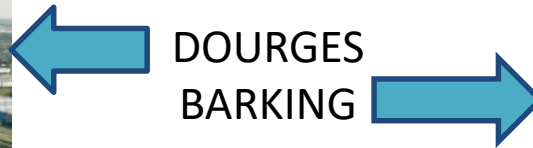
- Heighten awareness of others regional shippers to gather them around a table => 8
- Collecting main goods flows of each companies (volume, origin, destination, transport mode, seasonality)
- Mapping and analyzing data with Nallian involved into CLUSTERS 2.0 (CargoStream)
- Selection of the most relevant road for launching the train => considered as a test
- At this step, organization of 10 meeting (4 per year)



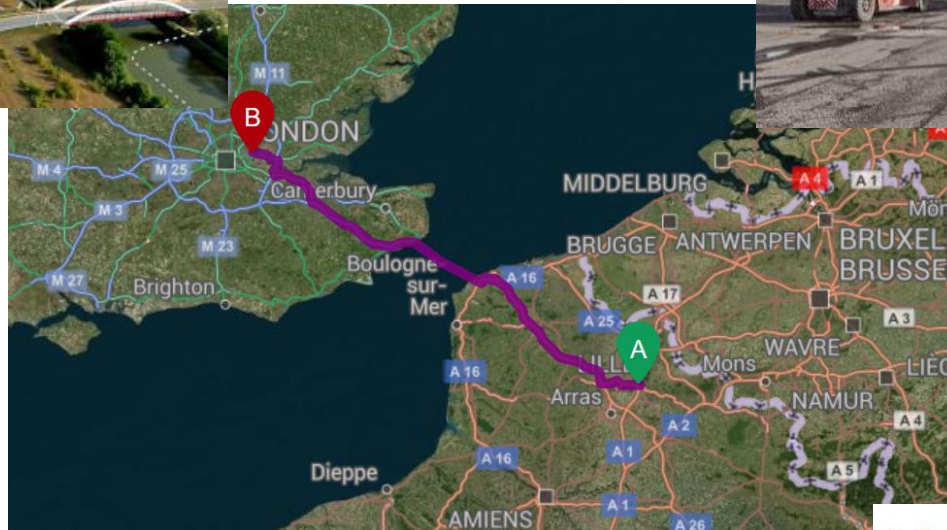
II. RAIL MASSIFICATION CONCEPT

4) The pilote project


- The rail massification will be tested between Dourges multimodal platform and Barking => the analyse through ICT raises a need to join the UK



**310 KMS VIA
THE CHANNEL**



III. OPPORTUNITIES

- Reduction of transports cost when goods are bundling => increase the filling rate 
- Improvement of the ecological efficiency => decrease the foot print and increase company CSR
- Reduction of bottleneck
- Implementation of new logistics models => reliability

Opportunities for Physical Internet

- Providing a new way to reach a common stake through a collaboration: reducing cost and improving sustainability for a new logistics model
- Creation of a new « methodology » to tackle PI issues
- Fostering an interconnected network and creating the missing link => UK through France to Spain or Italy by train
- Demonstration of the reliability and the efficiency of the multimodality
- Support a new mind shift

=> one of tool to run towards Physical Internet as a concrete approach

IV. CHALLENGES

- The main challenges remains making shipper working together
- Demonstration of economic, sustainability and reliability advantages
- Definition of a common target to fit with all shippers expectations and needs
- Finding a common agreement and business model to committ all shippers



Launching the train btw Dourges to Barking, has required:

- a. Making a business case to assess the economics and technical feasibility
- b. Without back haul, the test won't be relevant (Exportation from UK is weak – many of trucks are empty)

IV. CHALLENGES

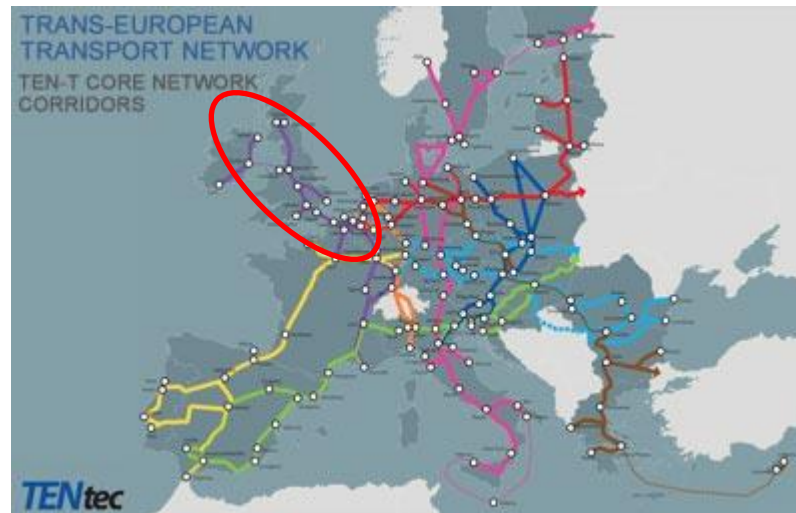
- c. Defining an action plan to find shippers, LSP, companies in UK who would be interested
- d. Thinking about the best opportunity to attract them => removing from Barking terminal to Daventry?
- e. Hiring logistics consultant to help the group in UK and sensitize other stakeholders => our last meeting (6/27/2017)



CHALLENGES STILL REMAIN SINCE ECONOMICS STAKE MUST BE DEMONSTRATED EVEN IF SUSTAINABILITY IS ACQUIRED

V. CLUSTERS 2.0: MAKE A STEP FORWARD

- The massification pilot project integrated into CLUSTERS 2.0 throughout a LivingLab
- Its innovative approach embraces the whole project => gathering shippers to use a smooth freight mode is the first effort ever engaged
- The aim is to bundle goods on train within TEN-T Corridors via a modal shift



TRANS-EUROPEAN TRANSPORT NETWORK, EU COMMISSION

V. CLUSTERS 2.0: MAKE A STEP FORWARD

- First target into CLUSTERS 2.0:

- Increasing of intermodal transport by 50%
- Increasing vehicle load factor by 75%

TO A REGIONAL LEVEL

- Second target:

- If the pilot succeeds, dissemination of a common methodology to be duplicated with other HUB (Duisport, Interporto Bologna...) **to foster a better interaction between logistics clusters**

**MAIN AIM: CONSOLIDATION OF FREIGHT VOLUMES BTW LOGISTICS CLUSTERS NETWORKS
FOR MORE EFFICIENT AND BETTER INTEGRATED SUB TRANSPORT SYSTEMS AND MODES**



THANK YOU FOR YOUR ATTENTION

POLE EURALOGISTIC

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