

# European Commission

## DG MOVE - Directorate B

STUDY ON SUPPORT MEASURES FOR THE IMPLEMENTATION  
OF THE TEN-T CORE NETWORK RELATED TO SEA PORTS,  
INLAND PORTS AND INLAND WATERWAY TRANSPORT

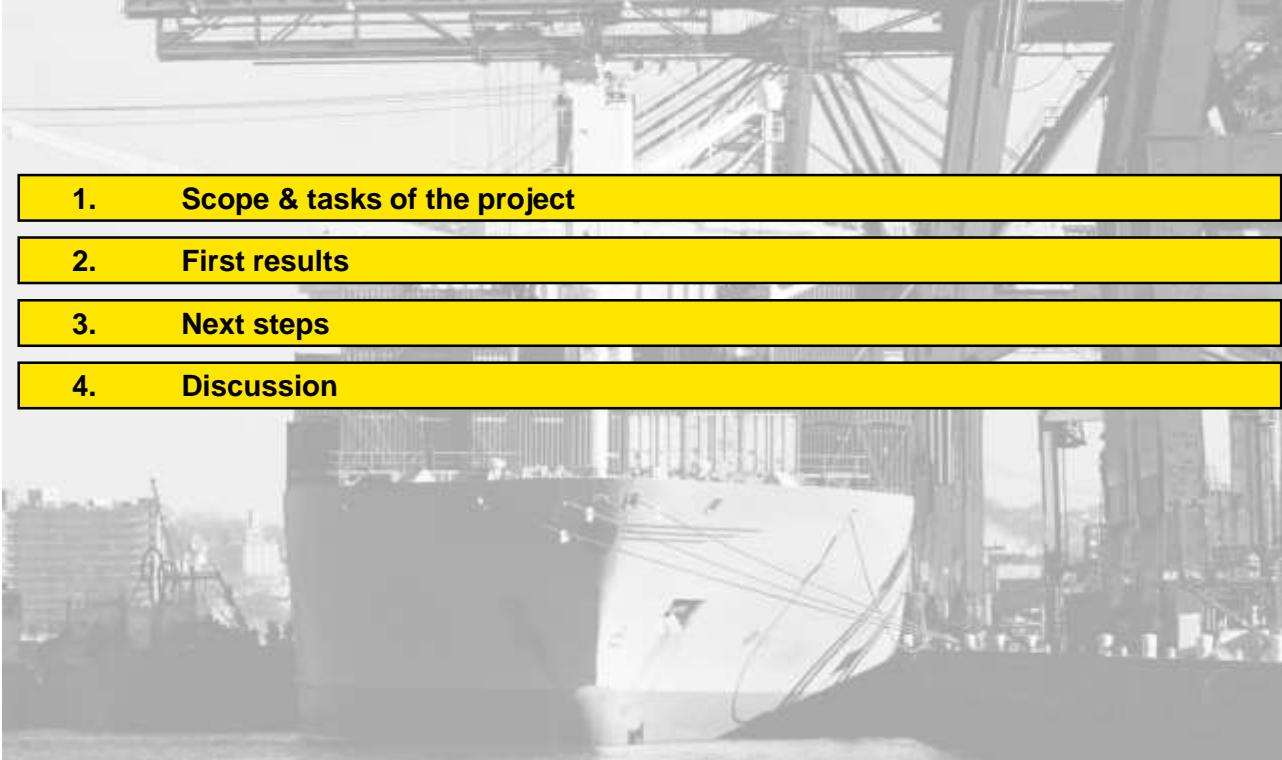
**Lot 1:** Assessment of market potential for inland ports and IW business

Port Forum 11/12/2017

CONTRACT No. MOVE/B3/SER/2015-224/SI2.721484



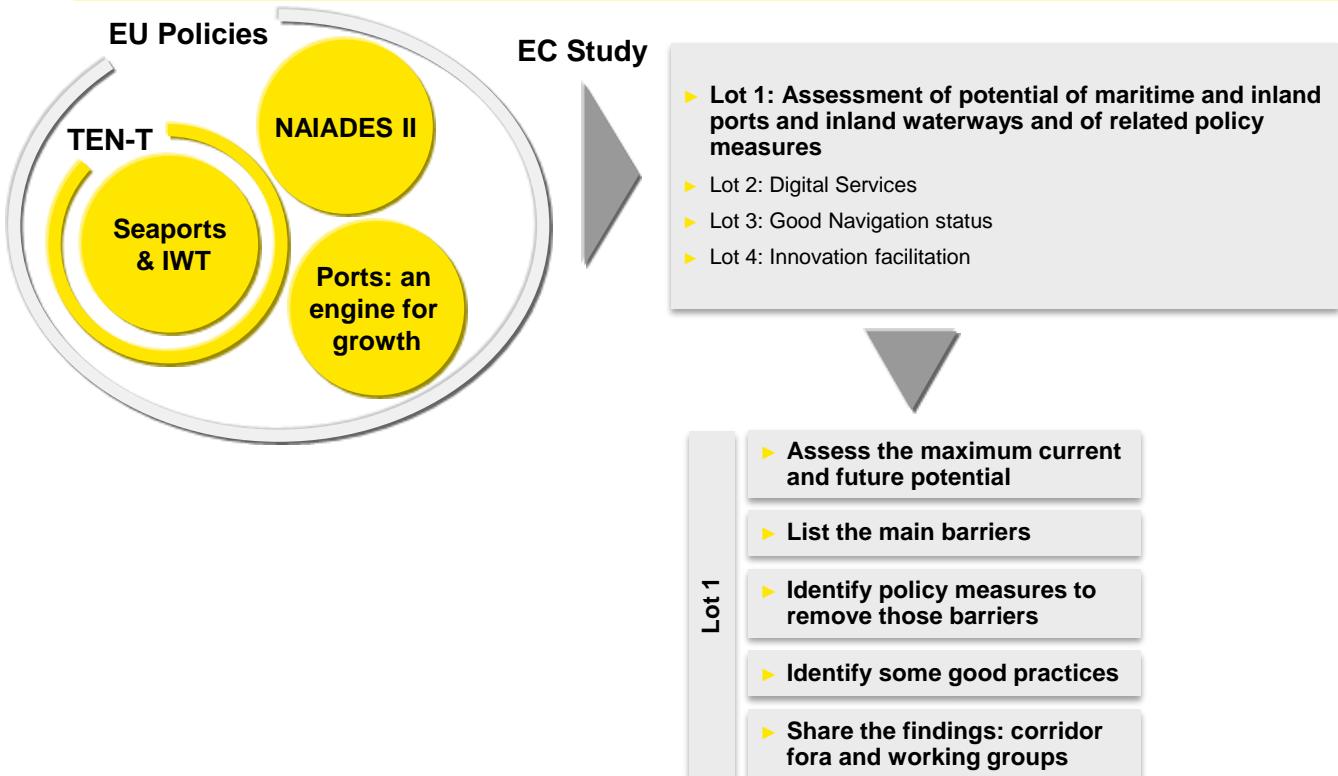
# Agenda

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- 1. Scope & tasks of the project**
  - 2. First results**
  - 3. Next steps**
  - 4. Discussion**

# 1. Scope & tasks of the project



# 1. Scope & tasks of the project



# Progress of the study

Final validation stage

Work in progress

Next step

1

## Critical review of the current situation

2

## Design of policy scenarios

3

## Assessment of their impact

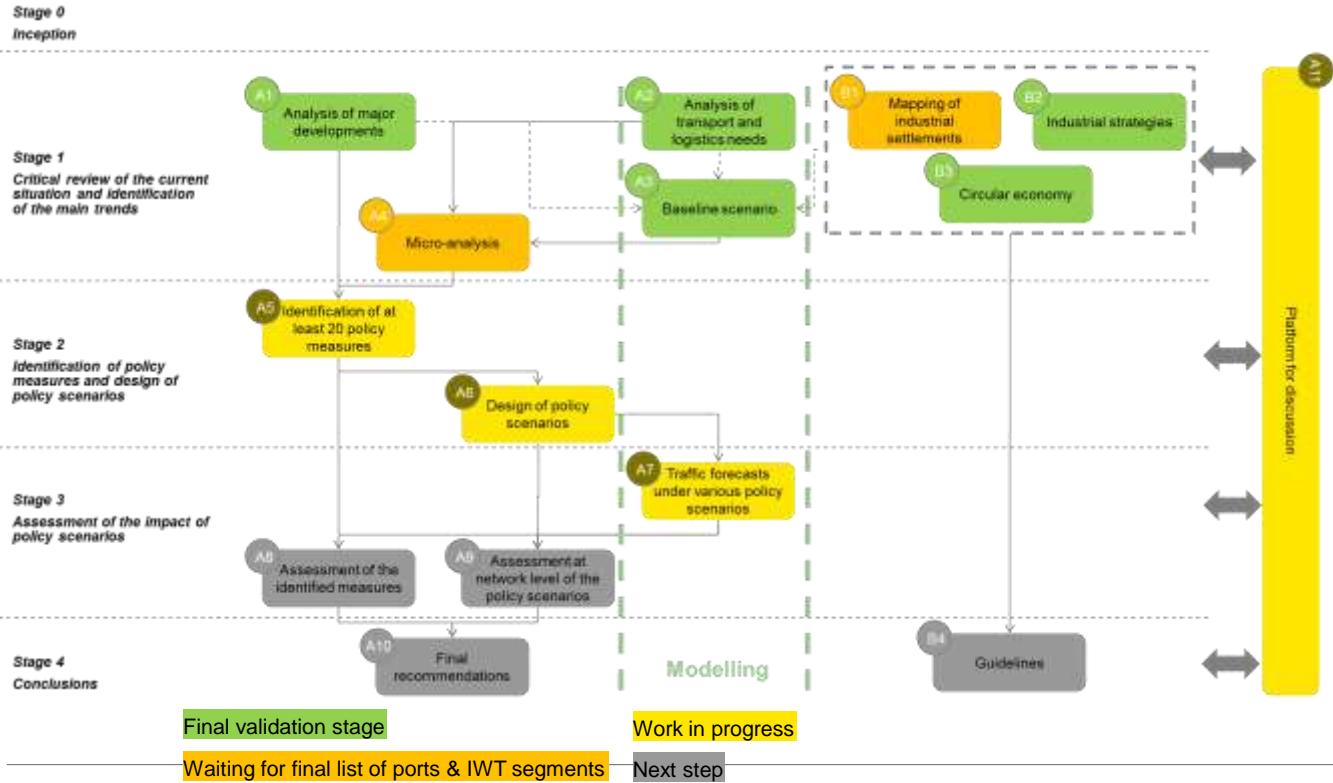
- ▶ Analysis of major developments
- ▶ Analysis of transport and logistic needs
- ▶ Traffic forecast – baseline scenario
- ▶ Industrial strategies
- ▶ Assessment of existing industrial development and clustering strategies

- ▶ Identification of 20 policy measures
- ▶ Design of policy scenarios

- ▶ Traffic forecast
- ▶ Assessment of the identified measures
- ▶ Assessment at network level of the policy scenarios

**Support to EU policies: TEN-T corridors, NAIADES II, Ports: an engine for growth**

# Progress of the study



# Stakeholders have shown a strong interest in the project

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## Sector association

- ▶ INE 26/11/2017
- ▶ Port Director Malta 27/03/2017
- ▶ ESPO Civitavecchia 28/04/2017
- ▶ Port Forum 11/12/2017
- ▶ ESPO workshop 12/12/2017
- ▶ Events with inland waterways to be organized in the coming weeks

## Written discussion

- ▶ Discussion paper on scenario disseminated on the 12/04/2017
- ▶ More than 60 comments collected
- ▶ Detailed answers and additional information provided on November the 7<sup>th</sup>
  - ▶ Appendix on the modelling tool
  - ▶ Appendix on the assumptions on costs
  - ▶ Appendix on continental containers

## 2. First results

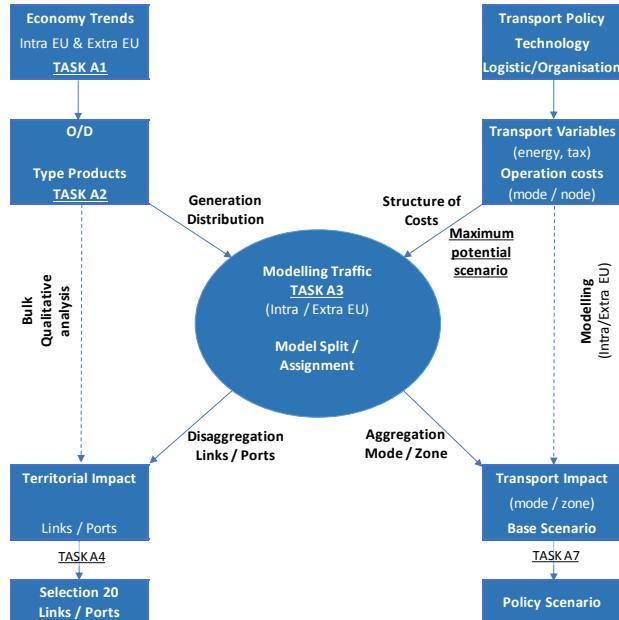


# Applications on the container market and PortPrint – model architecture

## Methodology

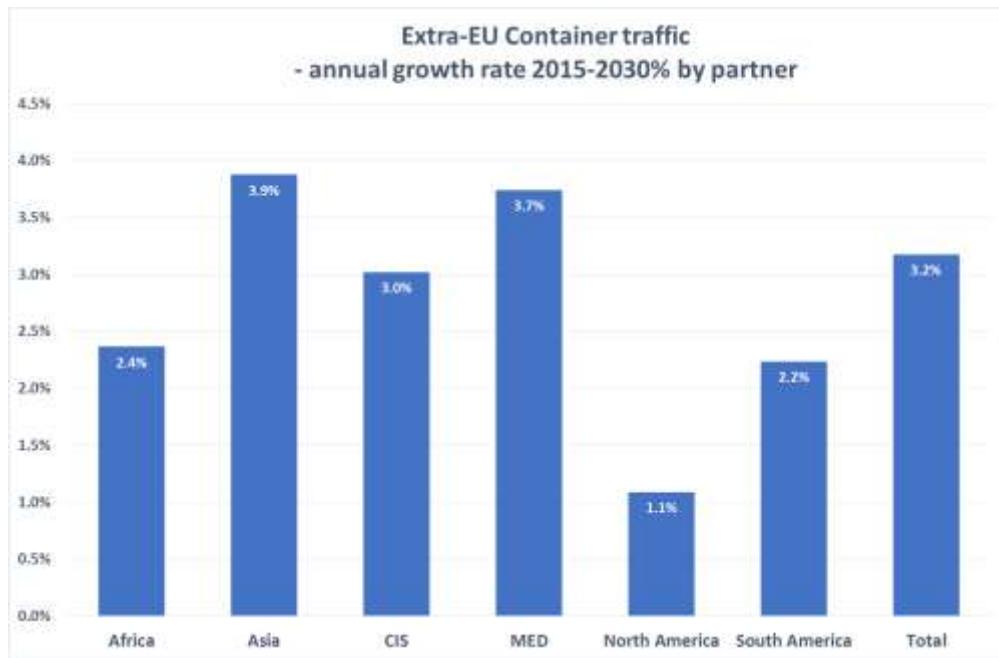
A3 – presentation of the results of the modelling tool:

- ▶ Detailed Policy assumptions and Methodology
- ▶ Demand generation: two separate matrix
- ▶ Portprint model
  - ▶ Generation & Extra-Eu matrix
  - ▶ Port choice model
  - ▶ Modal share
  - ▶ Assignment
- ▶ Progress on the bulk



# Applications on the container market and PortPrint model – generation module

## Results – Growth rate by partner

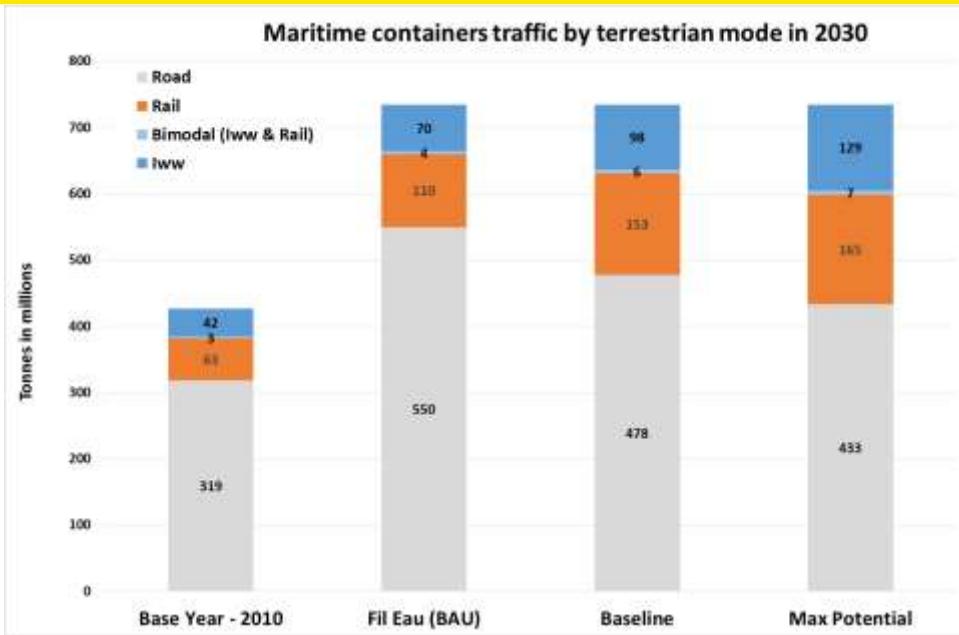


# Definition of scenarios

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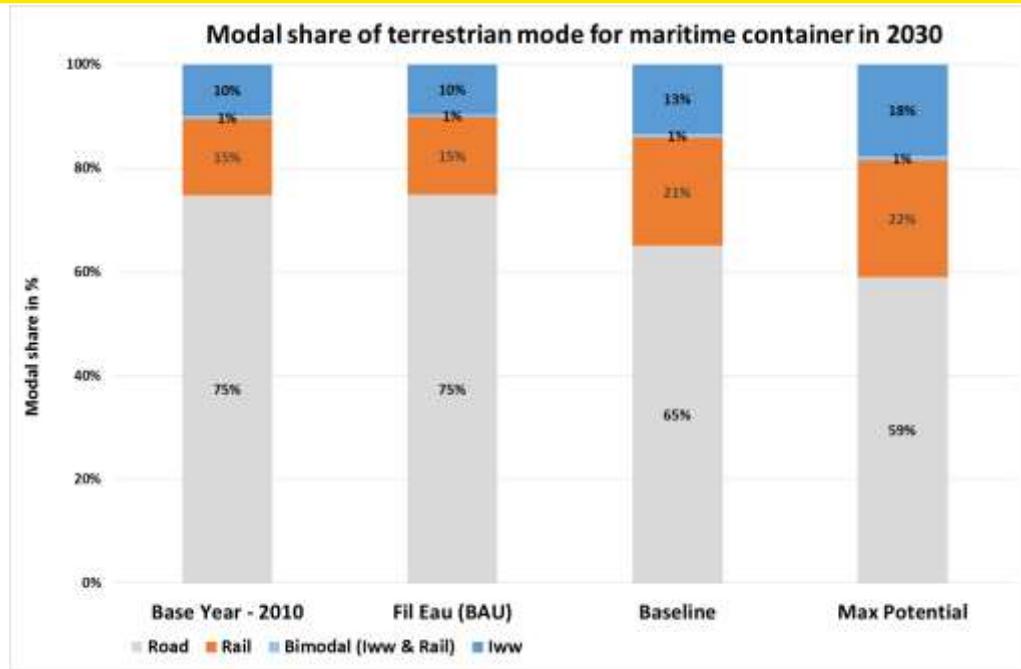
#	Scenario name	Infrastructure	Costs	Comments
S0'	<b>Business as usual</b>	No TEN-T	2010	Required for modelling: just demand growth
S1	<b>Baseline</b>	TEN-T	Baseline	Infrastructure projects on TEN-T included + evolution of transport costs
S2	<b>Maximum potential</b>	TEN-T	Max potential	Alternative set of assumptions on transport costs with strong improvement of IWT performance (and also rail)

# Results on maritime container market – in tons



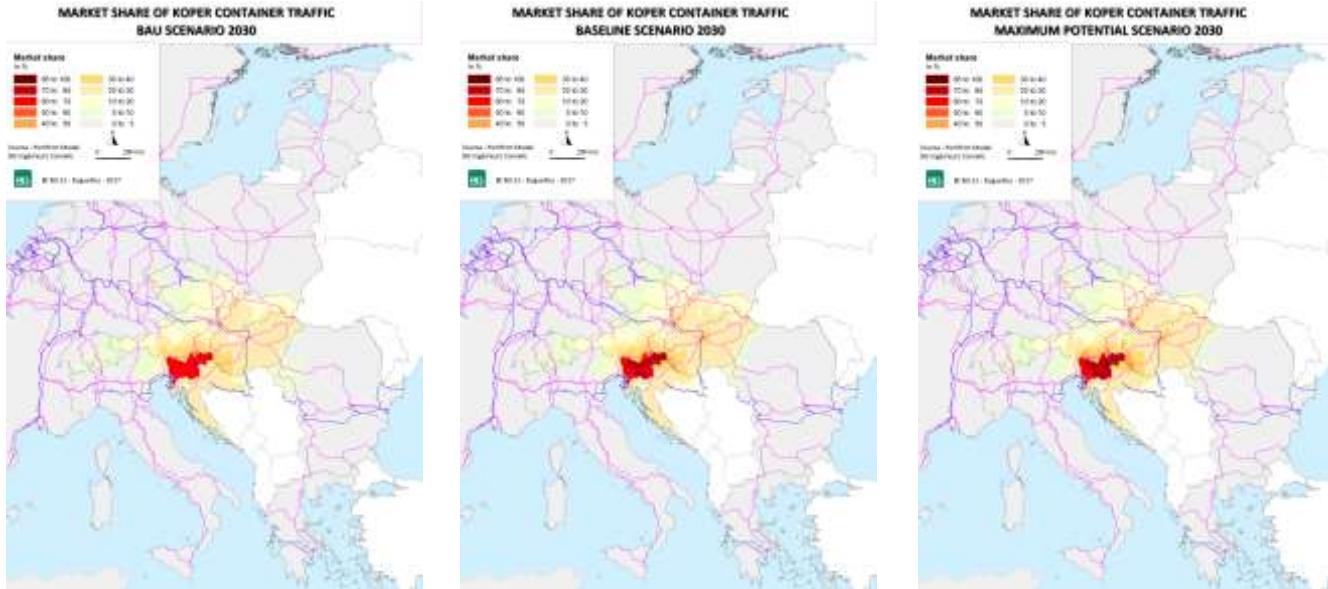
- ▶ Increase of the total market by 70% between 2010 & 2030 with:
  - ▶ x 2,3 for IWT traffic between 2010 & Baseline Scenario 2030
  - ▶ x 3 for IWT traffic between 2010 and Max Potential Scenario 2030

# Results on maritime container market in modal share



- ▶ The total share of IWT is 10% in 2010 & 2030 (BAU), 13% in baseline scenario and 18% for maximum potential scenario.

# Results on maritime container market



BUSINESS AS  
USUAL 2030

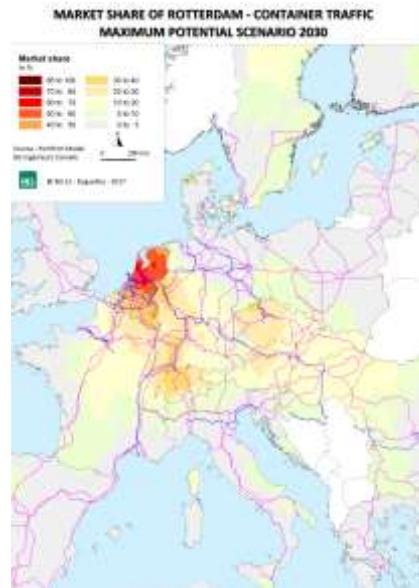
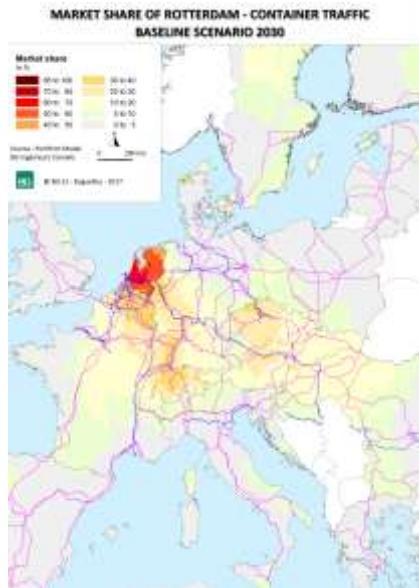
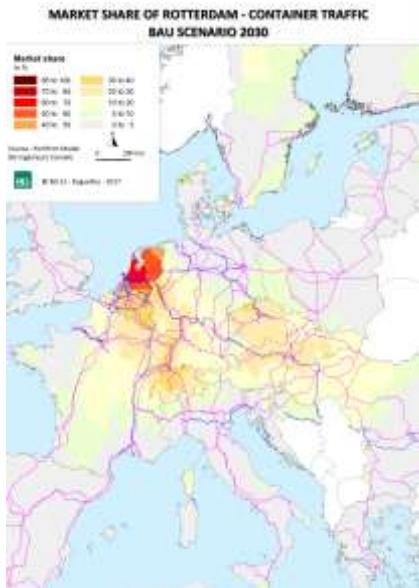


BASELINE 2030 Infrastructure  
projects + trend on costs



Max Potential :  
improvement of IWT & rail

# Results on maritime container market



BUSINESS AS  
USUAL 2030

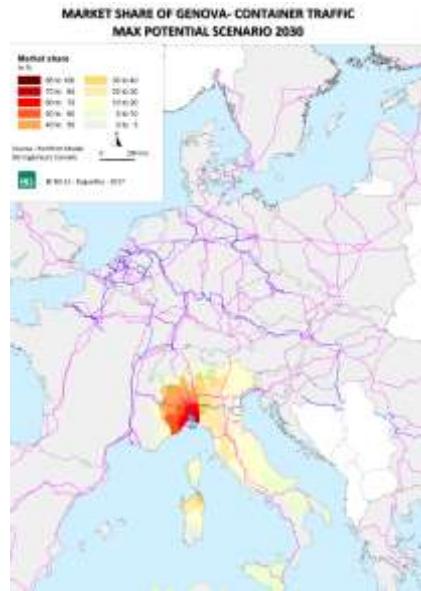
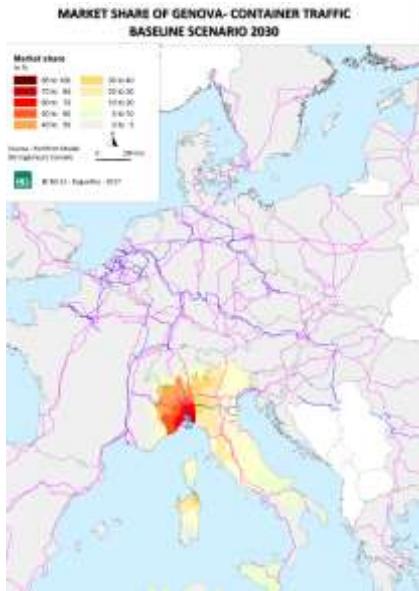
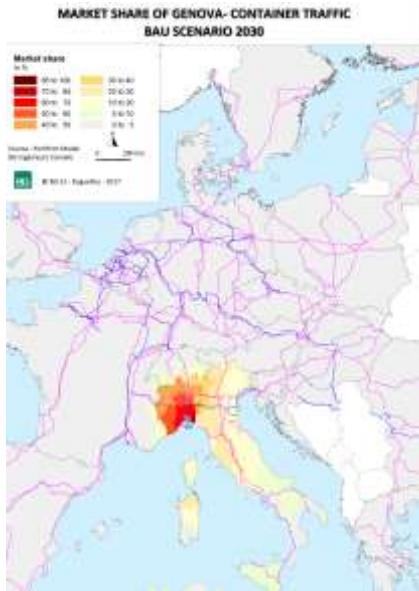


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# Results on maritime container market



BUSINESS AS  
USUAL 2030

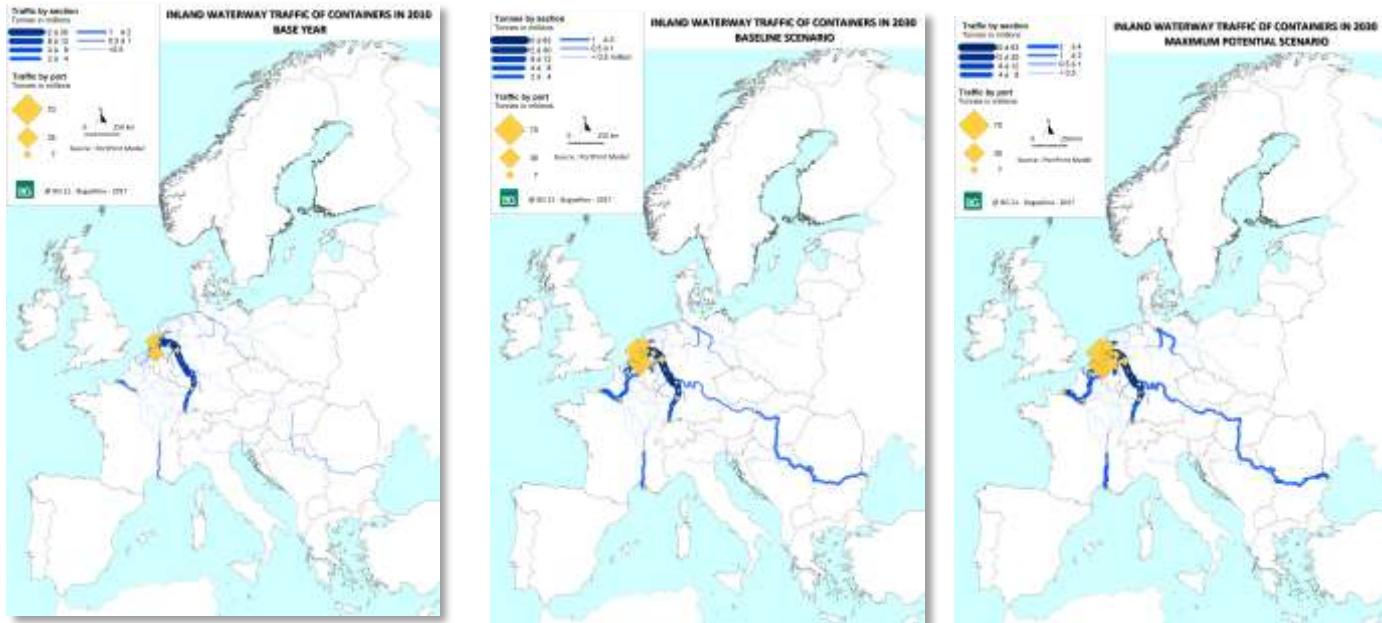


BASELINE 2030 Infrastructure  
projects + trend on costs



Max Potential :  
improvement of IWT & rail

# Results on maritime container market



BASE YEAR 2010

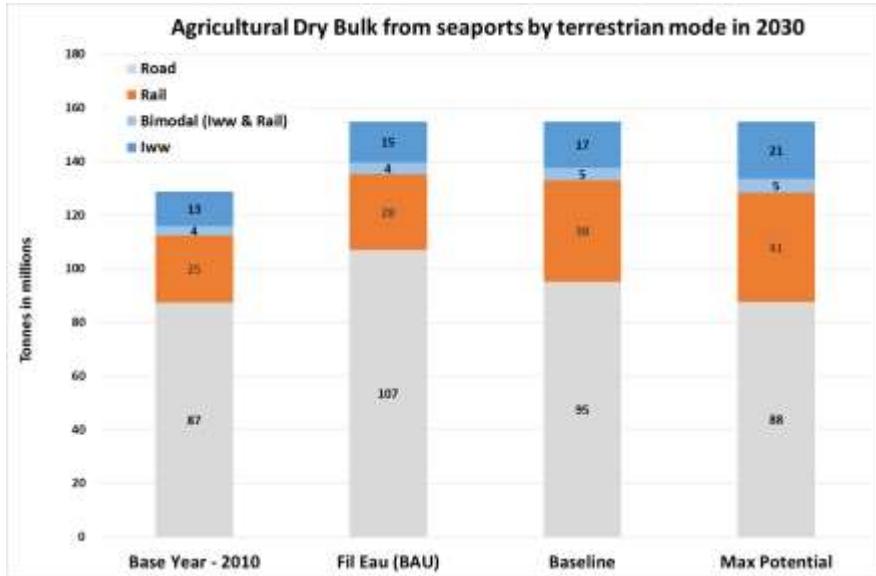


BASELINE 2030 Infrastructure  
projects + trend on costs



Max Potential :  
improvement of IWT & rail

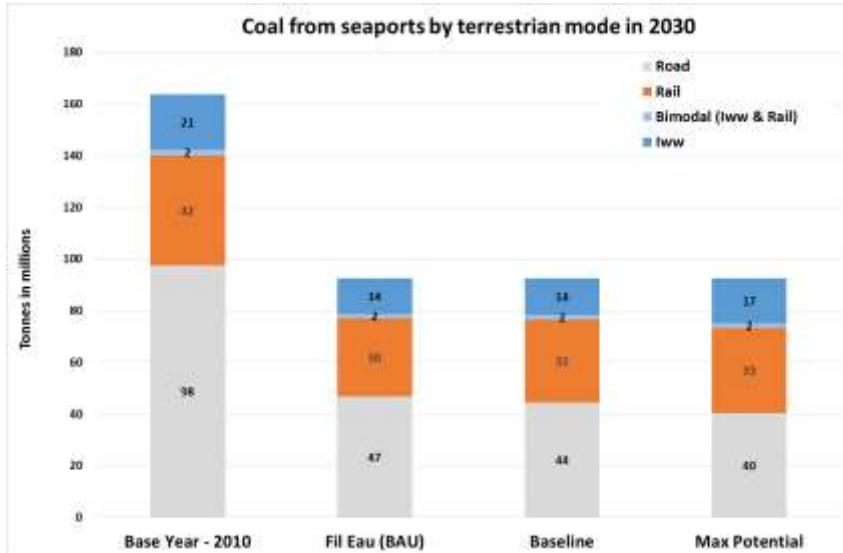
# Results on agricultural bulk (included livestock feed)



- ▶ Compared to the Base Year, the traffic increase of :
  - ▶ 20% due to the generation of traffic
  - ▶ 33% in the baseline scenario
  - ▶ 66% in the Max Potential scenario

- ▶ 25% of the traffic is not generated in a core seaports => less concentration of the traffic at EU level
- ▶ When IWT is available, the modal share is high (> 30%), especially for Rhine-Alpine and Rhine-Danube corridors

# Results on coal from or to seaports (not intra-continental flows)



- ▶ Compared to the Base Year, the IWT traffic decreases:
  - ▶ - 35% due to the generation of traffic (BAU) and -43% for all modes (seaports). There is a structural change in the OD.
  - ▶ -30% in the baseline scenario
  - ▶ -15% in the Max Potential scenario. Modal shift limits the effects of decrease of traffic volume

- ▶ When IWT is available, the modal share is high (> 30%-40%), especially for Rhine-Alpine and Rhine-Danube corridors
- ▶ Rail also represents a high market share (30-35%)
- ▶ Road traffic is for very short distances

### 3. Next steps



# Use the tool to test alternative scenarios & variants

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#	Scenario name	Digitalization	Multimodality	Environment	Scope
S1	Baseline				Task A
S2	Maximum potential				Task A
S3	Short Sea Shipping				Task A
S4	Development of rail& IWT connections				Task D
S5	COP21 scenario (based on S1)				Task D
S6	Disruptive scenario (based on S1)				Task D

#	Scenario name	Variant #	Description	Scope
S1	Baseline	V1	Hub & spoke: Concentration of the traffic on the 15 biggest ports able to welcome ULV	Task A
S1	Baseline	V2	Redistribution: Slower traffic growth for containers in the 10 biggest seaports	Task A
S1	Baseline	V3	Faster uptake of new technologies for maritime transport and inland waterway	Task A

# Calendar

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- ▶ Workshop proposed to discuss more detailed results end of January / beginning of February
- ▶ Another workshop for a wrap up in May
- ▶ Final report end of June / beginning of July

## 4. Discussions



# Questions / issues

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- ▶ First feedback on the results?
  - ▶ Growth of containers flows, decrease of energy (coal, crude oil)
  - ▶ Corridor network corridors: projects are improving the connectivity of the largest seaports
  - ▶ No major change in the distribution of traffic amongst ports
- ▶ Any forecast available on the potential of circular economy in ports (in terms of T or revenues?)?
- ▶ Any comments / questions on the answers provided?

# Thank you!

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