



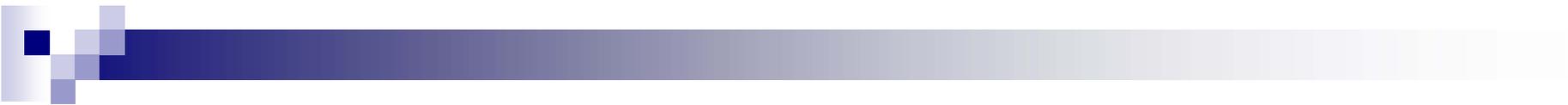
# Short sea shipping and inland waterway transport Status and prospects

Harilaos N. Psaraftis  
National Technical University of  
Athens



# Purpose of talk

- Take stock at some issues affecting EU short sea shipping and inland waterway transport
  - as regards the general transport policy thrust
  - as regards safety, security and environmental protection
- Try to identify
  - areas of concern
  - opportunities
- Make recommendations on how to improve the current situation



# References (some)

- **SSS roundtable conferences** (1992, 1994, 1996)
- **“Concerted Action on SSS”** (EC DG-TREN contract No. WA-96-CA.95/186) [1995-2000]
- **“TRAPIST project: Tools and Routines to Assist Ports and Improve Shipping”** (EC DG-TREN contract No. GRD2/ 2000/30342) [2002-2004]
- Psaraftis, H. N. (2005), **“EU ports policy: where do we go from here?”** Maritime Economics and Logistics, Vol. 7, No. 1, 73-82.
- **NTUA Maritime Transport web site**: references, documents, sources, links, etc.

# WHITE PAPER "European transport policy for 2010 : time to decide "



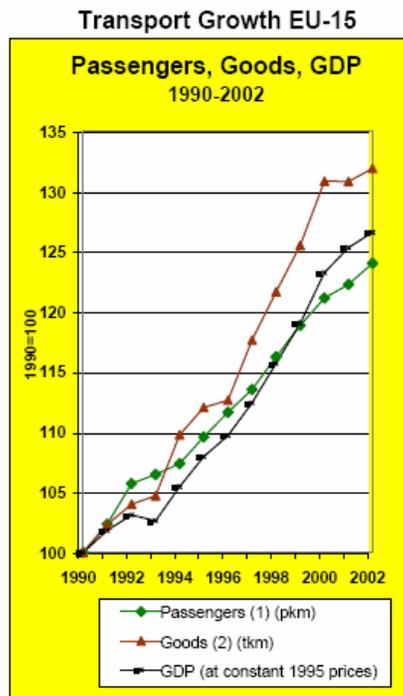
- COM (2001) 0370
- Major policy document of EU
- Outlines EU transport policy for 2010
- All modes
- 4 parts

# White paper cont'd

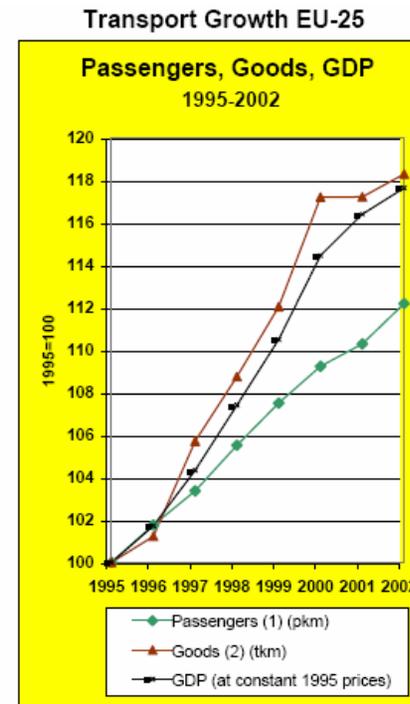


- Policy guidelines
- Part 1: shifting the balance between modes of transport
- Part 2: eliminating bottlenecks
- Part 3: placing users at the heart of transport policy
- Part 4: managing the globalisation of transport
- Conclusions: time to decide
- Annexes

# EU transport growth

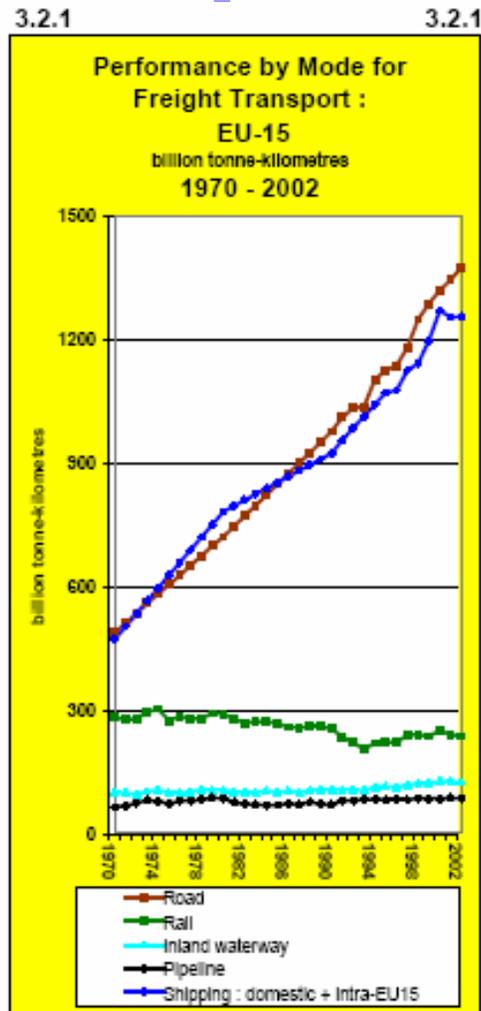


Notes :  
 (1) : passenger cars, buses & coaches, tram+metro, railways, air  
 (2) : road, rail, inland waterways, pipelines, sea (intra-EU + domestic)



Notes :  
 (1) : passenger cars, buses & coaches, tram+metro, railways  
 (2) : road, rail, inland waterways, pipelines

# EU-15 modal split



Lisbon, Portugal, May 9, 2005

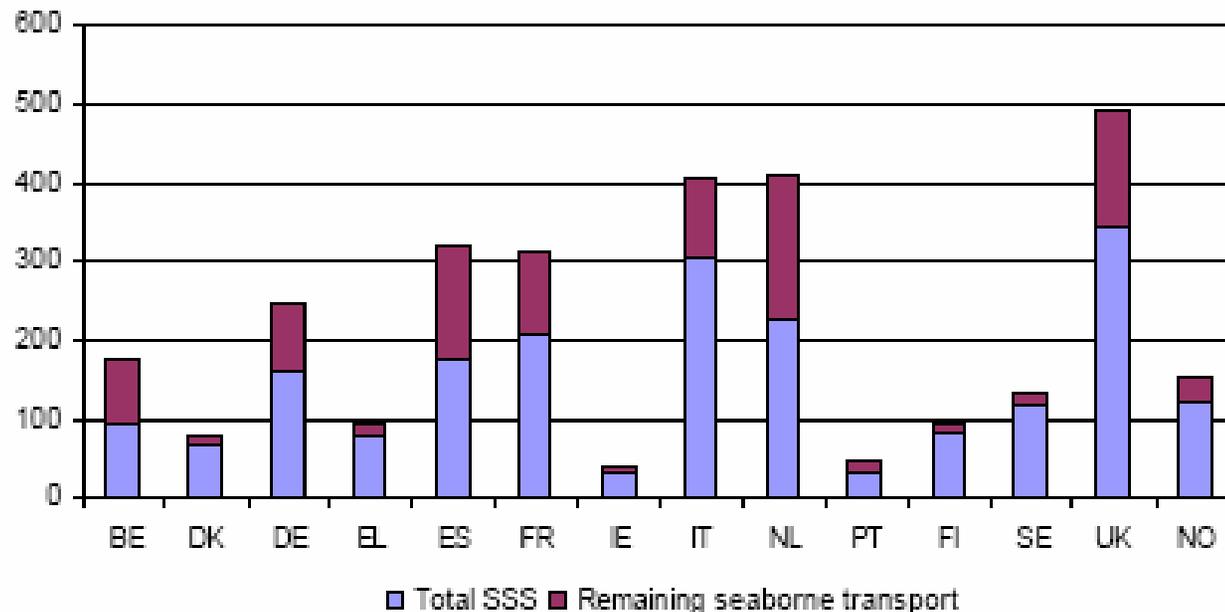


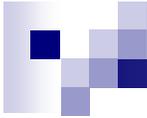
# Short sea shipping (SSS)

- Central pillar of EU transport policy:  
**SHIFT CARGO FROM LAND TO SEA**
- Goal: reduce transport 'external costs'  
**Congestion/noise/pollution/accidents**
- 2001: **0,5% of EU GDP**
- 2010: rise by 142% to **1% of EU GDP**  
**(80 billion euros a year)** if no action is taken

*In 2003, Short Sea Shipping within the EU-15 accounted for 1.6 billion tonnes of goods, of which almost a third concerned the ports on the Mediterranean sea.*

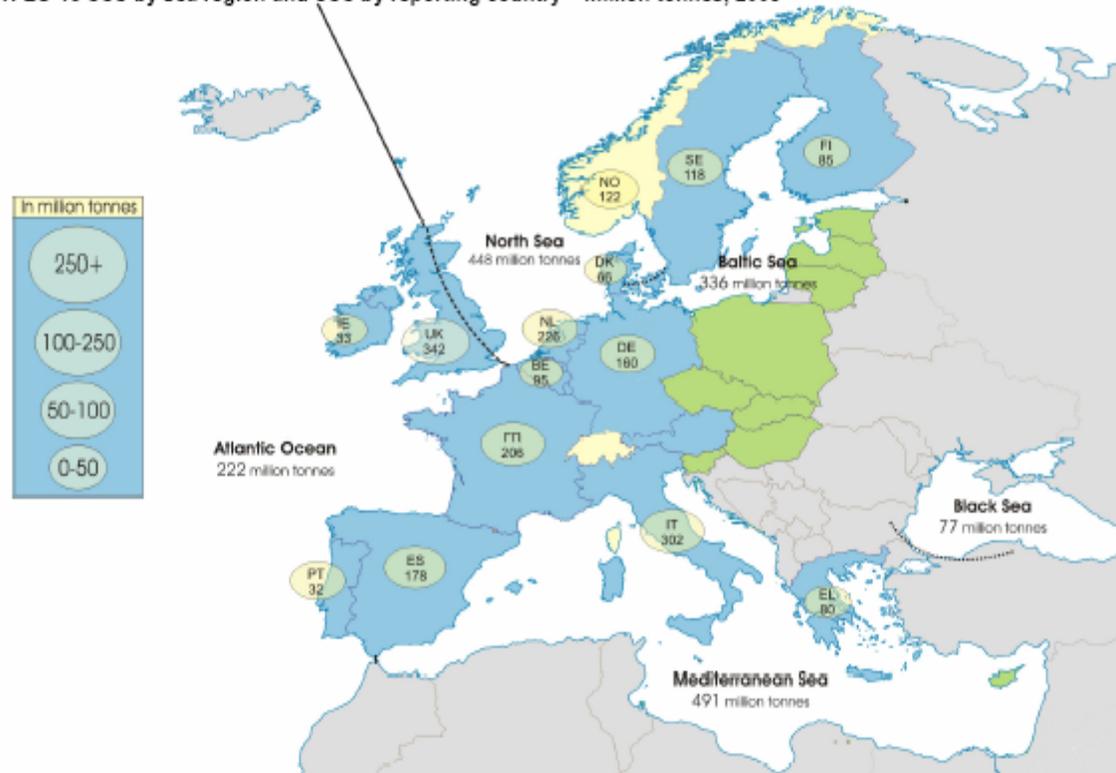
Figure 1: Share of Short Sea Shipping (SSS) in total annual turnover of tonnage - million tonnes, 2003

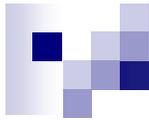




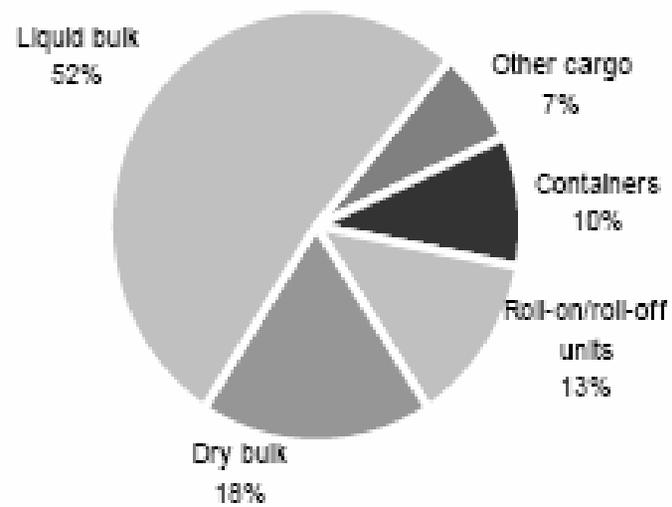
## Short Sea Shipping by Reporting Country and Sea Region

Map 1: EU-15 SSS by sea region and SSS by reporting country – million tonnes, 2003





**Figure 3: Distribution of \$\$\$ in the EU-15 by type of cargo – % of tonnes, 2003**



# SSS bulk

Figure 6: Share of SSS in liquid bulk handled – 1000 tonnes, 2003

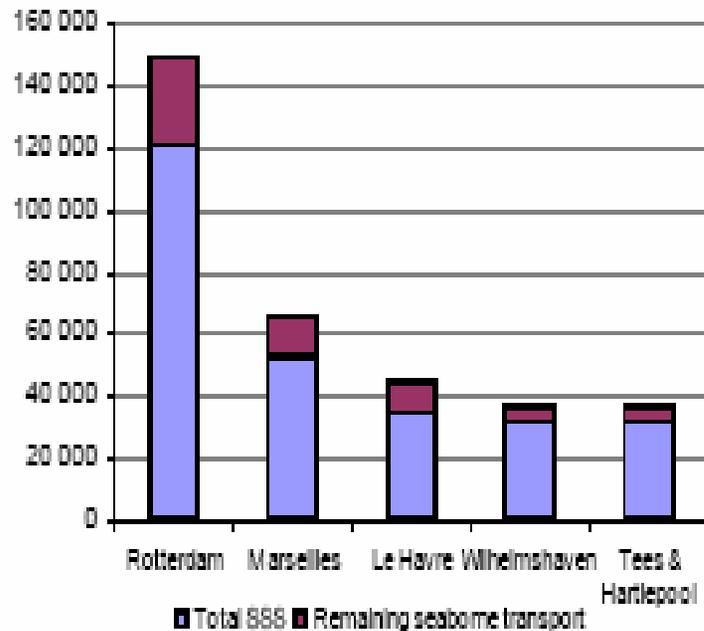
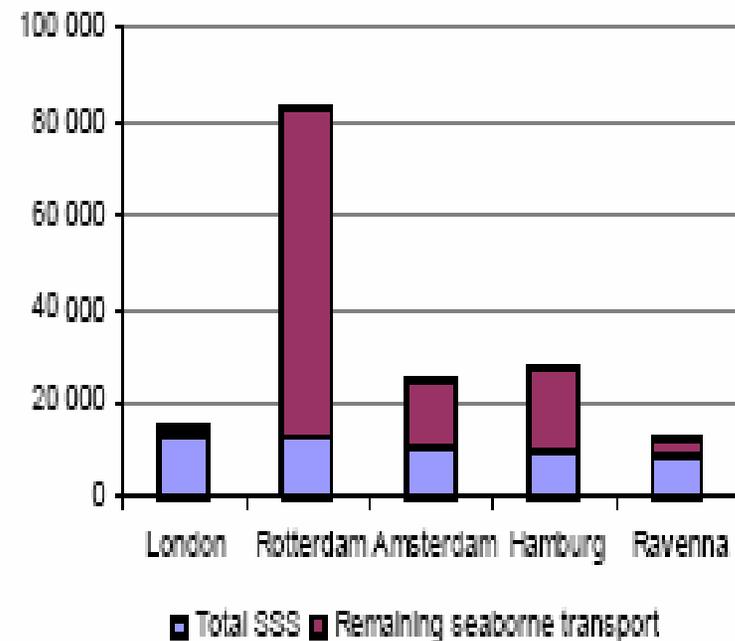


Figure 7: Share of SSS in dry bulk handled – 1000 tonnes, 2003



# SSS unitized

Figure 8: Share of SSS in containers handled – 1000 tonnes, 2003

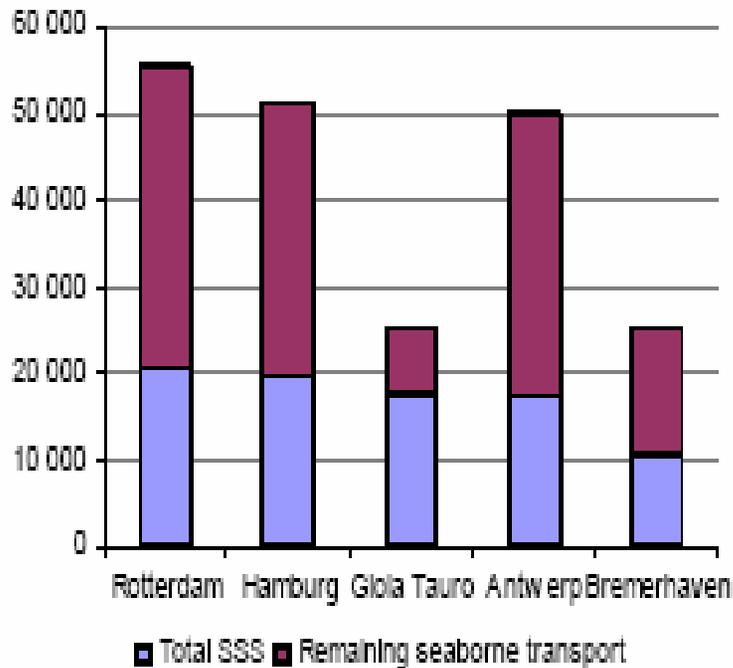
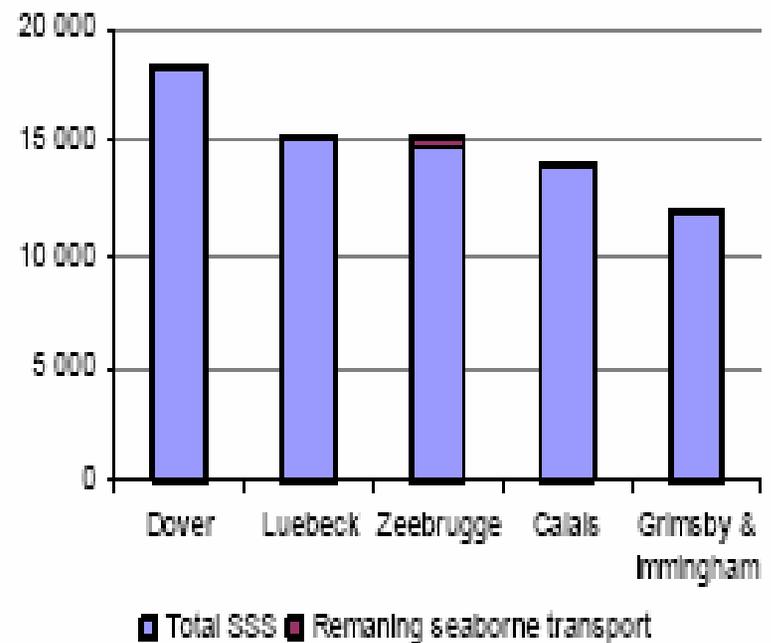


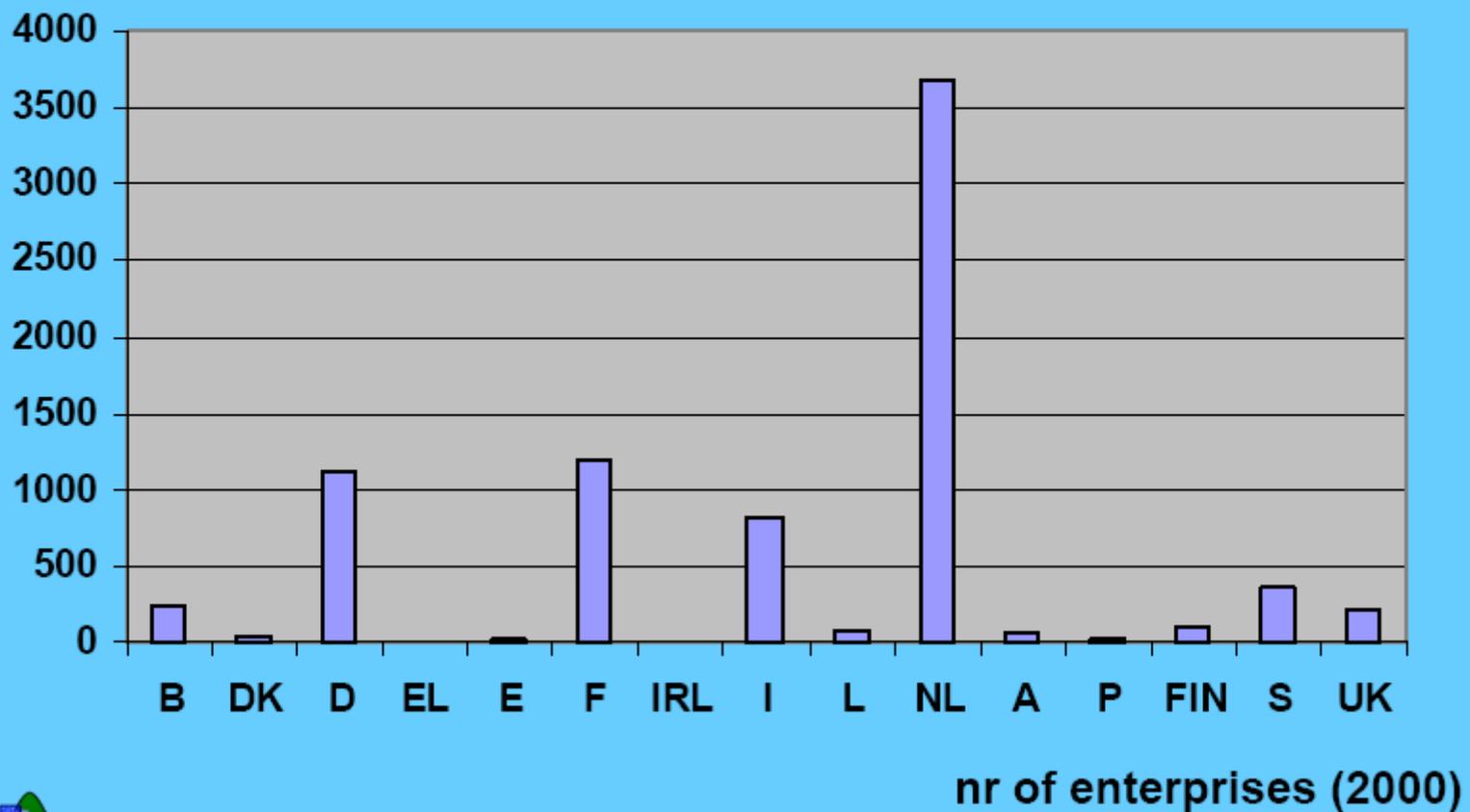
Figure 9: Share of SSS in ro-ro units handled – 1000 tonnes, 2003



# Inland waterway (IW) coverage



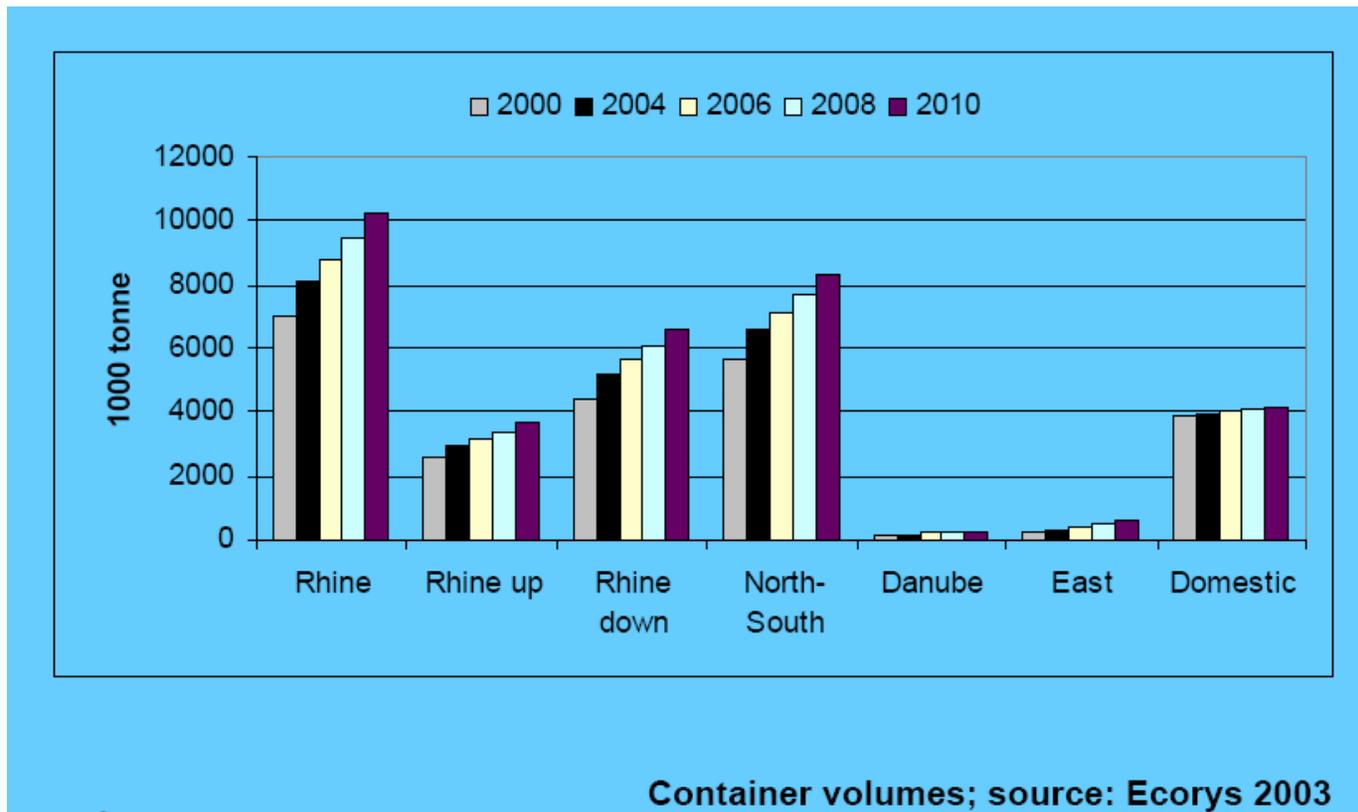
## B Market structure still fragmented



Prospects of Inland Navigation within the Enlarged Europe

5

# IW container forecasts





# SSS obstacles (some)

- Has not yet fully shed its past image as an **old-fashioned industry**;
- Involves **complex administrative and documentary procedures**;
- Requires **enhanced port efficiency**;
- Needs new **advanced technological** solutions for ships, ports, loading units and telematics networks.
  
- More later..



# EU: Need of a SSS promotion program

- Adoption of a Directive **standardising certain reporting formalities** for ships to arrive in and/or depart from ports in the Member States;
- Proposal for a new support programme “**Marco Polo**”;
- Proposal for a Directive on **Intermodal Loading Units**;
- Introduction of the “**Motorways of the Sea**” approach in the Commission’s White Paper;
- Proposal for a **Directive on market access to port services** (“port package”).



# SSS promotion cont'd

- Focal points
- Promotion centres
- Maritime clusters



# SSS flow statistics

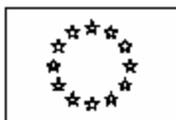
- Need to clearly know flows if traffic is to be shifted
- A difficult subject!
- Complete O/D tables do not exist
- Data inconsistencies
- Ref: “Concerted Action on SSS” statistics package



# [parenthesis:

- Q: In SSS-CA, which EU country provided the most comprehensive SSS flow database ?
- **Portugal!**
- port-to-port data
- Foreign trade statistics between Portugal and European countries by mode of transport
- O/D matrices

]



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 2.7.2004  
COM(2004) 453 final

**COMMUNICATION FROM THE COMMISSION TO THE COUNCIL,  
THE EUROPEAN PARLIAMENT, THE EUROPEAN ECONOMIC AND  
SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**on Short Sea Shipping**

{SEC(2004) 875}



# “bottleneck exercise”

- Image of SSS;
- Door-to-door SSS;
- Administration and documentation;
- Ports and port services (critical);



# Customs procedures for SSS

- 2002 Guide
- 2004 Working document
- e- customs
- New Computerised Transit System (NCTS)

# TEN-Ts (Trans-european transport networks)



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 1.10.2003  
COM(2003) 564 final

2001/0229 (COD)

Proposal for a

**DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**amending the amended proposal for a**

**DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**amending Decision No 1692/96/EC on Community guidelines for the development of the trans-European transport network**

(presented by the Commission pursuant to Article 250(2) of the EC Treaty)

Lisbon, Portugal, May 9, 2005

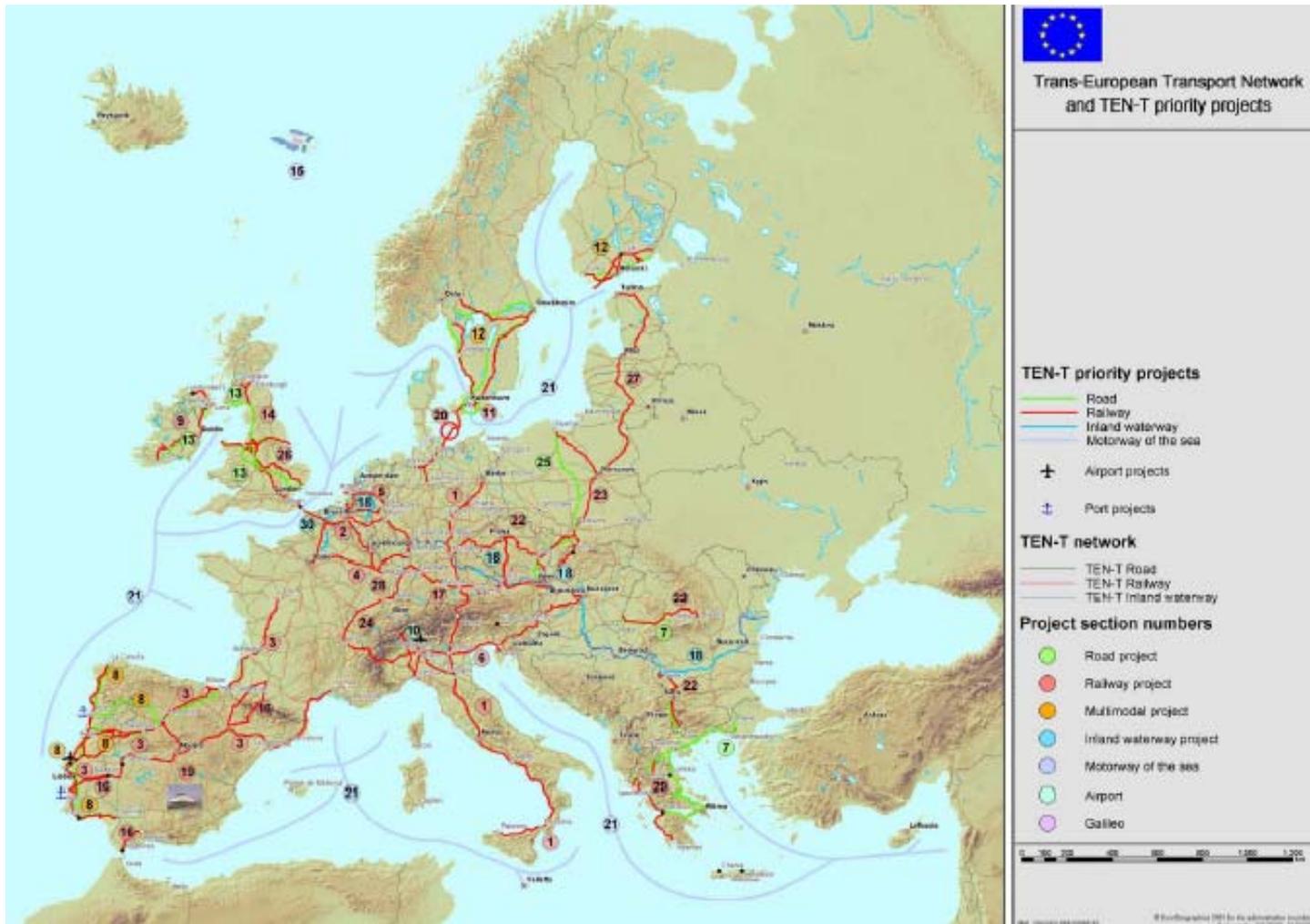
25



# Basic concept

- High-level group chaired by K. van Miert
- 29 high priority projects across EU
- Funding up to 220 billion EUR by 2020
- Introducing ‘Motorways of the Sea’

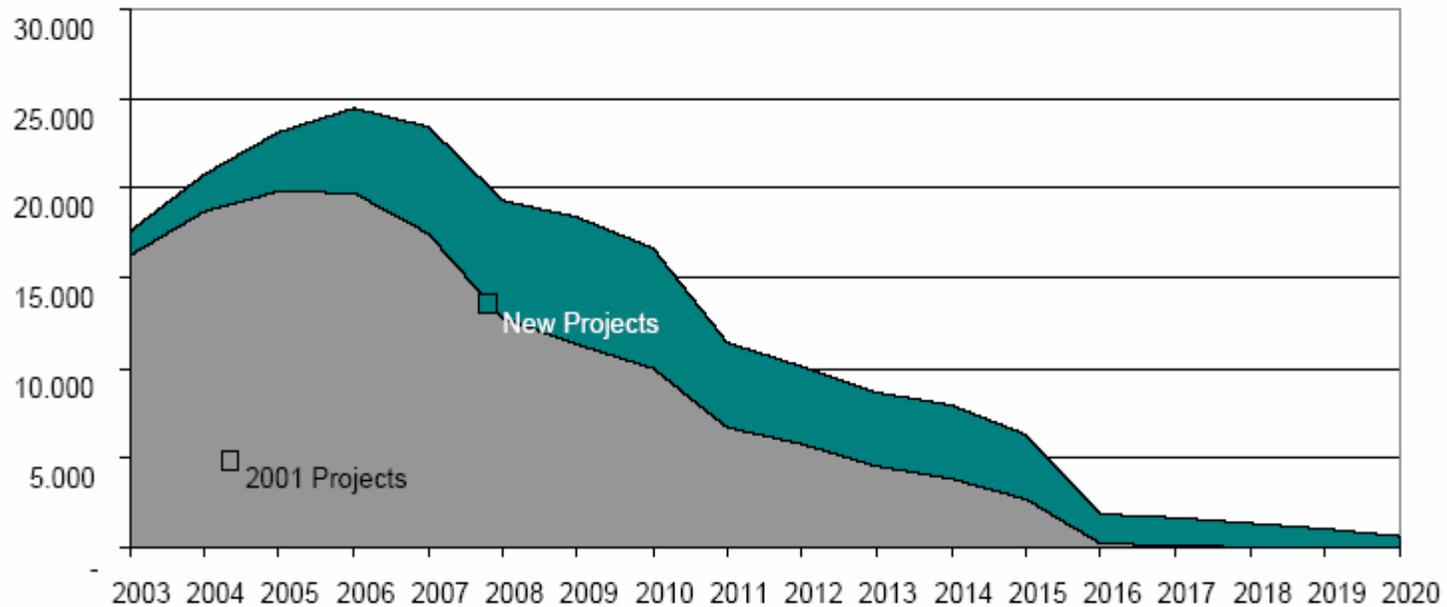
# TEN-T priority projects



Lisbon, Portugal, May 9, 2005

# Funding for TEN-Ts

Remaining Investment -  
Projects proposed in 2001 and New Projects  
(2003-2020, Meuro)



# Motorways of the Sea (project No. 21)

- Motorway of the Baltic Sea
- Motorway of the Sea of Western Europe
- Motorway of the Sea of South-West Europe
- Motorway of the Sea of South-East Europe





# Marco Polo program

- “Marco Polo” program launched in 2003
- Successor to “PACT”
- Goal: shift 12 billion ton-kilometers a year from road to non-road modes



# Marco Polo 1<sup>st</sup> call results

- 15 million EUR of EC-funds were available under the first call;
- 92 proposals were received, requesting 184.5 million EUR of EC-subsidy;
- 13 actions are granted EC financial support;
- 13 actions are shifting 13.6 billion tonnes/kilometres of freight off the road to short sea shipping, rail and inland waterways;
- private investments of about 360 million EUR (without infrastructure) will be triggered with selected 13 actions;
- the average environmental efficiency is 15, i.e. for every 1 EUR of subsidy spent, there are 15 EUR of external costs saved for society;
- the 13 actions show good geographical distribution, with large, small, central and peripheral countries benefiting.



# Marco Polo II

- Based on an independent ex-ante evaluation, the Commission proposes an overall budgetary envelope of 740 million EUR for the period 2007 – 2013, i.e. **roughly 106 million EUR per year.**
- This will **shift more than 140 billion tonne-kilometres of freight off the road** (equivalent to 7 million truck journeys of 1000 kilometres) and will reduce CO2 emissions by 8400 million kg.
- In terms of avoided environmental damage and less accidents, less energy consumption and less infrastructure damage, the **benefits are forecast to be about 5 billion EUR.**
- **1 Euro subsidy given in Marco Polo II will thus generate more than 6 Euro in terms of social & environmental benefits to our society.**



# Q: are things looking good?

Answer:

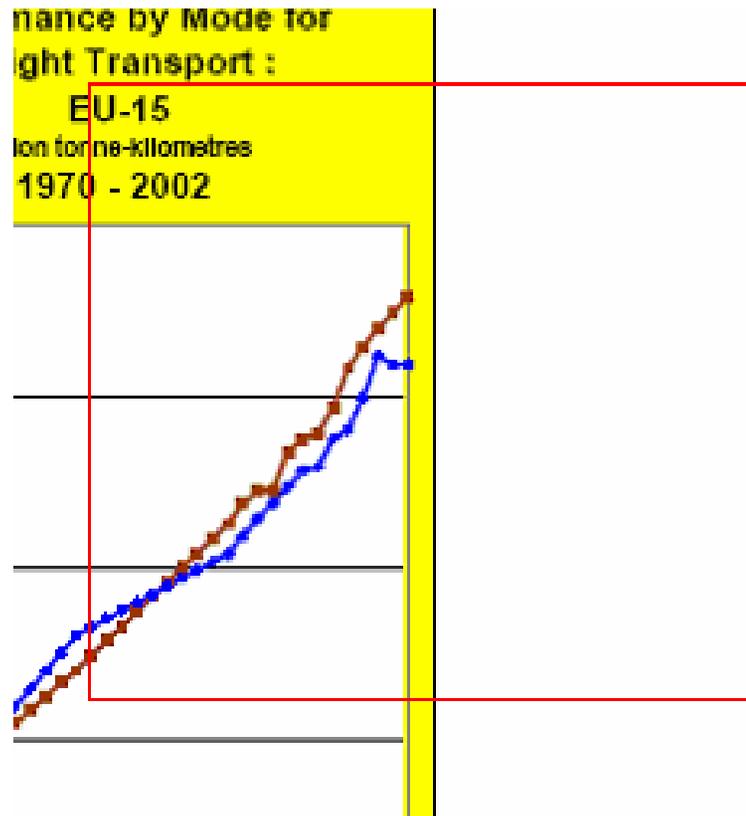
- we still have a long way to go
- things can be rather unsettling



## The not-so-good news...

- Even though SSS grew considerably between 1990 and 2002 (36%),
- Road transport grew even faster (41%)
- IW growth almost stagnant (<17% in 12 years)

# Focus after 1985





## Not-so-good news cont'd

- in 1985 road surpassed SSS as the top transporter in intra-EU trades in ton-km,
- a position that it held at least until 2002 and will continue to hold it if no serious action is taken
- Recent trends disturbing

# Disturbing trends, EU-15

## Modal split

%

	Road	Rail	Inland Water-ways	Pipe-lines	Sea
1970	34.7	20.0	7.3	4.5	33.5
1980	36.3	14.6	5.3	4.3	39.4
1990	41.9	10.9	4.6	3.0	39.6
1991	42.3	9.8	4.5	3.3	40.0
1995	43.0	8.5	4.4	3.1	41.0
2000	43.2	8.2	4.2	2.8	41.6
2001	44.0	7.9	4.1	2.8	41.1
2002	44.7	7.7	4.1	2.8	40.8

# EU-25

## Performance by Mode for Freight Transport EU-25 (4 modes)

1000 mio tonne-kilometres

	Road	Rail	Inland Water-ways	Pipe-lines	Total
1995	1 231	359	120	105	1 815
1996	1 260	358	117	110	1 844
1997	1 313	378	124	110	1 926
1998	1 382	369	127	117	1 996
1999	1 435	357	127	117	2 035
2000	1 486	374	132	119	2 111
2001	1 516	358	130	124	2 128
2002	1 554	354	129	120	2 158
1995-02	+ 26 %	- 1 %	+ 8 %	+ 15 %	+ 19 %
per year	+ 3.4 %	- 0.2 %	+ 1.1 %	+ 2.0 %	+ 2.5 %
2001-02	+ 2.5 %	- 1.0 %	- 0.7 %	- 2.7 %	+ 1.4 %



## And more...

- Marco Polo got much lower funding than expected (100 million euros for 2003-2006)
- 1<sup>st</sup> call (Dec. 2003): 15 million euros
- 13 projects retained
- 2<sup>nd</sup> call (Dec. 2004): 20,3 million euros
- Compare with 80 **billion** euros of annual external costs!



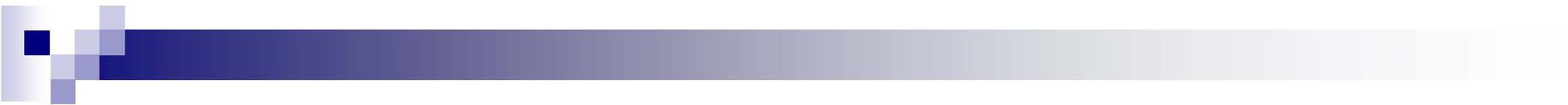
## And more..

- Complaints from inland navigation industry that program not friendly to SMEs
- Marco Polo II: Promising, but.....→ ???



## Yet more...

- Serious fleet modernization problems in both SSS and IW
- EILU Directive: lack of enthusiasm from industry
- Port package: defeated in EP (November 2003)
- Big setback for EU port industry
- By extension, serious setback for EU intermodal transport



## Port package cont'd

### **Compromise text that was put to vote**

- had little relation to the original text proposed by the Commission
- tried to satisfy almost everybody
- united against it hererogeneous forces (eg, dockers and private ports)



# Port package cont'd

## Many felt that

- it forced a **'one-size-fits-all'** model onto a widely diversified industry
- **inadequate consultation** with trade unions and the industry was a major problem



## Port package No. 2

- Swan son of Mrs de Palacio?
- Revenge of Mrs de Palacio?
- ESPO and others urged not to rush through it
- Submitted in October 2004
- Opposition from port industry
- Attempts to reform it under way



# 'Mainline' aspects of EU transport policy

(those that deal directly with intermodality,  
shortsea shipping, and inland waterways)

- **situation is certainly not as rosy as one may be led to believe at first glance**
- How about other aspects???



# Safety & environmental protection

- OUTSIDE OUR SCOPE: port-state control policies and procedures (inspections, detentions, etc), on *ship* compliance to relevant safety laws and regulations
- WITHIN OUR SCOPE: a number of related directives are directly or indirectly applicable to *port & intermodal* operations, planning and development



# The impact of environmental protection..

## **LIST OF EU ENVIRONMENTAL DIRECTIVES THAT AFFECT PORTS, AND, BY EXTENSION, INTERMODAL TRANSPORT**

- The Health and Safety in the Workplace Directive,
- The Waste Reception Facilities Directive,
- The Wild Birds Directive,
- The Habitats Directive,
- The Bathing Water Directive,
- The Dangerous Substances Directive,
- The Urban Waste Water Treatment Directive,
- The Shellfish Directive,
- The Water Framework Directive,
- The Environmental Impact Assessment Directive,
- The Strategic Environmental Assessment Directive, and
- The Environmental Liability Directive.



## More..

- After *Prestige*: Commission proposes a Directive to introduce **criminal sanctions** for ship-source pollution offences
- Parliament added **the competent port authority**
- Seems that, in addition to financial liability, we may see **criminal liability** imposed on port authorities



# Impressive framework

- ...BUT one may wonder if all these regulations together would place a rather heavy burden on ports and (by extension) SSS, just to comply with all of them
- Example: scrap plans to build a huge container terminal at Dibden Bay in the UK on environmental grounds (public inquiry lasted a year and had 15.000 pages of documentation!!)



# The impact of security...

- IMO's ISPS Code (1/7/2004)
- Progress impressive in EU ports



## Security cont'd

- EU Regulation on ship and port security, (transposes the ISPS code into EU law)
- EU Directive on port security
- plan for a future EU Directive on *intermodal security*



## More security..

- EU-US agreements (bilateral and global)
- Container Security Initiative
- “International Port Security Program” of the US Coast Guard



# Some questions

- How much all of these measures would really enhance EU port & intermodal security?
- Is there an estimate of the total cost of these measures?
- Is there an estimate of the impact these measures might have on trade and on the goal to shift cargoes from land to sea?



# Where do we go from here?

- Real risk: each policy development outlined before may pull things into a separate direction
- With the rejection of the port package, European SSS is left with a void as to what the institutional and operating environment of the sector will be in the future



# Where do we go from here cont'd

## My opinion:

- **Maritime security** seems to be the locomotive pulling the overall European maritime transport policy train.

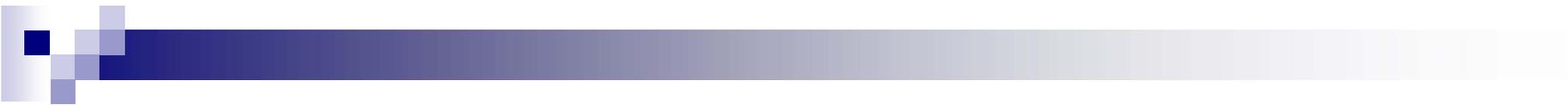
[Locomotive is designed and driven by good old Uncle Sam].

- Security aside, things like EU intermodal efficiency, shifting cargo from land to sea, and opening port services to competition, seem to follow far behind.



# General picture

- Picture of SSS not very rosy, and some developments are disturbing
- Similar picture for IW



# Is there hope?

## YES

- Setbacks such as the rejection of the port package can produce lessons that may be useful for the future
- This will require politicians and legislators to reassess their current 'patchwork' modus operandi and adopt a more 'proactive' policy philosophy
- Maritime transport policy should be developed by carefully assessing *all* of its implications *before* its adoption, and by listening to the industry stakeholders more than is done today



## Hope cont'd

- If the 2<sup>nd</sup> version of the port package is handled like the 1<sup>st</sup> , it will have the same fate
- If over-regulated ports are handed a maze of additional requirements, SSS and intermodal effectiveness will be affected
- That will help road transport increase its share in intra-community transport even further



# More hope?

- “WATERBORNE” technology R&D platform
- “Maritime Policy” Green Paper/Task Force

(but both will take some years to develop, and some more to be implemented)

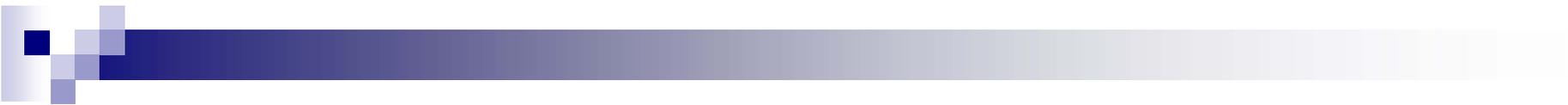
# Q: Should our policy makers reformat their disk?





# A: not necessarily!

- Situation might be improved if EU policy makers have access to a set of tools and a pool of experts that can assist them in the analysis of policy alternatives.
- The pool of experts must be drawn primarily from the industry.
- But it should also be assisted by scientific expertise that has the tools for the analysis and assessment of complex policy scenarios.
- The policy ramifications of the vast array of maritime and intermodal R&D projects sponsored by the Commission should be analyzed and may prove useful.



## In conclusion..

- The industry is **at a critical point**, to move ahead proactively and meet these challenges, instead of retracting to inertia, complacency and fragmented action
- This will not happen automatically, and it will definitely require the **full energy and cooperation** of all stakeholders involved



# Thank you very much!

## Coordinates

- [hnpsar@deslab.ntua.gr](mailto:hnpsar@deslab.ntua.gr)
- [www.martrans.org](http://www.martrans.org)