



Maritime Navigation and Information Services

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MarNIS



Cas Willems
Project manager MarNIS

Zagreb, July 2008



Maritime Navigation and Information Services

MarNIS

- Integrated Research Project
- Responsible org: DG Energy and Transport
- Project duration: 4 years
- Starting date: November 2004
- 50 Partners and 12 subcontractors from 13 European MS:
 - Ø Ministries of Transport and Port Authorities
 - Ø Branch organisations (Harbour masters, Pilots)
 - Ø Industry & IT companies
 - Ø Universities & Research institutes
- Coordinator: DVS Centre for Transport and Navigation of the Ministry of Transport - the Netherlands



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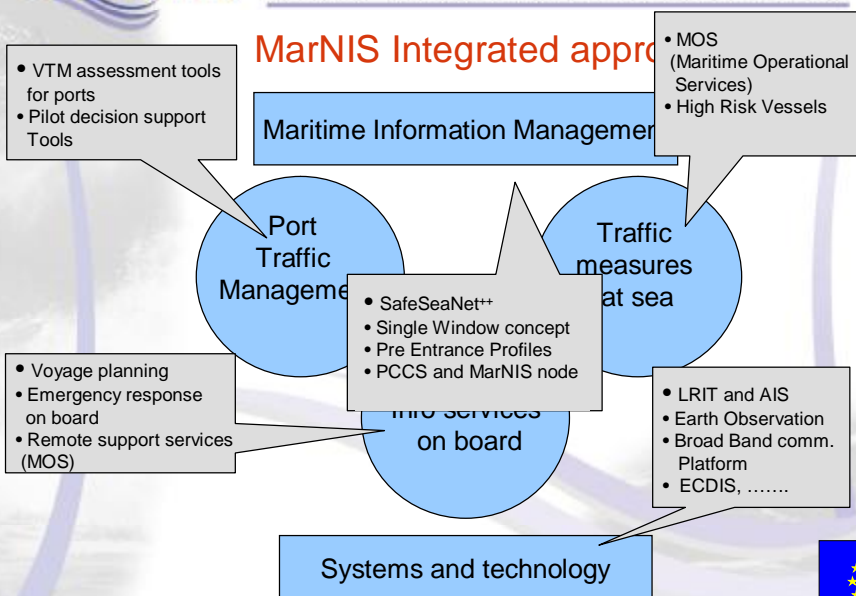
Objectives

- Improvement of safety, efficiency of maritime transport and the protection of the environment;
- Improvement of efficiency and reliability of information flows;
- Develop proposals for administrative, organisational and procedural changes
- Develop proposals for new legislation

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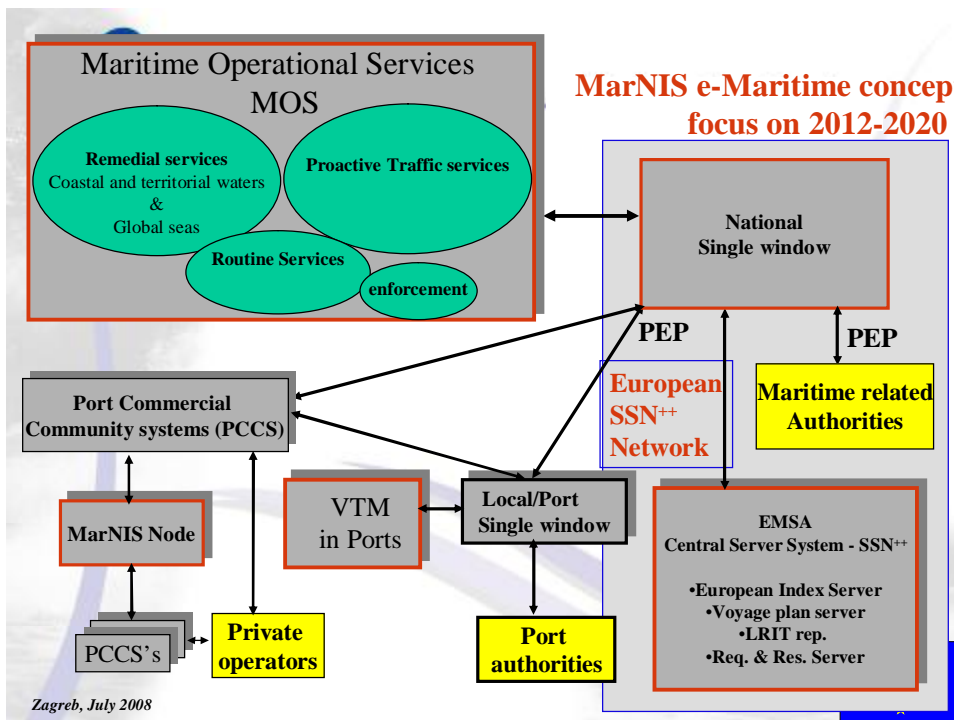
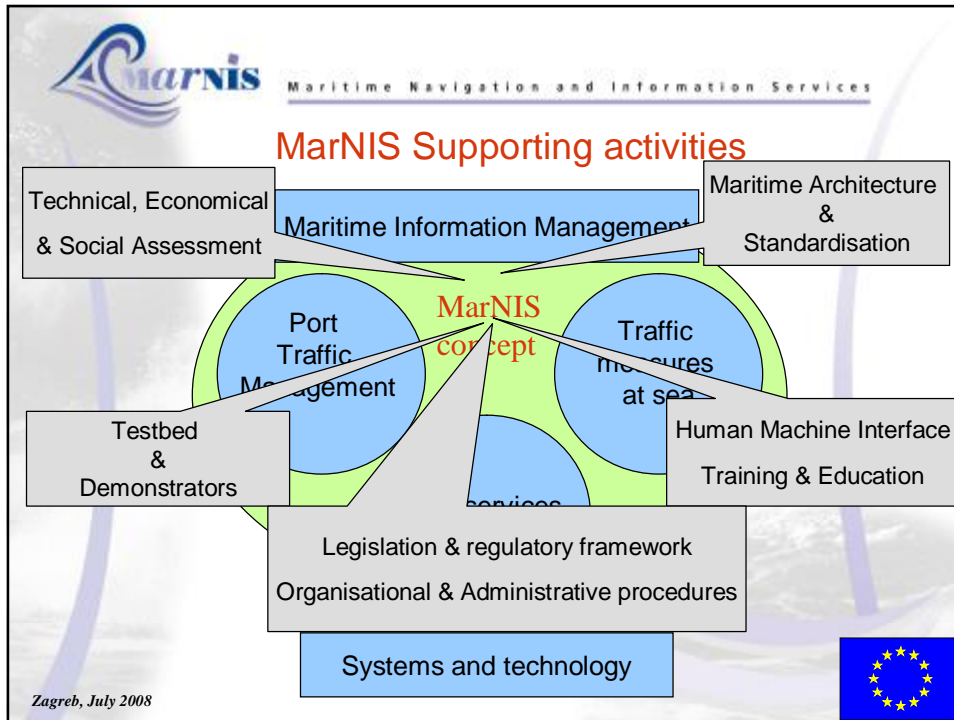


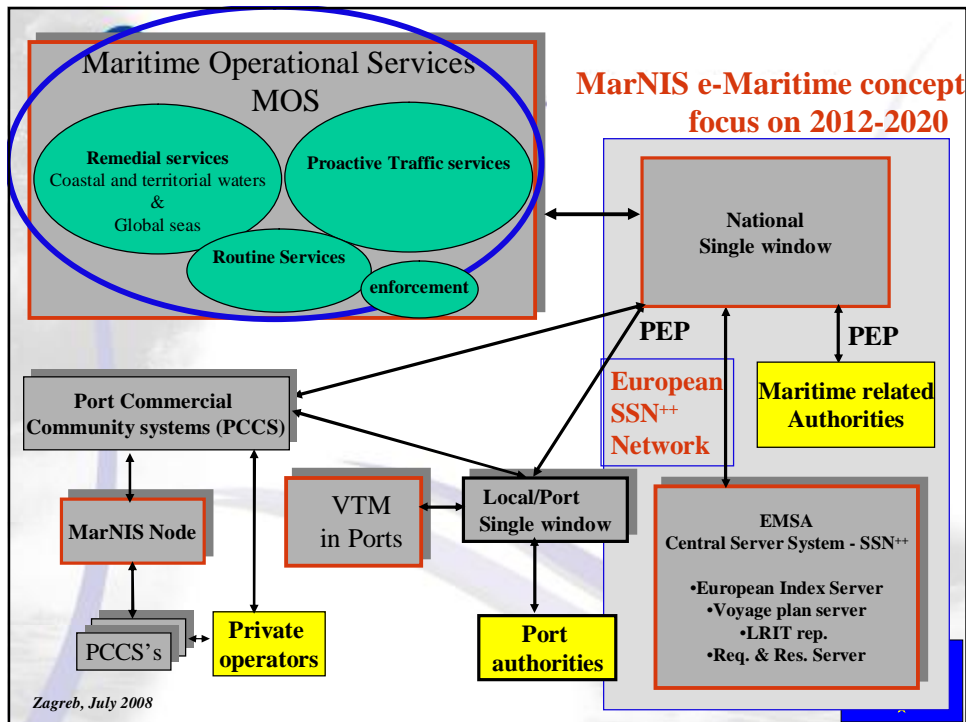
MarNIS Integrated approach



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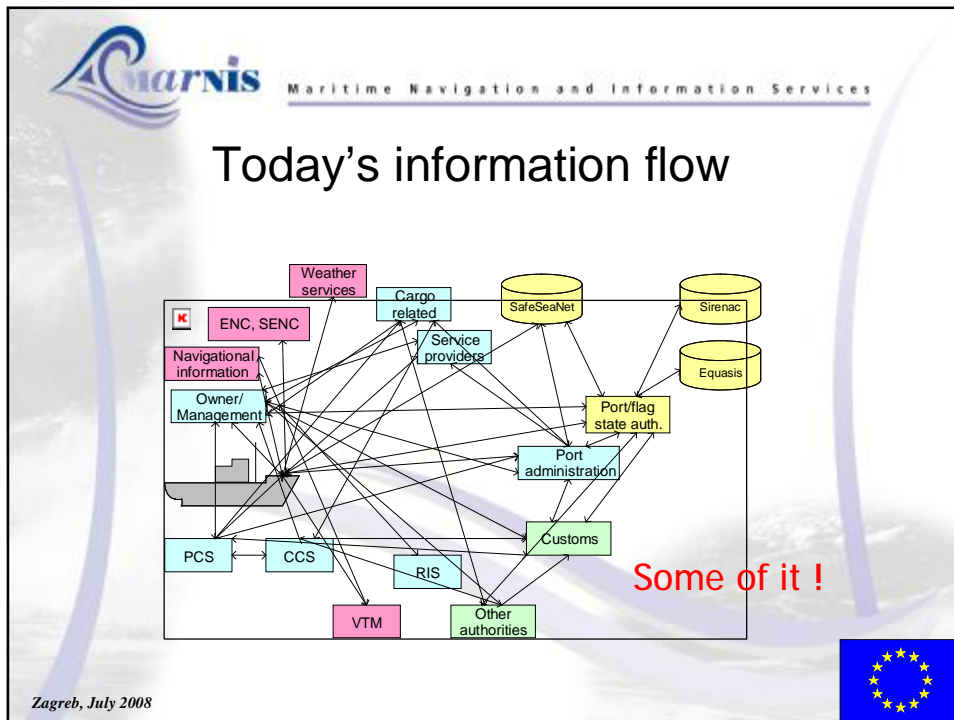
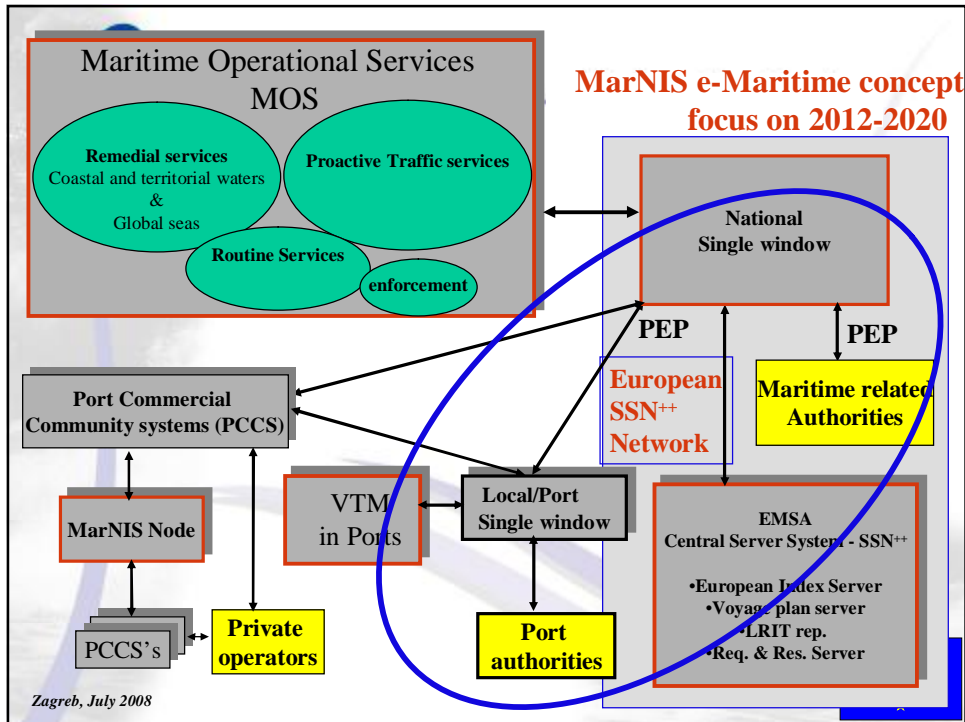
 **Maritime Navigation and Information Services**

Maritime Operational Services (MOS)

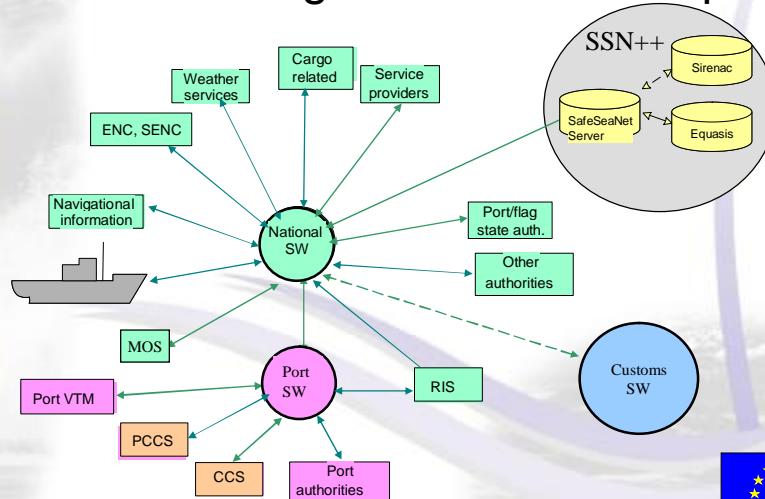
- Builds on and integrates existing services for Search and Rescue and Vessel Traffic Management
 - Ø Vessel Traffic Services
 - Ø Oil Pollution Response
 - Ø Maritime Assistance Services
 - Ø Search and Rescue (SAR)
 - Ø Enforcement
 - Ø e-Navigation services: Aids to navigation, Marine marking service; hydro/meteo services
- Traffic image from :
 - Ø AIS, LRIT, earth observation services (SAR, IR..) and other sensors
- Maritime Risk Areas
 - Ø MarNIS RISK indices for High Alert/ High Risk Vessels
 - Ø Weather and traffic dependent



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MarNIS: Single Window Concept



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Objectives Single Window Principle

- More efficient communication
 - Ø Master/agent will report only once
- Early reporting
- Separation of responsibilities
- Not restricted to Maritime Authorities

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MarNIS Single Window concept

Single window: info to and from Authorities

MarNIS single window concept consists of:

- Safe Sea Net ++ (SSN++)
- National Single Window (NSW)
- Port Single Window (PSW)

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SafeSeaNet

- **SafeSeaNet nowadays**
 - Ø European Index Server; European Platform for Maritime Data Exchange between Member States' maritime authorities based on the concept of a distributed databases
 - Ø collection, dissemination and harmonised exchange of maritime data
 - Ø Prevention of accidents at sea and marine pollution
- **Add-on:**
 - Ø Alert and security messaging based on MarNIS conceptual advise
 - Ø AIS repository

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SafeSeaNet++

- Response and request server
- Reference databases, e.g.:
 - Ø Voyage history, e.g. last 10 ports, ...
 - Ø UN code tables
 - Ø Insurance info
 - Ø Certificates of crew
 - Ø Route info
 - Ø Sirenac
- additional data available via SSN++, e.g.:
 - Ø PEPs/PDPs information
 - Ø Alert messages from MOS
 - Ø Voyage server info
 - Ø LRIT info
- Use of SSN++ by other Authorities

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National Single Window

- The central contact point for all national authorities
- The national gateway to SSN++
- The provider of information to local authorities via Port Single Window
- Link towards Port Commercial Community Systems

Port Single Window: The contact point for all local authorities

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Pre-Entrance/Pre-Departure Profiles (1)

- Master/agent reports only once to NSW
- NSW compiles Pre-Entrance/Pre-Departure Profile - Messages
- NSW makes use of already available information at other authorities and reference databases
- NSW informs the other Authorities
- Based on PEPs Clearance will be given

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Pre-Entrance/Pre-Departure Profiles (2)

- IMO FAL messages
 - Ø Overlap in information
 - Ø Authorities select the information they need and ask often for additional information
- PEPs
 - Ø Tailor made, directly linked to the tasks of the authorities
 - Ø More information related to the tasks
 - Ø Cross Reference Checks

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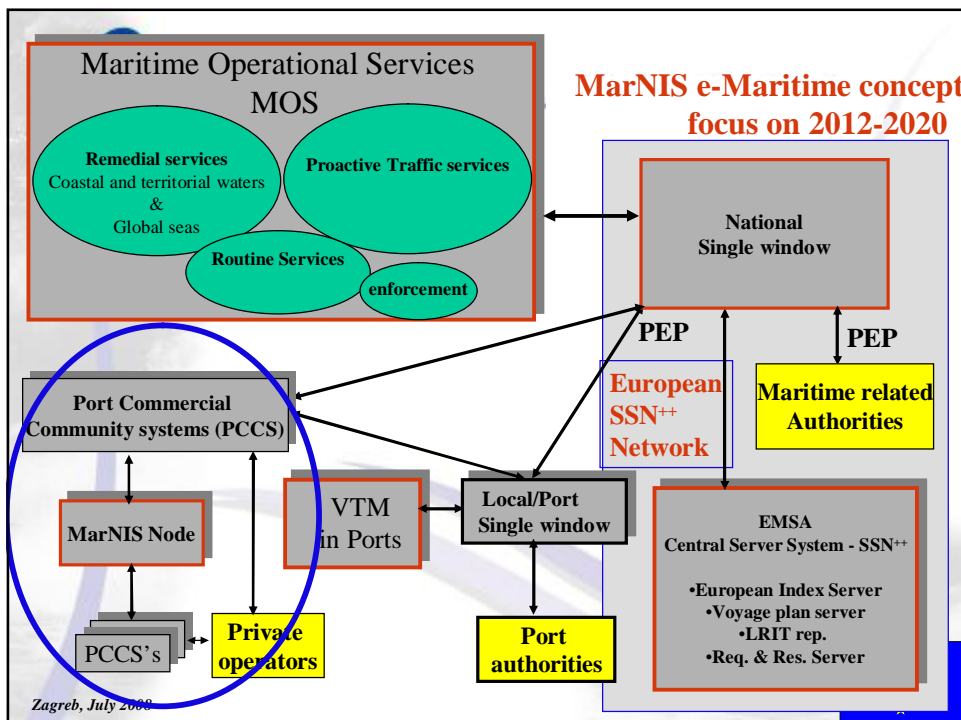


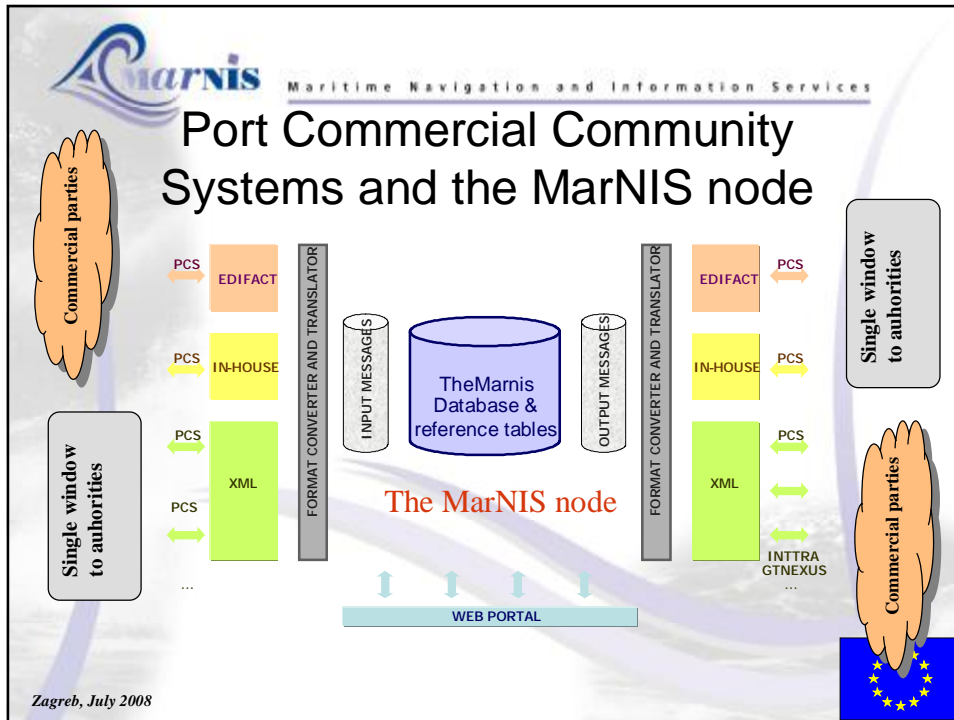
PEPs and PDP's

- Cargo PEP/PDP
- Arrival info PEP
- Safety PEP
- Emergency PEP
- Port Security PEP/PDP
- Port Planning PEP/PDP
- Health PEP/PDP
- Port Environment PEP/PDP
- Immigration PEP/PDP
- Customs PEP/PDP

- Inland navigation PEP/PDP ?

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See you during the MarNIS demonstrators

Genoa 23-25 September 2008
Lisbon 15-16 October 2008

For more information:
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 or
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