EFFORTS International Conference

6th EC FRAMEWORK PROGRAMME

EFFORTS « Effective Operations in Ports »

Port of Le Havre
22 & 23 September 2009

Sub Project 2
Ports & Environment
Sub Project 1 – *Navigation in Ports*

- Safe and efficient port access depends on:
  - Effective tug assistance
  - Precise navigation & manoeuvring
  - Accurate charts
WP1.1 : Tug assistance

- Stereo visual representation
- Visual image with textures
- Effects of wave on tug performance
- Model of a rotor tug
- Flow code for ship-ship interaction
- 3D collision & fendering modules
- Demonstration simulator
WP1.2 : Precise navigation & manoeuvring in ports

- New Portable Pilot Unit:
  - Reduction of weight
  - Easy to use
  - Cross platform software
  - Birds eye view of the vessel and its assisting tugs shown on Port ECDIS display for pilot and tug masters
  - Data stability
WP1.3 : Port ECDIS

- A new quality of information for navigation & dredging
- Further standardisation to be undertaken
Sub Project 3 – *Ports Organisations*

WP3.1 : Port Processes

- Full port process map
- EFFORTS ICT method & roadmap
- Two test implementations:
  - Dublin
  - Thessaloniki
- Inputs to Arktrans, ISO contributions

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Sub Project 3 – *Ports Organisations*

WP3.2: Risk Management Framework

- Web-based platform RAPORT (Risk Assessment for Port) to support port to:
  - Perform Formal Safety Assessment in distinct operational areas
  - Provide pictures of the risks in specific port areas.
WP III – Education & Training

- Foreseeable shortage of qualified port personnel
Sub Project 2 – Ports & Environment

- Energy Management
- Diluted Aluminium
- Ships Ballast Water
- Air Quality
- Noise Annoyance
WP 2.1 : Clean Energy Management

• Improve management of energy in EU Ports:
  – **Lower costs** by efficient production, supply & consumption chain
  – Reduction in losses
  – Lower environmental impacts

• Tool to simulate **new energetic scenarios in ports**
**WP 2.2 : Water Quality**

**WP 2.2.1**

Ships ballast water treatment

Identification of best active substances for the treatment of ballast water, according to their biocide effect, environmental acceptability & onboard usability.

**WP 2.2.2**

Aluminium dilution from protection of port quays

Assessment of the aluminium concentration in port water, sediment and living organisms.

Evaluation of the aluminium toxicity effect on marine organisms & potential environmental impact of the use of sacrificial anodes.
WP 2.3 : Air Quality

- Mapping of pollutants & pollution sources in ports.
- Development of air treatment (COVs, SOx) system based on **photocatalysis** technology.
WP 2.4. Noise annoyance of ports

- Develop a concept of a *noise annoyance map* considering meteorological factors
- Develop *annoyance metrics* using psychoacoustic descriptors & listening test evaluations
- Create *annoyance maps* presenting noise impacts.
- Propose *new practices and systems* for controlling noise.
International Conference – Agenda of the day 1

- 10h00 – 12h30 **Tour of the Port of Le Havre**
  - Jean-François Emery, EFFORTS SP2 leader, Port of Le Havre

- 12h30 **Lunch**
  - Novotel Hotel, Le Havre

- 14h30 – 18h00 **Session I : Clean Energy Management in Ports**
  - AREVA, CORYS TESS, Ports of Le Havre and Dublin

- 20h30 **Buffet Dinner**
  - Espace André Graillot, Chaussée Kennedy, Le Havre
International Conference – Agenda of the day 2

- 8h30 – 12h30 **Session II : Water Quality in Ports**
  - University of Caen, VTT, IFREMER, Instituto Nazionale Tumori, TL & Associés

- 12h30 **Lunch**
  - Novotel Hotel, Le Havre

- 14h30 – 16h00 **Session III : Air Quality in Ports**
  - Biowind, CFT, Port of Le Havre

- 16h00 **End of the conference**