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Van:	EP-Nuffic
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	PELRA meeting at STC in The Netherlands, 22 August 2016

# **Background & References**

Living Lab Logistics Indonesia-NL (LLLI-NL) started in 2013 to develop 3-helix networks between Indonesia and the Netherlands to co-create solutions for contemporary challenges in logistics. In 2015 the LLLI-NL Roadmaps were developed, which included a Human Capital Agenda and Applied Research Agenda related to Agro logistics and Port & Hinterland Connections. One of the priority topics selected is to support the development of an *Indonesian short sea shipping strategy: develop an inclusive strategy including tools and application for inclusion of cargo in the Pelayaran Rekyat* (*PELRA*). During the course of 2015 and in the framework of its international promotion logistics project EP-Nuffic has organized and/or stimulated via her regular project instruments (e.g. LLLI-NL and NICHE IDN 145 ITS Surabaya) several preliminary meetings and workshops:

- (1) to articulate the demands and developments in the field of short sea shipping in Indonesia
- (2) to mobilise the network of companies, knowledge institutions and public organisations in the field of the short sea shipping sector in Indonesia and the inland shipping sector Netherlands

These meetings and workshops were well-received and gave solid reasons to further explore the Indonesian market and investigate the possibilities to develop joint (commercial and innovation) activities between the short sea shipping sector in Indonesia and the inland shipping sector in the Netherlands.

The subject *interisland shipping* fits very well in several contemporary developments:

- Government-to-Government MoUs Maritime and Higher Education between Indonesia and The Netherlands (signed April 2016);
- The maritime policy in Indonesia;
- The ambition from the Port of Rotterdam to be involved in port (and hinterland) developments in Indonesia;
- The support from the Embassy of the Kingdom of The Netherlands in port developments in Indonesia (a.o. Ambon).

# Meeting

In this report you will find the results of the PELRA meeting organized on the 22<sup>nd</sup> of August 2016 in Rotterdam in The Netherlands.

Monday 22 August 2016 from 1400-1700 hours Location: STC Group, Lloydstraat 300, 3024 EA Rotterdam, Muller Room Host: Anne Padmos (STC) Moderator: Frits Blessing

# Agenda

- 1400 Welcome by Anne Padmos, STC
- 1405 Introduction by Frits Blessing / getting to know each other
- 1420 Presentation ITS about PELRA, based upon their PELRA proposal by Pak Setyo Nugroho, ITS
- 1440 Presentation on NL/EU Inland shipping development by Mr Bart Kuipers, EUR
- 1500 Short Presentations from / questions to:
  - Mr Ben Maelissa, Danser Container Line
  - Mr Henk Schipper, ELV
  - Mr Henk de Bruijn, Port of Rotterdam
- 1520 Discussion: finding parallel developments / mutual interests (major priorities)
- 1540 World Cafe on selected priorities: Plans of Approach 2016-2018
- 1630 Plenary feedback, priorities, roles, next steps
- 1700 Closing

# Participants

- ITS (Institut Teknologi Sepuluh November): Tri Achmadi and Setyo Nugroho
- Danser Container Line: Ben Maelissa
- ELV: Henk Schipper
- Port of Rotterdam: Henk de Bruijn
- EP Nuffic: Arjan Koeslag
- EUR (Erasmus University Rotterdam): Bart Kuipers and Martijn van der Horst
- HR (Rotterdam University of Applied Sciences): Bert Hooijer, Marcel Ludema, Maurice Kriatkow
- STC BV: Anne Padmos and Rene Meeuws
- Frits Blessing

# Report

As a result of this meeting the following 4 major themes were selected as priority areas of mutual interest between Indonesia and The Netherlands. These 4 themes form the backbone of our Plan of Approach 2016 – 2018 to further develop a Indonesian short sea shipping strategy in close collaboration with the inland shipping sector in The Netherlands. In the upcoming time for each selected theme a detailed action plan (priorities, roles, steps) is to be developed among the Dutch and Indonesian stakeholders.

# **Theme 1 Supply-Demand**

- Data supply-demand is a major challenge in Indonesia: how is that organized in The Netherlands? Specific questions and issues raised:
  - What is the role of ports in gathering and providing these sets of data?
  - What is the role of other parties?
  - o Could Port of Rotterdam provide (data) examples to be used in Indonesia?

- Need to start with a pilot (database) to work from/ take it from there
- Investigating present market structure of inland shipping in Indonesia (company size, market forces, and other socio-economic aspects of the skipper)
- Select a pilot region, e.g. East Java
- Try to find out why idle time (91%) is high
  - o Is that an over-supply or location issue?
  - Need to gather more in-depth data in order to develop adequate strategies

# Theme 2 Business Models

- Distinguish between larger companies / new entrants (like Danser) and existing fleet of captainowners (like ELV)
- Involve shippers (e.g. from NL Unilever, Friesland Campina) in developing new concepts
- Select pilot for captain-owners in a cooperation: step by step transition, showing by doing

   Possible functions of a cooperative:
  - R&D
  - Acquisition
  - Planning
- Need for new business models/ behaviour approaches changing "mind-set" of the sector

# Theme 3 Ship Designs

- Currently ships are built from wood which faces restrictions in deforestration
  - Are there any good alternatives?
- Ships used are more based on tradition than on cargo requirements
- How to step-by step improve existing tonnage (re-engineering) and European examples (e.g. new engines in old ships, LNG in existing fleet)
- Possible ideas to be further explored:
  - Pilot with old European tonnage?
  - Estuary sailing?
- But also: new ships for the future of Indonesia (see also theme 1)
  - New ships but adapted to local environment
  - Hardware/ ICT driven solutions

# Theme 4 Creating Awareness / Promotion / Enabling

- Target groups: policy makers, captain owners, shippers / cargo, new entrants
- How to make the sector interesting for a new generation of (young) people to join?
- Involve policy makers and major shippers (like Indofood, Unilever, Friesland Campina)
- How to implement social innovation and enable transition of the sector
- Creating perspectives build a new future together
- How to attract new investors to the sector for instance Go-Jek enters the shipping industry
- Major questions/ issues to be further explored:
  - How did we do that in The Netherlands?
  - How can Indonesia learn from these experiences and practices?
  - How can the Dutch inland shipping sector can jointly develop (commercial and innovation) activities with their Indonesian counterpart sector

# **Next Steps**

During a mission to Indonesia end September 2016 to ITS in Surabaya (in the framework of the EP-Nuffic NICHE IDN 145 project involving EUR, HR / RUAS and STC BV) the above mentioned themes will be further discussed with local stakeholders.

## Appendices:

- 1. PELRA Intro Presentation
- 2. PELRA Presentation STC
- 3. PELRA Presentation ITS
- 4. PELRA Presentation EUR
- 5. PELRA Presentation Danser



















# **ITS Project**

- Assistance to the department: Vision, mission, roadmap 2020 Network
- Curricula
- •
- Research Organisation Training
- ...















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# DIGITAL ISLAND | PART TRANSPORTATION

Transportation Sharing

Reduce Transportation Cost

Increase the availability of Transportation

Focus on Inter-island transportation system

• Optimize the usability of traditional sea transportation

Implementation of ICT

References: Grab-bike, Uber, etc





















Dank u wel!



#### Contents

- Introduction
- Management issues
- Regulation issues: harmonization/insurance
- Innovation agenda Dutch inland shipping

























#### Regulation in transport: European/Dutch/Local

White paper (European Commission, 2011): 30% of all goods transport by IWT or rail in 2030 (50% in 2050)

Maritime Strategy (Dutch Ministry of Infrastructure & the Environment, 2015)

strengthening multimodal nodes along waterway

clean, safe & sustainable
promoting innovation

promoting intervation

Environmental performance: degassing – Province Zuid-Holland

Concession agreements terminal operators 2<sup>nd</sup> Maasvlakte for 2035: fixed modal split targets - Port of Rotterdam



#### Harmonization international IWT in Europe

- Technical regulations related to the characteristics ship
- Manning/crew regulation (who works on a ship?)
- Dangerous goods regulations
  - definitions: what is a dangerous good?
  - certificates for shippers for transport of dangers goods
- European Code for Inland Waterways (UN/ECE)
  - General provisions (navigation regulations, etc)
  - Marks and draught scales on vessels
  - Visual signals on vessels
  - Waterway signs and marking

•etc.

#### Harmonization international IWT in Europe

"CEVNI: European Code for Inland Waterways"

"In every country, the first part of the regulations <u>should, if</u> <u>possible</u>, be the same for all the inland waterways of the country concerned; nevertheless, a Government <u>may</u> <u>depart</u> from this rule if the special characteristics of the various inland waterway networks in the country concerned are <u>so different that it cannot be applied</u>"

#### Harmonization international IWT in Europe

**The Mannheim Act** (officially : Revised Rhine Navigation Act of 17 October 1868): international agreement that regulates vessel traffic on the river Rhine. Dominant principles:

- Free shipping
- Equal treatment of sailors and fleet
- Exemption from shipping charges
- Simplified customs clearance
- Obligation to maintain the Rhine's banks
- Standardization of ship safety and ship traffic regulations
  A single jurisdiction for shipping matters and the
- establishment of the Rhine waterway courts
- Establishing a commission to monitor these principles: Central Commission for the Navigation of the Rine (CCNR)

#### Harmonization international IWT in Europe

#### **CCNR Regulations**

(Central Commission for the Navigation of the Rine)

- Police regulations for the Navigation of the Rhine
- Radiotelephony for inland navigation
- Regulations for Rhine navigation personnel
- Rhine vessel inspection regulations
- Radar equipment, AIS equipment, engines, on-board sewage treatment plants, etc.
- Unique European vessel identification number

#### Harmonization international IWT in Europe

**River Information Services** (RIS) have been developed in order to simultaneously improve the safety and logistics of inland navigation.

The EU RIS Directive1 ensures that the RIS in use on all waterways in the EU is based on the same technologies, data standards and definitions, thus allowing inland navigation to make use of these services consistently throughout the EU.

### Harmonization international IWT in Europe

International Association for the representation of the mutual interests of the inland shipping and the insurance and for keeping the register of inland vessels in Europe (Source: Hacksteiner).

International conventions

- Straatsburg Convention on limitation of liability for inland navigation vessels (CLNI)
- Budapest Convention on the contract for the carriage of goods by inland waterways (CMNI)
- Draft European Convention on liability for damage in connection with the carriage of hazardous and noxious substances by inland waterways (CRDNI)

#### Harmonization international IWT in Europe

Straatsburg Convention on limitation of liability for inland navigation vessels (CLNI)

- Limitation of liability in respect of claims
- General limits on the claim amounts

Budapest Convention on the contract for the carriage of goods by inland waterways (CMNI)

- Contract of carriage and rights and obligations of contracting parties
- Signed (2001) by Hungary, Romania, Switzerland, Luxemburg and Croatia
- Balance between maritime and land law

#### Harmonization international IWT in Europe

Draft European Convention on liability for damage in connection with the carriage of hazardous and noxious substances by inland waterways (CRDNI)

- · Liability of the owner and limitation of liability
- Liability based on maritime and transport conventions

## Conclusion:

Harmonised regimes through conventions, EU law and bilateral agreements

# Innovative future directions: improving performance of IWT

- Environmental performance (LNG)
- Logistics performance (Synchromodal)
- Ships of the future (Autonomous shipping)
- Waterways of the future (Intelligent infrastructure)
- Skippers/barge operators of the future (entrepreneurial)



#### Improving environmental performance IWT

The IWT fleet in Northwest Europe is very old!

Shippers are demanding environmental performance! [Heineken]



# Improving environmental performance IWT

• New engines and fuels:

- LNG, Gas-to-Liquids, biofuels, hybrid technology
- Selective catalytic reduction/diesel particulate filters
- Behavioral/organizational approaches:
  - Slow steaming, maneuvering
  - Real-time on board monitoring

Ship design:

• Larger ships, new construction, light materials







# Improving logistics performance of IWT

- Environmental performance
- •Total flexibility towards the customer
- Transport is a commodity
- Trust
- Transparancy & visibility

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# Skippers/barge operators of the future

- Development towards an attractive industry
- Development towards a professional industry
- Develop new markets for future business

# The future of IWT





# Entrepreneurship & cooperation! Well educated

- New business models
- New finance models
- New business culture





## Weak performance container barging for many years - port turnaround time

- Average rotation time: 21 36 hours
- Average call size: 33 containers •
- Punctuality terminals: 59% starts > 2 hours too late or to early

Source: Port of Rotterdam/Nextlogic (2012)

Waiting times of 92 hours at Port of Rotterdam drive surcharges .



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Source: Port Finance International, 2015





































