



### In this issue ...

- SPIN-TN to focus on Inter-modality & Interoperability *Page 2*
- How far have we got ? *Page 2*
- Work Underway - Fleets and transport equipment *Page 2*
- Work Underway - Integration of European waterways *Page 2*
- Soon to Start - Inter-modal liability *Page 3*
- Soon to start - Seamless cross-border operations *Page 3*

### Foreword

*Gert-Jan Muilerman from via donau*

Working Group 3 on Intermodality and Interoperability within the SPIN Thematic Network focuses on the integration of inland navigation into intermodal transport chains, and analyses all system components that are required to operate an intermodal supply chain. These components include "hardware" such as transport vehicles, transshipment equipment, and intermodal loading units, but also "software" such as an intermodal liability regime and the broader legislative framework. Working Group 3 has organised the involvement of specialist institutes to provide recommendations in order to improve both the hard- and software required to better integrate inland navigation into intermodal logistics chains. First results are scheduled for the Summer and Autumn of 2003. This SPIN-Letter summarises the main objectives and expected results of the various working groups identified.

Subscription: To subscribe to the distribution list of this newsletter, please visit the SPIN-TN website ([www.spin-network.org](http://www.spin-network.org)) and register.



## Description of Work

### *Inter-modality & Interoperability:-*

#### SPIN-TN TO FOCUS ON INTER-MODALITY & INTEROPERABILITY.

SPIN-TN has established a working group whose focus is related to the integration of Inland Navigation into inter-modal transport chains, interoperability of systems and systems used on different European waterways.

Inter-modality and interoperability are seen by SPIN-TN to directly or indirectly affect all other areas of the project's work, therefore the tasks of this group are designed as horizontal activities, and are seen to have a parti-

activities to promote inter-modal transport, such as MARCO POLO and the Communication on inter-modality and inter-modal transport (COM (97) 243). The working group will focus on the following fields of interests:

- Fleets and transport equipment
- Inter-modal liability
- Seamless cross-border operations
- Integration of European waterways
- Short sea shipping, sea river and sea-ports

The Working Group has already started work on the sub themes Fleets and transport equipment, as well as the Integration of European Water-

market requirements with respect to inter-modal load units (ILUs), as well as an analysis of the advantages and disadvantages of each ILU is carried out. With the publication of the Consultation Paper on Intermodal Loading Units (ILUs), the European Commission has recognised the lack of harmonisation and standardisation of intermodal loading units [European Commission, 2002]. This deficiency forms a major barrier to the further development of intermodal transport. In April 2003 the European Commission published the proposal for a Directive on Intermodal Loading Units [Commission of the European Communities, 2003]. The proposal states that Europe needs an optimal intermodal loading unit, the EILU - European Intermodal Loading Unit - which combines the benefits of containers (their solidity and stackability) with those of swap bodies (in particular their greater capacity). Such an EILU could be used in four modes of transport (rail, road, sea and inland waterways). The Consortium of the SPIN Thematic Network will provide an overview of the main bottlenecks as well as recommendations for improvements with regard to intermodal loading units, from the specific viewpoint of the inland waterway sector. The Working Paper should further expand on these issues and provide recommendations for a load unit strategy to improve the competitive position of the inland waterway sector within the intermodal transport market.

### *Innovative transport vehicles*

Another task explores the main trends in the transport vehicles used for the next ten years, their interaction with the loading units and waterways used. Emphasis is placed on different requirements on fleets cruising different European waterways. One of the most distinctive characteristics of



cular impact on "Systems and Technologies".

### HOW FAR HAVE WE GOT?

SPIN-TN feels that the integration of Inland Navigation in inter-modal door-to-door transport is imperative for gaining access to new markets, for participating in the growing transport volumes, and for increased use of waterborne transport in Central and Eastern Europe.

There have been several European

ways. Others are soon to be started. The output of the sub themes will be reviewed within a selected group of network members and results reflected within a finalised "Positioning Papers" which will suggest policy recommendations and action plans.

### WORK UNDERWAY - FLEETS AND TRANSPORT EQUIPMENT

#### *Intermodal loading units*

Work is now underway to review of the

▶ inland waterway vehicles compared to other modes of transportation is their extraordinary long life-time. Nowadays the average age of the larger European dry bulk ships is 42 years, whereas tanker ships and push tows have an average age of 34 and 41 years respectively (European Commission, 2001). Due to the long-life cycle of inland navigation vessels and due to the existing overcapacity in many submarkets, the new construction volume is not very significant compared to the total fleet (CEN, 1999). In a study by VBD (2002), it was also concluded that despite the achievements as regards new propeller techniques, increased ship sizes, etcetera, the general concept of inland navigation vessels has only seen limited adaptations in the last fifty years (since the emergence of push boats). As a consequence, innovations in the inland waterway fleet through newly built ships tend to proceed relatively slowly. The Working Paper will describe the most promising ship technology innovations in terms of their economic potential for the inland waterway sector as well as the innovations that have already been or are expected to be realised in a

commercial setting. Moreover, suggestions will be made for a Common European Strategy for the inland waterway sector to improve the innovative character of ship technologies used.

#### *Intermodal transshipment interfaces*

A review of cost-effective transshipment techniques is also being carried out, in order to develop possibilities for smaller-scale operations (especially for secondary ports in hub-and-spoke networks) within a time horizon of ten years. Several innovations have been initiated in the field of intermodal transshipment. Whereas some concepts are aimed at eliminating transshipment from the intermodal transport chain at all (such as the river-sea push barge), and thereby creating a truly unbroken transport chain, most of the innovations are aimed at optimising the transshipment processes themselves. However, overall, remarkably limited innovations have literally made it to the commercial exploitation. The objective of this Working Paper is to provide a brief overview of the innovations that have been developed, and to discuss the causes for success or

failure of these innovations. Finally, suggestions will be made for a Common European Strategy to improve the innovative character of transshipment technologies used, and assess the effectiveness of existing policy instruments (e.g. subsidies) as well as of proposed new policy instruments (to be developed on the basis of the study results of this Working Paper).

#### WORK UNDERWAY - INTEGRATION OF EUROPEAN WATERWAYS

The forecast increase in transport between the European Union and the Candidate Countries requires a better use of waterways for East-West trade relations. To date, the traffic between the different European waterway systems is however limited: for instance less than one million tonnes per year are transported on the Rhine by the Danube fleet, whereas four million tonnes are transported by the Rhine fleet on the Danube [Woehrling, 2002]. Compared to the total Rhine (400 million t) and Danube (27 million t) traffic, these figures are relatively modest.

Apart from the nautical and technical



differences between the Rhine and Danube waterway systems, legislative barriers are also responsible for the under-exploitation of this potential. In a draft document of a Group of Volunteers within the UN/ECE, following main legislative obstacles - that are specific to inland navigation - were identified [UN/ECE, 2002b]:

- . Restrictions on transport rights for 'foreign' vessels;
- . Restrictions on access to and use of inland waterways and ports;
- . Differences in technical regulations for vessels (ship's certificates);
- . Insufficient harmonisation of the civil law framework;
- . Differences in regulations on boatmaster's licences, the size and composition of crews, and working and rest hours.

These legislative barriers have also been mentioned as important issues in the White Paper European Transport Policy for 2010 [European Commission, 2001]. This Working Paper will result in a series of policy recommen-

dations that are aimed at harmonising the different laws, regulations and directives, which have an impact on the interoperability between the various waterway systems in Europe.

#### SOON TO START - INTER-MODAL LIABILITY

Despite the emergence of three international conventions in the last decades (CLNI, 1988; CMNI, 2000; Draft CRDNI, 2002), much work is still needed before a unified civil law system covering the European waterway network can be said to exist [ECMT, 2002]. In a research project for the European Commission, it is stated by IM Technologies & SGKV [2001] that - from the end-user's point of view - liability rules should not be mode-specific nor exclude non-transport activities such as warehousing, and should not distinguish between national and international transport [IM Technologies & SGKV, 2001]. Reality is still far from such a situation: carrier liability systems have historically developed on a uni-modal

level.

The actual liability depends on the ability to identify the mode and/or place within the intermodal transport supply chain where loss/damage occurred. The result is remaining uncertainty in the terms of liability and legal position within intermodal chains. This lack of uniform carrier liability arrangements, which ultimately result in additional insurance and administra-



▶ tive costs, is considered a barrier to the further development of intermodal transport by inland navigation. SPINTN has invited a leading University to be its technical adviser for activities to transform these recommendations to IWT-chains for implementation. SPIN will actively support initiatives to implement international conventions, stemming also from UN and OECD activities, which seek to homogenise at a pan-European and international

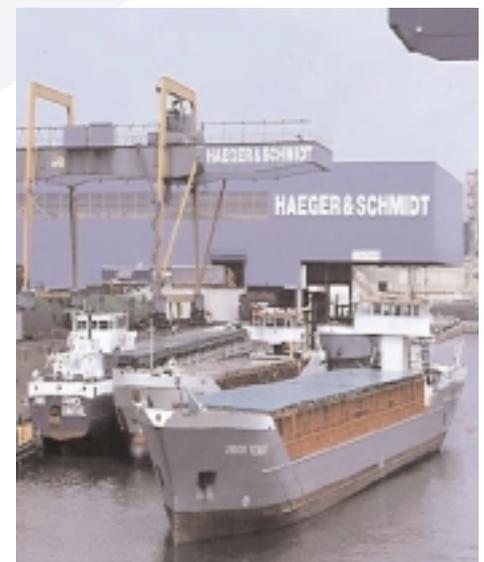


levels the liability regimes.

#### SOON TO START - SEAMLESS CROSS-BORDER OPERATIONS

As the majority of inland water transport operations involve international transportation, seamless cross-border operations are essential. This especially applies to borders between EU and CEEC and between intra-CEEC borders. Concepts and measures for improving border operations will be discussed with the major stakeholders and recommendations will be developed. The activities addressed shall support River Information Services application's as there is a strong interaction need for seamless border services. SPIN will identify the most severe deficiencies and will propose measures for their

removal. This working group will result in a series of recommendations for a harmonised and more efficient customs system at the European level.



## Contacts

For further information, please contact:-

First name	Name	Organisation	E-mail
Richard	IDIENS	FDC	richard.idiens@fdc.fr
Gert-Jan	MUILERMAN	via donau	muilerman@via-donau.org
Hilde	BOLLEN	PBV	hildebollen@binnenvaart.be
Cas	WILLEMS	AVV	c.p.m.willems@avv.rws.minvenw.nl
Branislav	ZIGIC	VBD	zigic@vbd.uni-duisburg.de

## Abbreviation/acronyms list

AVV	Adviesdienst Verkeer en Vervoer (Transport Research Centre for the Ministry of Transport, Public Works and Water Management in the Netherlands)
CEEC	Central and Eastern European Countries
DG-TREN	Directorate-General for Energy and Transport
EC	European Commission
EILU	European Intermodal Load Unit
EU	European Union
FDC	France Développement Conseil
ILU	Intermodal Load Unit
IWT	Inland Waterway Transport
PBV	Promotie Binnenvaart Vlaanderen VZW (Inland shipping promotion Flanders)
RTD	Research and Technology Development
SPIN	Strategies to Promote Inland Navigation
SPIN-TN	SPIN Thematic Network
UN	United Nations
VBD	Europäisches Entwicklungszentrum für Binnen- und Küstenschifffahrt e.V. Duisburg (European development centre for inland and coastal navigation)
via donau	Donau Transport Entwicklungsgesellschaft mbH für Telematik und Donauschifffahrt-via donau (Development Agency of the Austrian Federal Ministry of Transport, Innovation and Technology)

Newsletter editor

FDC Rue du Cornet, 22 – B-1040 Brussels, Belgium  
E-mail: [ikoepler@fdc.fr](mailto:ikoepler@fdc.fr)

Register as an expert,  
visit SPIN-TN Website  
[www.spin-network.org](http://www.spin-network.org)

