Promotion of IWT in logistics education and simulator standards

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Education is very important. We need people capable to run the inland waterway transport. This poses challenges to Human Resources in the sector. How do we guarantee sufficient workers for the future of IWT? How can we train and prepare them for the sector and to work on the ever more modern fleet.

Our work focused on three subjects.

Elaboration of technical standards for full mission ship-handling simulators

The Commission prepares a new directive to harmonise education and training in the inland navigation sector in Europe. We investigated how modern tools such as simulators could be used as part of training. But what are the criteria for a simulator to be recognized as a near to real life environment?

We used the following steps to develop these criteria:

1. We used the list of functionalities (CCNR) as a starting point.
2. We studied existing documents regarding simulators.
3. We analysed how we could extend the CCNR-list with regard to the features in the field of using SH simulator as a tool for examination purposes.
4. We scrutinised the parameters (performance features) needed for each functionality.
5. Next, we defined the quality levels (high, middle, low).
6. At workshops with experts of simulator suppliers, we collected their input and feedback.
7. Next, we drafted technical requirements that could be useful for assessments and examinations.

This led to a report that serves as an input for further discussions and decisions. It contains:

- Technical descriptions of every functionality and feature.
- Relevant criteria and parameters for a performance description per technical area.
- Performance levels and application of performance levels per parameter.
- Per field of use the estimated minimum range of needed functionalities and performance level per concerned parameter.

As a parallel activity and with various Edinna members, a Train-the-Trainer manual about the use of the Ship Handling simulator has been developed. This will be presented to the Edinna network and all others interested on 17 March 2016. Within Prominent, we also foresee a follow-up on how we can use simulators for the purpose of education, assessment and examination in comparison to real-life experience. This will give us an idea of the effectiveness of these tools compared to real life experience.

Concept for electronic service record books and logbook

Service Record books and logbooks are an administrative burden. When we make these digital, this would considerably cut paperwork and lessen the administrative burden.

To take steps forward, we had lots of interviews with skippers about the potential move from paper to digital. We asked them about any ongoing digitalisation systems and what they see could be the future. This was the process we followed:

1. Research of existing initiatives.
2. Research of possible demands of the users.
3. Research of possible demands of other involved stakeholders from the IWT sector.
4. Research of possible future system and tools.
5. Research of possible future system and database.
6. Interviews and workshops with all stakeholders.
7. Research of impacts.
8. Drafting and submit this deliverable.

Most skippers see the advantage of it. If the service record book would be connected to a central database, this would

create a level playing field for the whole sector. It would become impossible to have several service record books.

This report will feed further discussions and decisions. It can be used as a roadmap for further developments towards the introduction of a European electronic service record book (e-SRB) and electronic logbook. There are already some pilot projects running that explore the possibilities. They are documented in the final report that contains recommendations for the future.

As a follow up the Prominent project and together with the Joint Research Centre, we are in the process of a research to determine the requirements to get these tools operational at a later stage. We are working towards a design and develop a European electronic service record book (e-SRB) and a European electronic logbook that will be tested during a pilot for real life experience.
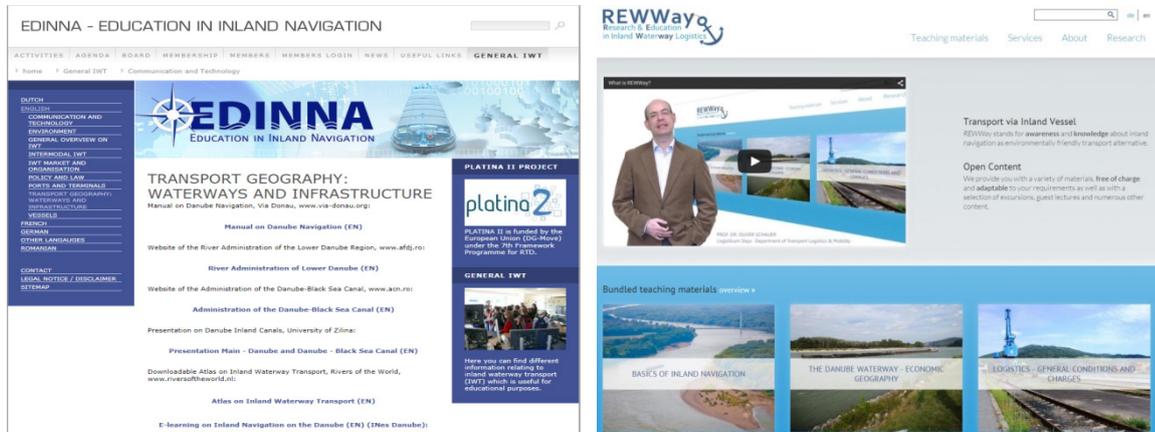
Learning material for future logistics decision makers

Many institutes for logistics education do not teach about the potential role of IWT for door-to-door transport. This is a clear missing link in education. Some logistics educational institutes don't even mention IWT at all. They only focus on road and rail. Since there was room for improvement, we gathered all existing information and connected it in a coherent way.

This resulted in:

- ☐ Learning material for future logistics decision makers.
- ☐ Updated, extended and restructured databases with IWT data.
- ☐ A clear dissemination plan.
- ☐ Dissemination activities to support the uptake of IWT knowledge, e.g. at River Shows where we present in interactive way how IWT can be part of door-to-door services.
- ☐ Cooperation with European Logistics Association. More focus on IWT in logistics examinations.

The material we developed is already available on the EDINNA website. And also the REWWay website contains useful information about IWT in interactive ways (questions, movies).

We organised dissemination activities to support the uptake of IWT knowledge, for example at River Shows with ± 250 participants in total:

- ☐ In cooperation with REWway in Enns, Austria
- ☐ In cooperation with Ceronav in Constanta, Romania
- ☐ In cooperation with CRUP and Via Donau in Zagreb, Croatia
- ☐ In Rotterdam the Netherlands

As for the integration of inland navigation in general logistics education, the Prominent project will extend the activities and future possibilities for exchange of knowledge by developing:

- ☐ A web-based community of practice, including learning materials and modules.
- ☐ Dissemination activities and embedding it in different curricula of logistics studies .