Round-table discussion at the Central Commission for the Navigation of the Rhine (CCNR) on vessel handling simulators in inland navigation
Strasbourg, 30 January 2013

On 30 January 2013, the Central Commission for the Navigation of the Rhine organised a round-table discussion on vessel handling simulators in inland navigation. The aim of the discussion was to enable the various stakeholders to express their points of view on the target groups for these tools, how they are used, and the functions they need to be able to provide. It also offered an occasion for a wide-ranging exchange of information.

The discussion reached the following conclusions:

- These simulators are tools which could help to modernise and rationalise skippers’ careers. As such, they were presented as a tool capable of improving the quality of learning for crew members throughout their careers.
- Simulators make it possible to increase the power of attraction of inland navigation by opening up new perspectives in terms of occupational retraining.
- Simulators also make communication with the general public easier and could therefore also be used as a means of promoting inland navigation.
- Simulators can never take the place of practical experience. These are two complementary methods for acquiring skills.
- The functions available on the simulator can be more or less developed and can vary depending on the simulator’s use.

Context

Vessel handling simulators are relatively recent tools in inland navigation. They make it possible to reproduce the behaviour of a vessel so well that, from the dummy wheelhouse, the impression is really that of steering a vessel. A battery of screens makes it possible to reproduce the landscape and topography of certain stretches of river.

Simulators are one of the CCNR’s priority work topics, and its Committee on Social Issues, Employment, and Professional Training (the “STF” committee) has been working on the possibility of using them.
Target groups

In his presentation, Arjen Mintjes recalled that simulators could be used by a very varied range of target groups. Four were identified in particular:

- students undergoing training at a recognised inland navigation training institute,
- crew members who have obtained their qualification solely on the basis of their experience in navigation,
- skippers who are already qualified and wish to undergo specialist training or keep their skills up to date,
- people from other professional sectors ("career changers"); this category still needs to be defined more clearly, as it includes people with very different backgrounds.

Ways of using simulators

The discussion made it possible to identify four potential ways of using simulators:

- as a teaching tool during initial training at a recognised training institute,
- as a tool for examination purposes; such an examination could be used to check practical experience acquired on board a vessel,
- as a tool for continuous training for skippers,
- as a tool for densifying training in occupational retraining, using it both for practise and as a means of intermediate assessment.

The functions required

One of the conclusions of the discussion was that the quality of a simulator depends on its ability to reproduce reality. As Mr Hissel's presentation showed, some functions are nevertheless directly connected with the desired use to be made of the simulator.

The strengths and weaknesses of simulators

Simulators present many advantages: they make it possible to practise handling a vessel in complex situations (in terms of weather, water conditions, etc) by repeating the situation until success is achieved, they make it possible to realise the full extent of mistakes by analysing consequences, and they make it possible to vary levels of difficulty.
Like any tool, simulators have their limits. They reproduce reality as faithfully as possible, but some situations cannot be covered at an acceptable cost. Also, the perceived experience is not the same as on board a real vessel.

Practise on a simulator is thus complementary to acquiring a certain level of practical experience.

**Perspectives**

The discussion pinpointed the value of simulators as part of a policy to modernise careers aimed at making the profession both more attractive and safer. Several aspects of qualifications in inland navigation will need to be modernised, and for each aspect the simulator could play a decisive role. In the initial training of apprentice boatmen, firstly, simulators provide a complement to practical learning and improve the quality of the training dispensed, as Mr Wieck and Mr Paulus showed in their presentation. Using simulators would also make it easier to set up continuous training modules, thereby meeting the needs of both employers and employees (presentation by Mr Tadsen and Mr Bramley) and increasing future career prospects. Simulators should also facilitate access to the profession by people from other occupational sectors, particularly as they would make it possible to adapt learning to the learners’ past careers (presentation by Mr Roozendaal). Lastly, they would help to modernise the examination for obtaining a boatmaster’s certificate, by making it easier to check candidates’ practical experience (presentation by Mr Van Reem).

The round-table discussion also made it possible to note that many stakeholders are working on this topic, and that a degree of coordination of the various initiatives currently under way is necessary at the international level.

**Towards Vision 2018**

This discussion was part of the “Vision 2018” initiative launched at the beginning of this year by the CCNR. After a number of complementary round-table discussions to be held in 2013 in partnership with the main stakeholders in European river circles, the CCNR will be “bringing skills together” at its 5th International Congress, to be held in Strasbourg on 3 and 4 December 2013, in order to agree on a “common vision for sustainable inland navigation – Vision 2018”. Pooling the conclusions reached at these various events will make it possible to agree on a specific and comprehensive route map for inland navigation in the decades to come. Social concerns will occupy a central position in the Congress’s considerations, and the conclusions on the future role of simulators will constitute an initial contribution to the sustainable development of knowledge and skills in this sector.
About the CCNR (www.ccr-zkr.org)
The CCNR is an international organisation that exercises a regulatory role essential pour the navigation of the Rhine. It is active in the technical legal, economic, social and environmental fields. In all its areas of work, its guiding principles are the efficiency of transport on the Rhine, safety, and protection of the environment. Its work currently covers a large part of European navigable waterways.

Contact
CCNR Secretariat
Raphaël Wisselmann, Administrator with responsibility for technical and nautical issues, and river information systems
Tel.: +33 (0)3 88 52 96 44 /r.wisselmann@ccr-zkr.org