

Danube School Ship Concept Executive Summary

Need for a Danube School Ship

The idea of a joint Danube School Ship - to at least partly solve the lack of qualified nautical personnel - was already borne some years ago. The partners of the international Danube educational project HINT (www.hintproject.net) have now further discussed this idea with potential users (interviews, workshops) and developed a pre-feasibility study. Balanced acquisition of both knowledge and practical skills is an essential prerequisite of good training resulting in a highly performing crew on board ships. On-board practical training possibilities in inland navigation are unfortunately scarce in the Danube riparian countries, which makes the development of required competencies by inland navigation crew members very difficult.

Requirements in the Danube Region

To learn the requirements for a school ship in the Danube region, 51 companies and institutions in seven Danube countries have been interviewed, the majority of them nautical educational institutions, vessel operators, port operators or administrative bodies.

The **overall feedback was very positive** and the majority of the respondents (83%) is interested in making use of the ship. Regretfully, only **35%** have the **possibilities to finance** a Danube School Ship, even to a limited extend, like the operating costs they actually generate.

Approximately three quarters of the target group would prefer the school ship to be a **common used infrastructure of existing educational institutions**. The vessel type shall be a **motor cargo vessel**, preferably with barges and it should be a **new/specific school ship construction**.

Another essential part of the requirement analysis was the identification of the Danube School Ship **user groups**. With 72% each, **apprentices** in the dual education and training system and **students** (with little practical experience in their education) would profit the most from the existence of such a vessel.

The **estimated number of users** is also very different in the seven participating Danube countries and ranges between 25 users in Austria and several hundred users in Romania.

The **most important skills** trained on board are:

- the emergency situations training,
- the manoeuvring/ ship handling and
- the navigation through locks and difficult areas.

The opinion concerning the necessity of **simulators on board** is ambivalent. Slightly less than the half of the interview partners (48%) think that they would be valuable on board.

Further education and training on board of the ship is also a very crucial issue for the interview partners in all of the involved Danube countries. Only 7% think that it is not necessary to have further training courses on board, the others would prefer to have them in national language (77%) and/or English (53%).

The results of the survey show that **gaining international experiences is very important**. Nearly three quarters of the respondents think that the students/trainees on board shall participate in international tours; having mixed teams on boards (students/trainees and teachers/trainers from different countries) would be the optimum solution for 65%.

The future Danube School Ship shall be **utilized the whole year round**. Although there are peaks in spring and autumn, there are also enough potential users during summer months and winter period.

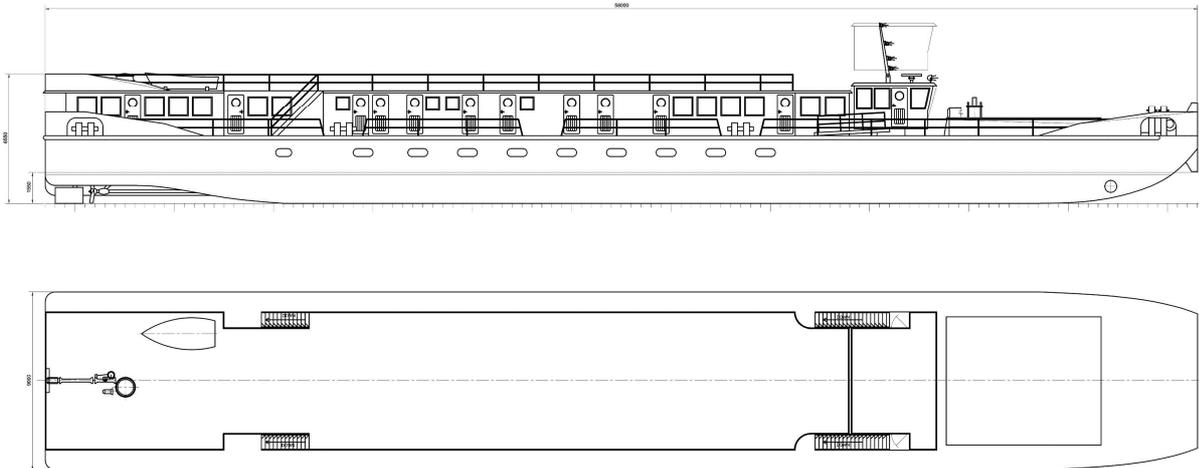
Summary of Danube School Ship Concept

Aim of the concept at hand is to establish a framework for the use of a joint Danube School Ship and to build the basis for an actual implementation project. The document describes a feasible manner for the technical, educational and organisational design of such a vessel. It furthermore outlines a cost estimation as well as funding options on a European level.

- **Vessel Design**

The vessel will be a newly built specific school ship construction and will have accommodation for up to 22 students/trainees, 2 trainers and 4-6 crew members. The school ship will have a cargo space on board but will also have the possibility to push two 2 full loaded DE IIb barges.

The detailed vessel design, including a detailed map, can be found in chapter 4.1 of the concept.



- **Organisational Structure**

Organisational structures are crucial elements for conceiving viable corporations. They strongly influence financial budgets and decision making. Two legal forms of operating a school ship are outlined in the concept: the Limited Liability Company and the Non-Profit Association.

The detailed organisational structure can be found in chapter 4.2 of the concept.

- **Education and Training Concept**

Needless to say, to train navigational skills is the main target of a school ship. Therefore, it has to offer a competence based practical training on board. The educational concept outlined in the Danube School Ship concept is based on the PLATINA Tables of Competences and considers approx.20 students on board of the vessel for training trips of 15 days, allowing for 120 hours of practice.

The detailed education and training concept can be found in chapter 4.3 of the concept.

- **Tour**

The tour of the Danube School Ship is influenced by the travel time of the vessel, the duration of training units on board and the estimated number of students per country. Considering the presumptions of the education and training concept, 480 students/trainees per year can be trained on board of the vessel, although the results of the requirement analysis show that it would be relevant for at least 580 persons.
Considering this, an exemplary tour can be found in chapter 4.4 of the concept.
- **Estimated Costs**

The estimated **acquisition costs** for the new school ship are between 2.1 and 3.2 million Euros.
The estimated **standby costs**, including for example costs for crew, repairs and insurances, come up to approx. € 730,000 per year.
The fuel consumption and therefore the **operation costs** are very hard to estimate, as they strongly depend on several factors. From this point of view, an estimation of 200,000 EUR per year seems reasonable.
Considering that the vessel will be used for the tuition of 480 students per year (20 at the same time) for a period of 15 days, the training of one student costs about € 1.940 for 15 days or approx. € 130 per day.
The detailed cost calculations can be found in chapter 4.5 of the concept.
- **Funding Options**

This part of the concept describes, which potential funding opportunities and instruments exist for the design and the development of the Danube School Ship in the time period from 2014 to 2020. It is important to note that currently (spring 2014) most European programmes have either not been finalised or started yet with the exception of Horizon 2020.
The detailed analysis of the funding possibilities can be found in chapter 4.6 of the concept.

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