

## COMPETITIVE AND SUSTAINABLE GROWTH (GROWTH) PROGRAMME



## STANDARDISATION AND HARMONISATION

### Working Paper

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### **Attachments:**

- [Job Profile – sailor](#) (Excel spreadsheet)
- [Synopsis masters licence](#) (Excel spreadsheet)
- [Training regulations](#) (Excel spreadsheet)

## 1 Preamble

Inland shipping has faced a significant change as well in technical as in commercial means in the last 10 years. Most remarkable is the inversely proportional development in Eastern and Western Europe. Liberalisation of markets on the commercial side and a significant growth in barge sizes on the technical side had the most influence in Western Europe. But there was also a significant change in Eastern Europe. As a consequence of privatisation quite a lot of shipping companies disappeared or down-sized significantly.

Mainly the liberalisation in Western Europe had an enormous effect on the revenues of barge owners and due to this on the field of human resources. As consequence, the already difficult image of inland shipping as working field downgraded again. Boosted through a gradual but continuous change in social behaviour (Change from a completely family run business to self employed owner plus employees), barge owners especially in Western Europe face the problem, that it becomes more and more difficult to hire qualified, well trained, affordable and motivated staff for their barges. Member states like The Netherlands partly solved this problem by facilitating compliances with employment regulations and allowing barge owners to hire foreign work forces (e.g.: only in 2004 about 700 work permits for Czech crewmen were handed out in NL).

On the other hand there is an interesting potential of well trained, experienced and "hungry" work force from Poland, Czechoslovakia, Hungary, Romania, Bulgaria, Yugoslavia and the Ukraine with are traditionally higher flexibility and mobility. Due to the actual wage differences these employees are (to a certain extend) interesting for West European employers. On the long run, the economical growth in Eastern Europe will probably decline the existing differences in labour costs step by step. As a result, these work forces will move back to their home countries (and probably change into more interesting economic fields) and due to this aggravate the human recourses situation in Western Europe again.

A long term solution for the entire IWT sector has to be based on a dual strategy: Increasing the attractiveness of the sector as a working field and facilitate job-migration and career chances on a multinational basis.

Especially increasing attractiveness seems to be the most promising field of action for the industry. Although inland shipping still seems to be (and definitively having the reputation of being) an old-fashioned business. Questions like "Inland shipping – is there still such thing?" are not exceptional. And this seems to be one of the main reasons of the actual employment problems in this sector. As long as the IWT-sector not succeeds in a course-correction, none of any other efforts will bring the necessary improvement. What's needed is a European-wide marketing programme for inland shipping as modern and innovative business sector with lots of career opportunities. It's not enough to act in a closed circuit and trying to convince colleagues. This applies for job opportunities as well as for economic chances for the IWT-sector in the competition of modes of transport. An interesting and successful business is automatically also an interesting field for careers.

(See also § 21 et seq. and § 104 et seq. of EFIN report "A new institutional framework for European inland navigation")

## **Obstacles**

The basis for a successful harmonisation or at least equivalence of Europe-wide standards in human recourses development is a comprehending knowledge of existing national regulations and standards. It's obvious that almost all old and new member states of the EC has more or less large-scaling regulations in their respective IWT- sector. Despite the big demand in knowledge about this rules and regulations, we faced several obstacles during our efforts for fact-finding.

1. Finding the responsible and authorized organisations and persons to give the needed information
2. Unwillingness of supporting by national and even EC-institutions in this research
3. Complexity of (inter)national respectively local regulations due to different institutions and overlapping competencies

To really be able to succeed in setting up international standards in human recourses development, it is almost indispensable that all involved parties give their full support. Branch organisations, companies and entrepreneurs has to push their respective policy and institutions to increase tempo.

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## **2 Requirements**

### **a. Manning regulations**

A pre-condition to define harmonized or equivalence European training standards would be a European manning regulation. At present, there are even in the "old" EC no international harmonized manning regulations with the exception of the Rhine established by the Central Commission for Navigation on the Rhine (CCR) and in some extent on the Danube. Due to the lack of such Europe wide manning regulation there is a wide variety of national regulations with again exceptions for special waterways and or barge types. Without such manning regulation all other definitions for entrance requirements, training regulations, job descriptions and examination standards are just partial solutions which cannot form a sufficient basis for human recourses standards in the IWT sector.

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### **b. Job descriptions/profiles**

Another important item is the question for proper job descriptions or profiles. These profiles should describe all necessary skills and knowledge to fulfil the

respective functions a board an inland vessel. Furthermore, these profiles would be the basis for training as well for examination and certification standards and will form qualification standards for the sector. Actually there are only job profiles to be known for the functions of sailors (Matrose/Matroos) and captains (Schiffsführer/Schipper) in the member states Germany, Netherlands, Belgium and France. These profiles (although there is already a close similarity) need to be harmonized (but not equalised) and defined for all member states active in the international IWT sector.

A job profile gives a description for the respective job, indicating targets, duties and responsibilities, complexity and general abilities of the employee. The description of processes, interaction with other crew members and his disciplinary position as well problems, dilemmas, conflicts and chances are important to give a complete job description. All details should be shown in a matrix, giving a brief but even general outline for the job.

Another important part of a job profile is a summary of needed competencies. These are divided into practical/methodical, organisational, strategic, social, communicative competencies which are essential to meet the requirements for the respective job.

See attachment for an example: [job\\_profile\\_sailor.xls](#) (Source: [www.vtl.nl](http://www.vtl.nl))

To complete the job description, there should be an outlook to the medium- and long term developments in the IWT-sector with regard to technology, policy and economy in the member state as well in the EC.

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### **c. Entrance requirements**

The requirements for entering a job in the IWT-sector are also quite essential. Beside physical requirements the most important field is the educational sector. Due to a wide range of differences in primary and secondary school levels in the EC between The Netherlands in the west and Hungary in the south-east, "job-starters" show a wide spread of educational standards. Due to this and the fact, that these levels will not easily be harmonized, the entrance requirements need to be reviewed. It seems to be important to develop a kind of "low-level-crash-training", to meet the demands of barge owners for crewing their barges and enable low-educated but interested young people to start a job in the IWT-sector.

Due to the a.m. unattractiveness of the IWT-sector it is an essential target to find solutions and to define combined strategies to improve chances to both enter the sector and improve penetrability to and from other sectors (eg: Road transport).

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### **d. Training regulations**

To achieve a maximum social mobility and permeability of employees in the IWT sector between geographical and social/economical working areas, the

training regulations should be synchronized as far as possible. This would allow (potential) employers to confide in the educational background of soliciting people. The main target is to define minimum standards concerning durations, frequents and most important contents of teaching in the various subjects, divided in theoretical and practical subjects: see attachment ([Training\\_regulations.xls](#))

Depending on the aspired level (sailor, mate, master), the mentioned subjects has to be taught more or less intensively and frequently. Trainings have to be “designed” in such a modular way that any additional/continuing training can base on the previous training. A harmonized training regulation would allow a career modelled by a “basic-training” in Hungary, a “middle-level” training in Belgium and studies for the “European Barge Master Certificate” followed in Germany.

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### e. Examination standards

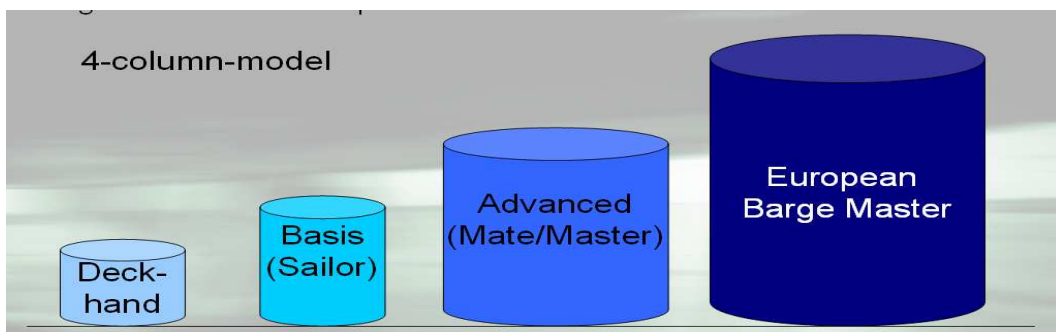
To reach the aim of one European level of education for crew members, it is also essential that educational courses are examined in a standardised way. That means that a sailor who followed training in Austria must be able to finish an exam in Germany with at least satisfying results. To compensate differences in local trainings, there should be a performance appraisal system (PAS). This will allow compensating deficits in one or more subjects with good performances in other subjects. Depending of the aspired level (sailor, mate or master) the PAS must be evaluated.

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## 3. Targets

### a) Modular conception

It seems to be essential, to develop a modular system for education and training in the IWT-sector. The advantage would be that trainings and studies could be started with a wide range of educational preconditions. That means that people from related branches (e.g. the road transport sector) which has already followed a vocational training, have easier access to the IWT-sector. Due to this especially the lack in lower level employees could be adjusted.



### **Deck hand**

This training for about 1 year would be interesting for educational “low-performers”. Under social aspects, the deck-hand training would form chances for as well these group of people and solve a manning problem in the sector

### **Basis**

For interested and motivated young people who are looking for a comprehensive apprenticeship in the sector. In 2-3 years (depending of educational basis) people will learn all relevant abilities and achieve the basis to follow an advanced training to become a mate or master.

### **Advanced**

In this training, sailors with a degree (achieved by following the basis training) will be prepared to get the license as mate or master. This training will accompany the “Patent-Lehrgang” and focus on items like (human recourses) management and control.

#### b) European Barge Master Certificate

Inland shipping has lost appeal due to insufficiently promoting career chances in the sector. As already mentioned the sector is rather recognized old fashioned then modern and innovative. Due to this people don't see interesting career chances in the IWT-sector. Becoming a “skipper” doesn't seem to be attractive. One solution could be to create a job-profile for a “European Barge Master”. This occupational image could be a key to increase attractiveness of the sector and open new financial sources. Entrepreneurs with this degree will likely get easier access to financial sources for investments, one of the major problems nowadays for this group of players.

The postgraduate studies to achieve the European Barge Master Certificate should mainly focus on economy, marketing and international business. With this certificate barge masters will much more recognized and accepted as business partners as they are today and be able to enter negotiations for fundraising or transport contract with international (industrial) shippers.

#### c) International examination boards

To achieve a maximum in internationalism in the sector and facilitate flexibility – especially for the degree of the European Barge Master – it would be an advantage to create International Examination Boards. These boards would be responsible for examinations of domestic but primarily foreign students. These boards could act ‘on demand’.

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## Strategy

### a) **E**uropean **D**atabase for **H**uman **R**esource **D**evelopment (EDHRD)

To avoid a long lasting process of finding 'the one' agreement for the entire EC-IWT sector, one first step should be setting up an internet based database with the several national manning regulations as well as training and vocational development regulations. The database should be build up as synopsis of all relevant items in human recourse development. Every item should be defined as precisely as possible and data input must be as detailed as possible. Every single item gets an own input-field, selection field or drop down menu. That gives the opportunity to have a maximum comparability of the received input. Main target must be, to create as much as possible data which can be compared automatically. To achieve that even in fields, where data can't be expressed in figures, there has to be offered a wide range of text modules which give graduated options to the different thematic fields.

Every member state should be allowed but also obliged to deliver as much as possible data. That means that not only official institutions deliver the (if existing) data about the official regulations. Also established branch organisation and even single companies/entrepreneurs should be allowed to supply their ideas and perceptions. Due to this approach it'll be possible to achieve a maximum bandwidth of possible solutions.

The EDHRD should be designed as open system. That means that users will be able to see the data-input of every other data-supplier as well as the automatically generated synopsis. Furthermore a communication-tool should users give the opportunity to discuss the various items and data input.

After having built up the frame-database, all relevant groups must be invited to register at this system. After a defined authenticity check, users get access to the database. Users may fill in as much as possible data, but may feel free, to leave fields empty. Furthermore there has to be differenced between existing regulations and proposals.

In respect of content, all regulations and standards should be divided into three main groups: Basis training (for job starters), advanced training (for continuing training to achieve higher levels of education (e.g. from sailor to mate), master and a top level education (European Barge Master Certificate).

### b) **H**uman **R**ecourses **D**evelopment **B**oard (HRDB)

Once all member states and/or market players have delivered their manning regulations, job descriptions, entrance requirements, training regulations and examination standards into this database, a working group should be authorised to form general standards for the entire industry.

This "Human Recourses Development Board" (HRDB) should be compiled of delegates from all member states active in the IWT sector. Additionally members should be delegated by the Central Commission for Navigation

on the Rhine (CCR), the Danube Commission and the Directorate General for transport of the EC. The board members must be authorised by their states to take binding decisions.

Obligatory basis for the standards to be defined should be the automatically generated synopsis. This synopsis generates average values for the various delivered data. Data which can't be evaluated easily in figures (e.g. soft skills etc.) could be evaluated by analysing the repartition of selected text modules.

The synopsis and the breakdown of non-figural-data than has to be aggregated to directive-proposals in the various fields. These proposals should be distributed to all users for a second round of evaluation. In this second round all users may give their comments and/or alternative suggestions. The HRDB than has to evaluate the comments and suggestions and incorporate them into the directive-proposals and hand them over to the EC.

The advantages of this approach are:

1. Maximum bandwidth of input
2. Maximum chance for involvement for market players
3. Maximum acceptance of output
4. Optimal and fastest availability
5. Access to this information for (potential) job starters
6. Cost and time saving

c. Image campaigns and recruiting programmes

The entire sector – especially in the old member states - faces a significant lack of new people entering the branch. Inland shipping does not seem to be the one with interesting chances and opportunities for the future. All players have to spend serious efforts to close that gap. Despite low margins and small capacities the entire branch has to start an international marketing campaign and recruiting programmes. Therefore all "big players" (branch organisations and companies) should try to win their national political institutions as well as the EC to set up an international marketing and recruiting fund. The collected money (50 % from the industry – 50 % from national budgets and the EC) than should be invested into print- and e-media for the target group. To spend the money as effectively as possible, it should be focussed on e-solutions like Internet and E-Mails. Printed information (e.g. postcards or small folders disposed at schools) should only be used to draw the attention to this e-information. Additionally representatives (entrepreneurs, members of shipping organisations but also journalists) could act as ambassadors for the sector and present the sector at schools.

If only 10 % of the time and money which is spend at events where players from the shipping industry trying to convince themselves about the importance of inland shipping would be spend on the proper target group, a lot could be reached!