# Classification of European recreational waterways

## Maps and current recreational waterways in Europe

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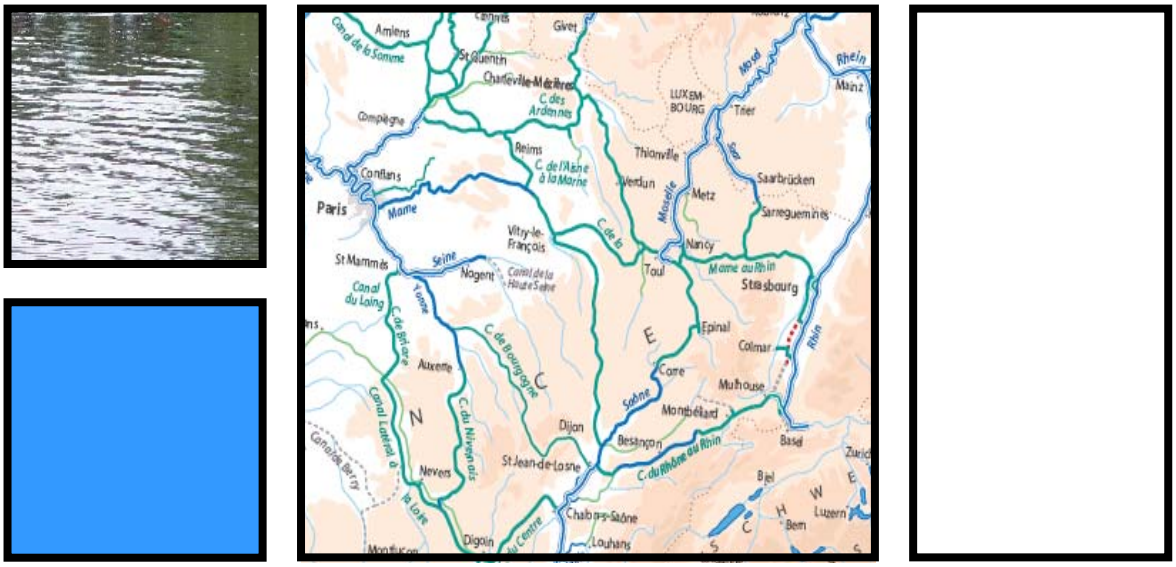


Client: SRN (Stichting Recreatietoervaart Nederland)

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Rotterdam, 21 December 2006

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# Preface

This report could not have been produced without the help of all respondents, who we would like to thank very much for their efforts. Furthermore Euromapping provided all maps for the questionnaire and adapted them with the requested changes. Lastly SRN and British Waterways should be thanked for taking this initiative. It was a pleasure for ECORYS to work with these organisations, and all the other parties involved.

# 1 Introduction

The INTERREG IIIB projects CROSSCUT, CANAL LINK and the INTERREG IIIC project VNE[1] are all aimed (among other objectives) at an improved European classification and use of recreational waterways.

The UN/ECE[2] has accepted a unified classification system in resolution 52 in 2004[3]. This extended ECMT[4]-classification of PIANC[5] contains a classification for recreational waterways that can be used throughout Europe. However, this classification is not yet in use in all countries. One of the aims of the above-mentioned projects is to provide a sound basis to facilitate the use of this classification in all countries.

Euromapping has already produced and published a map that uses this adapted ECMT classification. Although the ECMT has not itself adopted this classification for recreational waterways, we refer in the rest of this report to the ECMT classification as if it were formally extended as recommended initially by PIANC and then by the UNECE.

Table 1.1 Overview of ECMT waterway classes (see annex 2 for detailed ECMT map)

| Class | Designation | Max length (m) | Max. beam (m) | Draught (m) | Min height under bridges (m) |
|---|---|---|---|---|---|
| RA | Open Boat | 5.5 | 2 | 0.5 | 2 |
| RB | Cabin Cruiser | 9.5 | 3 | 1 | 3.25 |
| RC | Motor yacht | 15 | 4 | 1.5 | 4 |
| RD | Sailing boat | 15 | 4 | 2.1 | 30 |
| I | Motor barge | 38.5 | 5.05 | 1.8 - 2.2 | 4 |
| IV | Motor barge | 85 | 9.5 | 2.5 | 5.25 |
| VII | Push-tows | 285 | 34.2 | 2.5 - 4.5 | 9.1 |

Source: Extended ECMT table for classification of inland waterways proposed by PIANC working group (simplifying the breakdown of commercial waterways into three representative classes only).

The SRN (Stichting Recreatietoervaart Nederland) asked ECORYS to investigate whether the ECMT classification system could be used throughout Europe. In parallel with this investigation, an updated map of recreational waterways has been produced in co-operation with Euromapping. This provides the recreational waterway user with a map

[1] VNE = Voies Navigables d'Europe
[2] UN/ECE = Economic Commission for Europe of the United Nations Organisation
[3] European Recreational Inland Navigation Network, Resolution 52, 2004. United Nations, Economic Commission for Europe (UN/ECE) Inland Transport Committee. Working Party on Inland Water Transport Geneva, TRANS/SC.3/164.
[4] ECMT = European Conference of Ministers of Transport
[5] PIANC = International Navigation Association

based on a unified classification system for the waterways and their bottlenecks and missing links. Lastly, an overview is provided of the waterways, the policies applied by the responsible ministries, their management and the most important projects for recreational waterways.

To gather the information, representative organisations in 11 countries were asked to fill out a questionnaire with the following questions:

- Are there recreational waterways in your country that should be added to or deleted from the map?
- Are the details for your country mentioned on the map correct?
- What are the most important recreational waterway projects?
- Is it possible to use the ECMT classification in your country?
- Can you check the ECMT classification for your country?

In addition to the questionnaire, interviews were conducted with key players in each country to obtain an overview of the recreational water use in that country.

The contacts consisted of people that are involved in the INTERREG projects CANAL LINK, CROSSCUT and VNE. Although they were often working at the regional level, they kindly took the trouble to provide us with information for the country as a whole.

This report presents the results. In chapter 2 an overview is provided of the European waterways. Chapters 3 to 13 present the results per country. The annexes contain the contact list, the Euromapping legend, the extended ECMT classification and the replies to the questionnaire.

*Some additional remarks:*

If the contact persons did not have the information for the whole country, they were asked to contact the organisation or person that holds such information so that they could assist us in completing the questions.

The focus is on the European network. It was up to each country to decide on the level of detail, but in general it is considered unessential and perhaps even unfeasible to indicate all the open boat waterways (class RA) on the European map.

The focus is on recreational waterways. The classes I to VII for motor barges and push-tows are included because of their potential recreational use. Most of the bigger waterways are regularly used by recreational boats.

# 2 Recreational waterways throughout Europe

Recreational water use is becoming more important in Europe. More people can afford a recreational boat, have more leisure time and are interested in travelling around Europe. More than 1 million motorised pleasure craft sail the inland waterways of the Member States of the European Union. The growth in the water sport sector is estimated at 5% per year.

A European map with and a short description of the recreational waterways will enable the users to see if and how they can go from one country to another. It will also enable policy makers to see which waterways are vital for developing a European network of recreational waterways.

In 2004 the UN/ECE approved the extended ECMT classification which now includes recreational waterways. This is a step towards unifying the classification for boats. This report examines whether this classification can be used in the different countries, and proposes a common map based on this classification. Euromapping had already developed a European map showing the recreational waterways alongside the commercial waterways. As part of the current project, this map has been checked and updated for 11 countries.

A common picture emerges, of recreational waterways as a factor of regional economic development, reinforced where transnational boat movements are possible and encouraged. This picture is highlighted and the value of the corresponding policies underlined by the overall European map.

It is interesting to see that 9 of 11 countries mention that the ECMT classsifcation can be used in their country. Only the United Kingdom indicates that it is not possible to use the classification as the UK is having a different structure. Spain is mentioning that it does not have a classification and therefore can not say if it can be used.

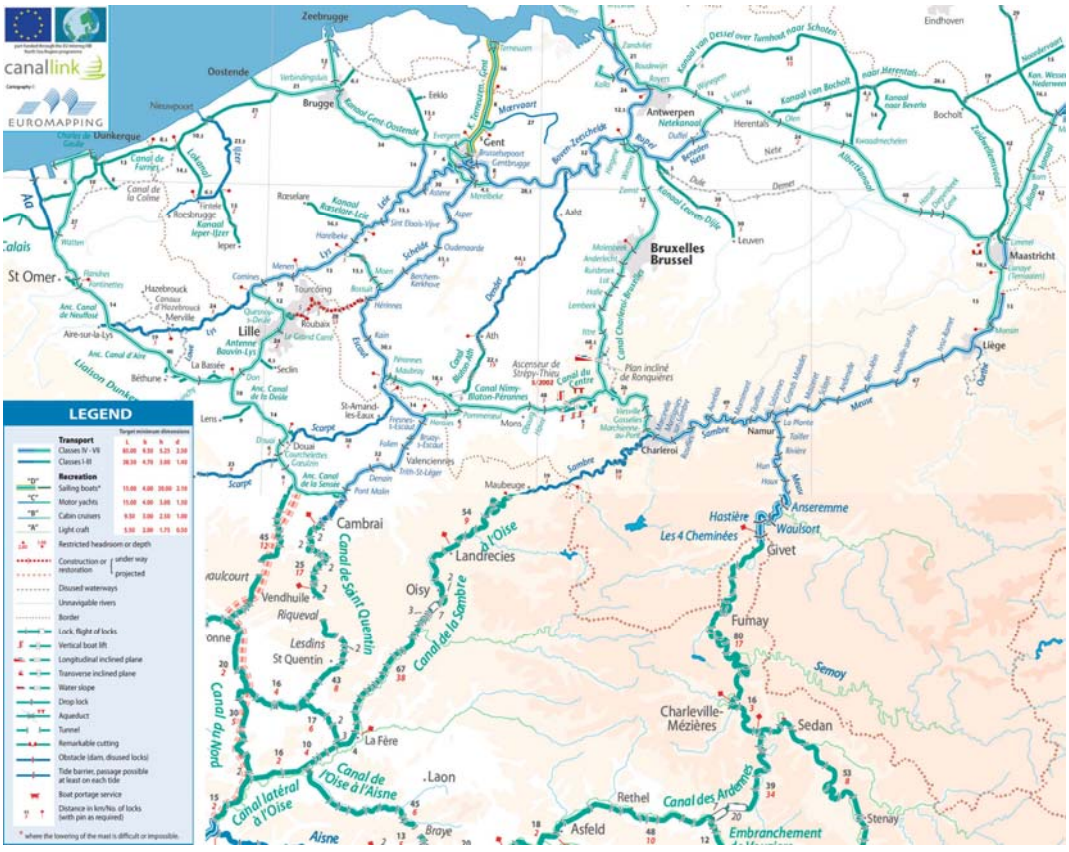
For most countries the waterways are in general managed by the national authorities. In 3 countries, Italy, Norway and Sweden, the waterways are managed locally or regionally.

# 3 Recreational waterways in Belgium

## 3.1 Waterways

Belgium has, in both Wallonia and Flanders, from east to west and from north to south, a dense waterway system. The biggest part of the approximately 1523 km inland waterways is suited for the RC class of the recreational sector. Most of these rivers are also being used for transport and are therefore very busy. The canals in West-Flanders within the triangle Ostend, Veurne and Ieper, the Blaton-Ath canal, the Dender and the river Sambre are of class I dimensions and are therefore less heavily used for transport.

Figure 3.1 Map of Belgium




Source: Euromapping

As there are many recreational facilities it is easy to cruise throughout the country. For the smaller rivers little information is available as to their navigability and for which boats. The Belgian waterways have many locks, especially in Wallonia. Since March 2006 no fee has to be paid to use them. As soon as a boat enters and leaves the Belgian

waters, they have to register themselves at the first Belgian tax collector's office or lock encountered on their route.

The Belgian inland waterways are connected to the North Sea and the neighbouring countries France and the Netherlands. Over the Dutch waterway system it is also possible to sail to Germany. Between Belgium and France there are 7 connections, mostly RC class. Between Belgium and the Netherlands there are four connections: the Terneuzen-Gent canal, the Rhine-Schelde canal, the Noordervaart and the Juliana canal.

## 3.2 Waterway policy

After the Second World War the policy was mainly directed towards the restoration of the main routes of the waterways to the European Class IV (1350 tonne barge). Therefore the main waterways network is well developed.

The three regions in Belgium – Brussels, Flanders and Wallonia – have independent administrations with separate policies. The federal level publishes useful documents for users of waterways (e.g. Vademecum voor de pleziervaart in België, August 2006) which are made specific for each region. Wallonia published in 2006 a document with the rules and infrastructure for recreational use of waterways ("La navigation de plaisance en Région wallonne"). This document is written for the users of the waterways and also contains information on infrastructure that is reserved for recreational use.

## 3.3 Waterway management

The waterways are managed by the Flemish administration in the North and by the Walloon administration in the South. The Brussels administration manages 14km of waterways, from the lock at Anderlecht on the Charleroi-Brussels Canal to the bridge of Vilvoorde on the ship canal between Brussels and the river Schelde.
These regional administrations are empowered to fix the operating hours of locks and bridges, to select the sections where high-speed navigation is allowed, to authorise motor vehicle access to the towpaths, to decide where boats can be moored, to edit the "Newsletters for Shipping" (Berichten aan de Schipperij – Avis à la Batellerie), to authorise the organisation of nautical events on the waterways, to maintain and repair the engineering works on the waterways, etc.

Table 3.1 Overview of the responsible organisations for waterways in Belgium

| Region | Organisation | Contact |
|---|---|---|
| Federal | Federale overheidsdienst Mobiliteit en Vervoer | www.mobilit.fgov.be |
| Brussels | Port de Bruxelles | www.portdebruxelles.irisnet.be |
| Région wallonne | Ministere wallon de l'Equipement et des Transports, Direction générale des Voies hydrauliques | www.voies-hydrauliques.wallonie.be |
| Flemish Region | De Scheepvaart NV | directie@descheepvaart.be |
| | Departement Mobiliteit en Openbare Werken, afdeling Haven- en Waterbeleid | Haven.waterbeleid@vlaanderen.be |

| | | |
|---|---|---|
| | Departement Mobiliteit en Openbare Werken,<br>afdeling maritieme toegang<br>Agentschap voor Maritieme Dienstverlening en Kust<br>Waterwegen en Zeekanaal NV | Maritieme.toegang@vlaanderen.be<br>kust@vlaanderen.be<br>info@wenz.be |
| | | |

## 3.4 Most important projects

The most important projects for recreational waterways in Wallonia are related to port facilities.

Wallonia and (marginally) Flanders are both concerned by the restoration of a missing link in the recreational waterway network, through restoration of the Espierre Canal (along with the Roubaix Canal in France). It is relevant to the present exercice that the engineers designing the restoration of this ECMT Class I canal deliberately adopted the recreational category RC, to save on the volume and cost of dredging works. The difference applies only to the available draught, which will be 1.60 m instead of the original 1.80 m.

## 3.5 ECMT Classification

The ECMT classification with classes I to VI is used in Belgium. The maps that Belgium has developed use this classification. However, the recreational ECMT classification (RA, RB, RC and RD) is not in use in Belgium. The maps do not contain information on rivers that are smaller than class I. However, in detailed documents a lot of information is being provided on facilities, specifically for recreational water users.

## 3.6 Consulted Literature


- Edwards-May, D. (2001), Europe – Voies Navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).
- Vademecum voor de pleziervaart in België, August 2006
- La navigation de plaisance en Région wallonne, August 2006

*Websites*

www.mobilit.fgov.be/nl/aqua/plaisure/plaisure_tourist.htm
www.mobilit.fgov.be
www.lin.vlaanderen.be/awz
www.voies-hydrauliques.wallonie.be
www.havenvanbrussel.irisnet.be/
www.binnenvaart.be
www.opvn.be
www.ris-rivierinformatie.be

# 4 Recreational waterways in France

## 4.1 Waterways

The French waterway system is the longest in the European Union, having approximately 8800 km of navigable rivers and canals. The French canals were created from the 17th century for transport, and were mostly enlarged or reconstructed during the following centuries.

The navigable rivers in France (e.g. Rhône, Seine, Moselle, and Loire) are connected to the many canals. There are basically three regions for recreational water users:

- South West: From the Atlantic Ocean, Bordeaux to the Mediterranean Sea, Narbonne via the Garonne lateral canal and the Canal du Midi.
- West: the network extending from Anjou (Loire and Maine) to Brittany, including the Nantes-Brest and Ille-et-Vilaine canals, the Vilaine, etc.
- North to Southeast: The whole of northern, eastern and central France has a dense network of rivers and canals (Seine, canal du Nord, canal de Bourgogne, Saône, Meuse, etc.) which converge on the Rhône and thence the Mediterranean Sea. This network covers the greater part of France.

One of the main touristic routes are:

- The “Canal du midi”, which links mediteranean sea to Toulouse. And then, the sailors can take the “Canal latéral à la Garonne” in order to join the Atlantic ocean.
- The “Canal de Bourgogne” is also very used by the tourists.

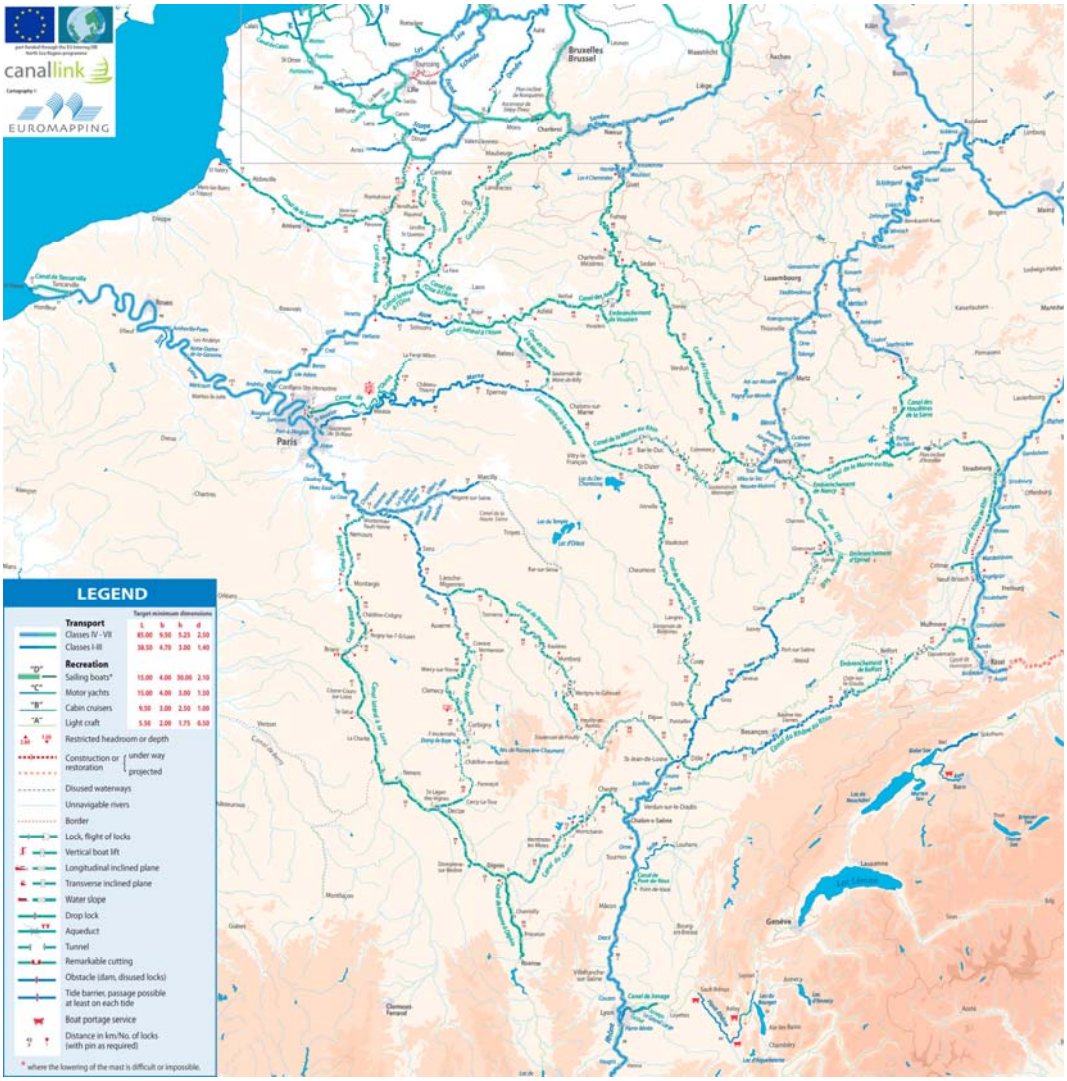
A characteristic of the French waterways system is that there are many locks.
France has furthermore many marinas along the various coasts, making the country very popular for recreational sailing and boating.

The waterway system is also connected to the neighbouring countries Belgium and Germany. There are several connections between France and Belgium. There is a connection between France and Luxembourg (Moselle), and there are three connections between Germany and France (Sarre and the Rhine at three locations). Between Switzerland and France there is theoretically a connection, but a series of power plants (including the 70m-head Génissiat) separates Lake Geneva from the navigable upper Rhône, while lower down the section of the Upper Rhône between Sault-Brénaz and Lyon is not navigable.

It is possible to cruise from the Atlantic Ocean via the Canal du Midi (UNESCO world heritage site since 1996) to the Mediterranean Sea which enables boats to avoid going

around Spain and Portugal. It is also possible to sail from Paris to the Mediterranean Sea by the river the Seine which is connected to the river Rhône by three separate canal routes.

Figure 4.1 Map of France – Main network, north, east and central France




## 4.2 Waterway users

There are approximately 50 000 craft of categories RB to RD regularly using the inland waterways, although many of these are concentrated in the cruising areas close to coastal waters. The principal users of the inland waterway network are the 2000 hire boats (category RC), and the owners of large motor boats making long-distance voyages through Europe. Approximately 25 000 boat owners purchase the boat licence “vignette” from Voies Navigables de France for periods ranging from one day to one year (each calendar year). They make use of one of the 472 marina’s.

The lack of any licensing system makes it hazardous to estimate the numbers of boats on the isolated waterway networks not managed by VNF.

It is important to note that some of the most regular recreational users of the French waterways are in craft larger than class RC and RD, which correspond to the former commercial carrying craft. These are not taken into account in the extended ECMT system, and will continue to rely on the continued maintenance of the historic canals with their original lock dimensions (they can accommodate a lower available draught).

## 4.3 Waterway policy

French government and VnF signed on the 16th of November 2004 a “contrat d’objectifs et de moyens” (“aims and means contract”) from 2005 to 2008. This contract is a very important step for the public corporation. The contract determines the state priorities concerning network security and the development of river transport. To reach the objectives of the contract, the French state increased means and resources of VnF. Furthermore, through this contact the French state is committed for 4 years on the budget.

Figure 4.2 Main waterways resort in France

Long ignored in favour of roads, the existing waterway network is in need of a great deal of restoration. This mostly concerns the repair or reconstruction of weirs, some of which date from the beginning of the century. There is also a need to adapt a number of waterways to current navigation constraints.

National waterway policy is focused on completion of the network of Class V waterways to form the integrated European network for inland water transport. Some of the smaller Class I waterways are retained in the main network ("réseau magistral") which the State will continue to maintain, but all the others are destined to be handed over to the regions or to smaller local authorities, or even other interested parties, if the regions decline the opportunity.

In the above figure is indicated that the splitting of the French waterways into the main network ("réseau magistral") is done in red, and the secondary waterways (blue), to be handed over to the regions. The Loire, Garonne and Upper Rhône are retained by the State for non-transport reasons.

## 4.4 Waterways management

Voies navigables de France (VnF) is responsible for managing, operating, modernising and developing the largest network of navigable waterways in Europe, comprising 6 700 km of canals and developed rivers (4 100 km on the main network and 2 600 km on the regional network), over 2 000 permanent structures and 80 000 hectares of waterside public land.
The Transport Ministry is managing directly 300 km on the main network and 500 km on the regional network and 1 000 km of the regional network are run directly by local authorities.

As a public corporation answerable to the Ministry for infrastructure, housing, transport, tourism and the sea, VNF acts in close cooperation with institutional partners and waterway users. In this manner, it makes an invaluable contribution to implementing all the policies linked with the preservation and sustainable development of the waterways.

The need to allow all the players make the best possible use of the network and of all its components and functionalities requires a high level of expertise and quality of service which can only be provided by having fully-trained personnel constantly available all over the network.

Organised around head office, 15 regional, inter-regional and local directorates representing over 80 professions exercised by almost 5,000 VNF agents, civil servants and local functionaries guarantee the day-to-day operation of waterway activities.

## 4.5 Most important projects

VNF is the lead partner of the INTERREG IIIB project Blue Links, to restore the Roubaix Canal and its extension in Belgium (q.v.), the Canal de l'Espierre, to recreational Class RC dimensions.
The Canal Seine-Nord link is the one of the most important projects (which is a river transport project, but it can be used also as a recreational waterway, especially by large boats like"paquebots fluviaux"). The 3 major benefits are :

- Linking large economic centres of north-western and central Europe will provide a solution for logistics players
- A solution for the traffic gridlock on the north-south road corridor. It's going to contribute to a decrease in road congestion. The large-gauge waterway link Seine-Schelde will relieve the north-souyh axis because it will carry a large volumes of bulk an high value goods, as well as exceptional and outsize convoys. Toatal capacity of the new canal Seine-Nord Europe is estimated at 32 million tonnes.
- An example of sustainable development

For more details, you can visit this web site**:** **http://www.seine-nord-europe.com/**

As part of its development of inland waterway transport, VNF is involved in extending the characteristics of its network: depth of waterways, headroom, size of locks, etc.

Recent modernisation works carried out by VNF include:

- In 2001: deepening of the Moselle, in keeping with the characteristics of the network in neighbouring countries. This had the effect of increasing boats loads by an average of 15%
- In 2002: the construction of a dike at the outlet of the Rhône-Sète canal to allow large motor-powered vessels enter the port of Sète in any weather. This development generated almost 50,000 tons of additional freight on the waterway in the space of 6 months.

The following developments are planned for the coming years:

- The raising of the bridges of the Nord-Pas-de-Calais network so as to make the network accessible to the vast majority of the modern European fleet, and the raising of those of the Moselle to allow for the transport of three-level containers
- The increase of the gauge of the Seine between Bray-sur-Seine and Nogent-sur-Seine to take 1,000 tons as against the 600 tons at present
- The deepening of the Aisne and of the Aisne side canal, from the current 1.80 metres to 2.20 metres. This will help cereal transport by increasing productivity by 15%.

It is also conducting, with the Alsace Regional Council, restoration of the Rhône-Rhine Canal south of Strasbourg to connect with Colmar. This is a significant project, in that it provides an example of provision of a recreational waterway to parallel an important inland shipping route (cf. Netherlands practice of separating commercial and recreational traffic on the busiest routes).

The Upper Rhône is to be made navigable in the sections developed by the Compagnie Nationale du Rhône (CNR), but this will not provide a navigable link through to Switzerland, on account of the Génissiat dam (70m head) and several other low-head hydropower dams between Génissiat and Geneva. The dimensions for the locks will be those of ECMT Class I.

Works continue on restoration of the canalised river Lot. The three départements Lot et Garonne, Lot and Aveyron plan to open up the entire river over a distance of nearly 260 km from the Garonne to the Massif Central. Dimensions are category RC, but with a draft of 1.20 m, lower than recommended for this category.

The Brittany regional council has plans to restore the Nantes-Brest Canal, also to category RC, but progress is slow on account of the scale of the works required and the small traffic currently projected through the very many locks.

The Canal du Berry is another ambitious project which has seen some progress in several sections.

## 4.6 ECMT Classification

The ECMT classification is used by VNF for the main network, but there has been no official recognition of the extended classification covering recreational waterways, apart from the above-mentioned example of the Roubaix Canal.

## 4.7 Consulted Literature

Edwards-May, D. (2001), Europe – Voies Navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).

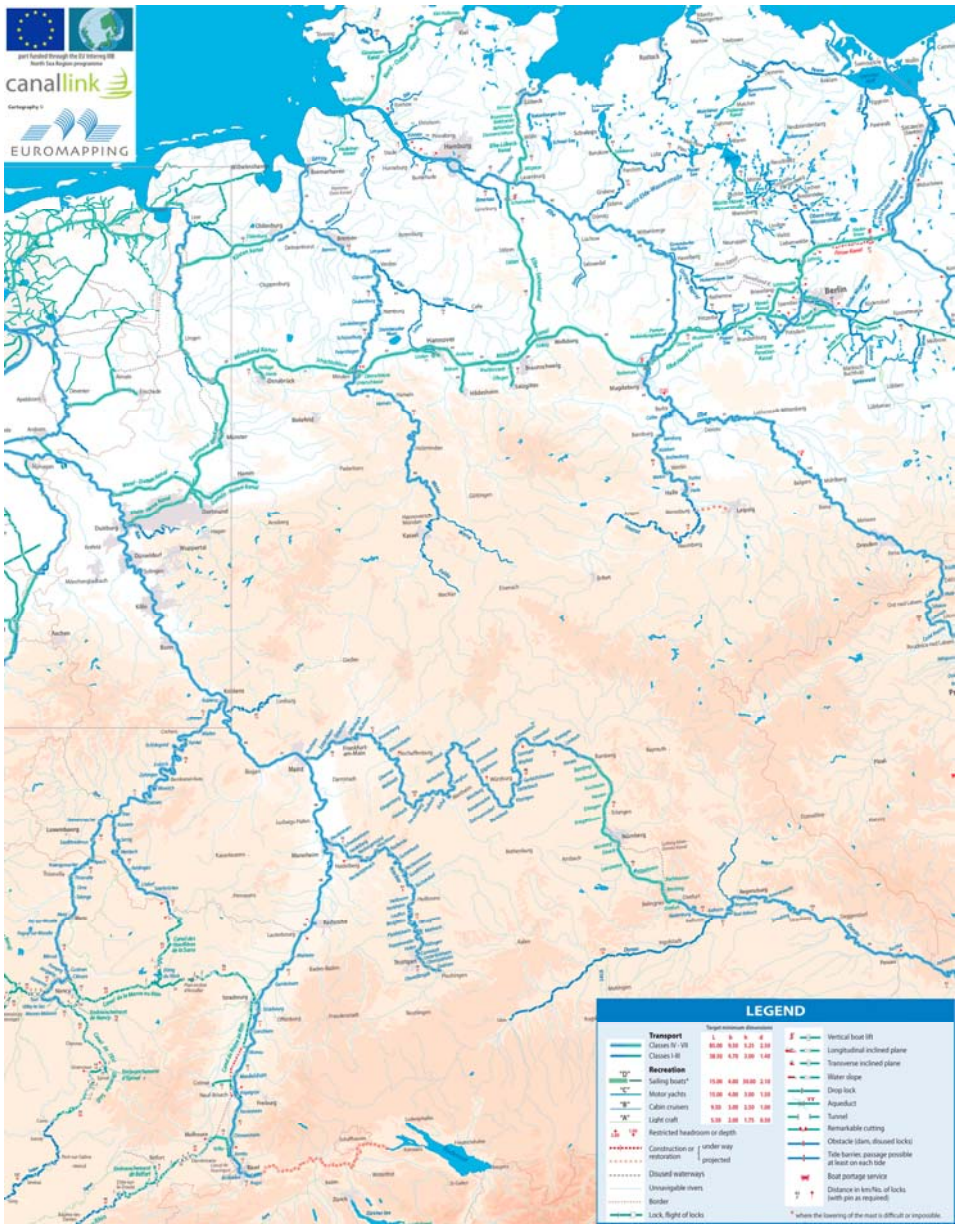
*Websites*
www.vnf.fr

# 5 Recreational waterways in Germany

## 5.1 Waterways

The German waterways can be characterised as one of the best examples where economic results and navigable rivers over a big area can be increased by planning and creating new waterways. This process started in the 19th century and nowadays it is continuing.

Figure 5.1 Map of Germany




Source: Euromapping

## 5.2 Waterway management

All inland waterways in federal ownership (large rivers, routes through lakes, and canals) that serve for the general transport of passengers and freight are controlled by the national government through the Federal Waterways and Shipping Administration (WSV) according to the German Waterway Act (WaStrG). The federal waterways include also the waterways in the national coastal waters. The federal policy is focused on the commercial waterways.

Most of the smaller waterways are managed by water authorities and drainage boards at the Land level, or in some cases at a more local level.

## 5.3 Most important projects

In Rhine area there are several projects going to improve the recreational use of the canals. At the Wesel – Datteln Canal, te Rhein – Herne Canal, the Dtateln – Hamm Canal and the Dortmund – Ems Canal there are several initiatives to build reasting places at locks and to build facilities to tie up recreational boats at locks. For more details see annex 3.

The Finow Canal was recently restored for recreational navigation. Like the Rhine-Rhône Canal mentioned above under France, it provides a route for recreational boating parallel to a busy commercial waterway, the Elbe-Havel Canal. In the Elbe the draught is deepened to 1.5 / 1.6 m.

The greatest potential for development of recreational cruising routes is in the East Friesland area bordering the Dutch provinces of Friesland, Drenthe and Overijssel. However, the abandoned canals in this region of Germany are now used exclusively for drainage, and the authorities are resisting plans to restore navigable links.

The Bremen turf canals are being preserved. Their category is RB, but they are not open to private boaters in powered craft.

## 5.4 ECMT Classification

The ECMT classification is used for commercial waterways, but to date there has been no formal recognition of the extended ECMT classification for recreational waterways. It is indicated by the regional Water and Shipping Administrations that the classification can be used. One region indicated that it is not necessary to use. Another region mentioned that it would be good to include more possibilities on the height between 4 and 30 m.

## 5.5 Consulted Literature

Edwards-May, D. (2001), Europe – Voies Navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).

Website
Main information source for the federal waterway network (Wasser- und Schiffahrtsverwaltung des Bundes) : http://www.wsv.de/
Recreational boaters find practical information, especially on regulations, on the site managed by the Deutscher Motor-Yacht Verband (DMYV)
www.dmyv.de/verband/sitemap.html

# 6 Recreational waterways in Hungary

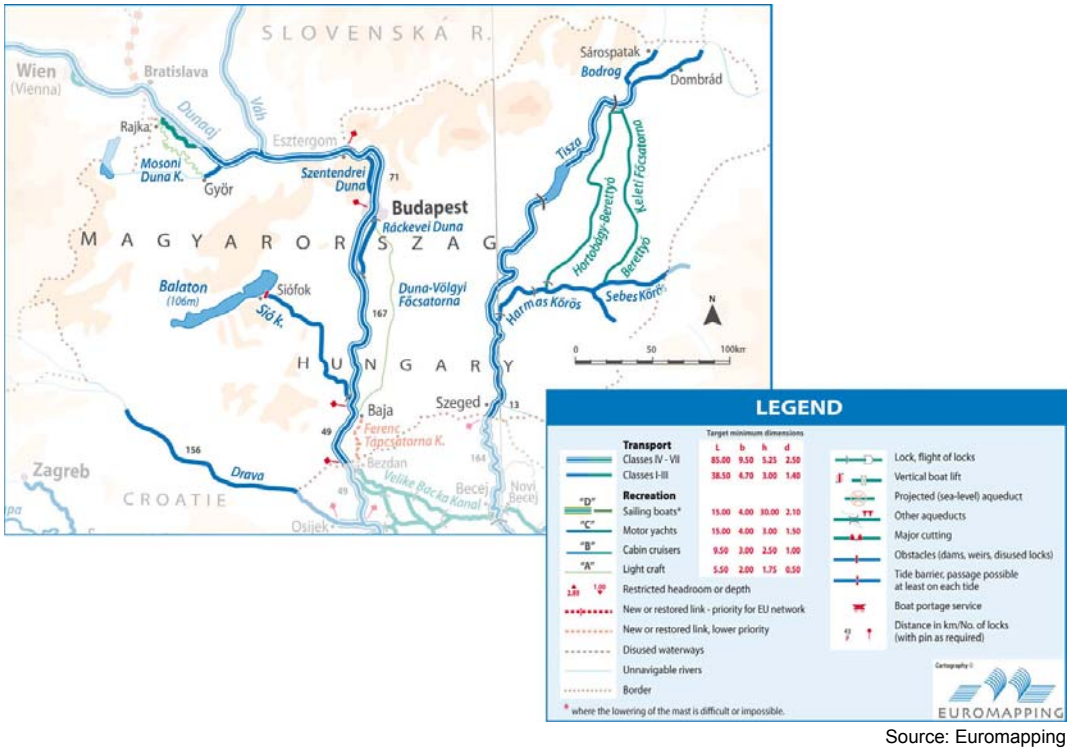
## 6.1 Waterways

Although Hungary has over 3500 kilometres of navigable waterways, most of these are only navigable for the smallest boats, ECMT class RA. They are, however, suited for long-distance trips. Hungary therefore provides an illustration of the value of including category RA in the Europe-wide recreational waterway reference map.

The rivers Danube and Tisza and their tributaries form the base of the Hungarian inland waterways. The Danube flows for 425 kilometres from north to south (through the middle of the country, and the capital Budapest), of which the first 150km is shared with Slovakia. Via the tributary of the Danube, the Sió Körös, the river is connected to the Lake Balaton. Private recreational boats are not allowed on to Lake Balaton, but they can cruise up to the lock which would normally give access to the lake.

The Tisza flows from the Ukrainian border to the border of Hungary and Serbia for 584 kilometres through Hungary. Especially around Szeged the navigability can be low because of the low-water levels in summer.

Figure 6.1 Map of Hungary




Source: Euromapping

## 6.2 Waterway policy & management

Since 1st January, 2004 the National General Directorate for Environment, Nature Protection and Water was established by the Government. The new central office is the legal successor of the National Water Authority (OVF) in water matters, which had existed since 1947.

The Ministry of Environment and Water exercises its responsibility for water management through 12 local 'Directorates for environment and water', financed by the Ministry. Each Directorate takes care of part of the waterway network in Hungary, fulfilling both political and implementation tasks: for example flood protection, managing embankments and water-courses, floodplains, and water pumping stations.

## 6.3 Most important projects

- The Ferenc Tápcsatorna. This tributary of the Danube will be reconstructed in the period 2007-2010.
- The Danube-Tisza Canal. This is a long-term project to connect the two rivers within Hungarian territory. For the time being, the only way to recah the Tisza from the Danube is via Serbia (via the Danube to the confluence or via the Velike Backa Canal. There is no date for a start to this project, which is primarily designed for inland water transport.

Figure 6.2 The Danube

Source: EPTA Program

Figure 6.3 The Tisza

Source: Kiss Rita fényképész

## 6.4 ECMT Classification

It is feasible to adopt the extended ECMT classification in Hungary.

## 6.5 Consulted Literature

Edwards-May, D. (2001), Europe – Voies Navigables.
EPTA Program, Emerging Markets, www.pultruders.com

# 7 Recreational waterways in Ireland

## 7.1 Waterways

Ireland has over a thousand kilometres of inland navigations. Most of the waterways are narrow and therefore navigable only by small boats in PIANC classes RC and RD.
The biggest rivers of Ireland are the Shannon, the Erne, the Royal Canal, the Grand Canal and the Barrow Navigation. The river Shannon is navigable for 257 km and flows into the Atlantic Ocean in the Southwest of Ireland. In the lower part of the Shannon, near Limerick, experience is needed to navigate on the river. The Shannon-Erne waterway connects the Shannon with the Erne from where the Erne is navigable for 61 km to the Lower Lough Erne. The last part from Belleek to the sea is not navigable.
The Grand Canal and the Royal Canal run across the middle of Ireland, where the Grand Canal is connected to the Shannon and the Royal Canal will be in the near future, eastwards to Dublin. The Barrow Navigation extends from the Grand Canal to the south coast at Waterford. It is therefore possible to go from Dublin to the seaports of Waterford and New Ross in the South of Ireland via the Barrow Navigation. Belfast is connected to the Erne by the Ulster Canal. This canal is not navigable at the moment but its restoration (or reconstruction) is planned for the future.

The links between the canals enable the recreational water user (categories RA, RB or RC) to go throughout Ireland and visit the lakes (‘loughs’) on the way. The coastal waters of Ireland are very suitable for sailing and the marinas on the coast make it possible to make a round trip by boat.

Furthermore there are several connections from the sea going inland for maximum 50 km, sometimes leading to a lake. For example, in the north of the country The Lower Bann Navigation is connected to the biggest lake on the Island, Lough Neagh.

The waterways of Ireland have many locks, but some of them work automatically and a pass is required. These passes are obtainable from the waterway patrollers.

Figure 7.1 Map of Ireland


Source: Euromapping

## 7.2 Waterway users

The waterways in Ireland are primarily used for recreation.

According to the data of the MAYA report the Irish leisure boat fleet is small with an estimated fleet of 15 000 boats in 1998, but there are also boats operating on navigations for which no statutory obligation to register exists.

There are 44 marinas with about 4000 berths. This means that 1 out of 3.5 boats have a marina berth. Other boats use mooring or dry berthing. Almost half of all marinas (21) are located in the coastal area of the island.

It is believed that the Irish leisure boat sector is growing. The Irish economy is one of the fastest growing economies in Europe and this will have a positive influence on the leisure boat sector.

## 7.3 Waterway policy

During the last two decades Ireland has been successful in restoring disused canals for economical, heritage, commercial and ecological reasons. (In 1999 the British/Irish 'Agreement Act' was signed creating Waterways Ireland, an organisation that is responsible for the managing and developing inland waterways throughout the island.

## 7.4 Waterways management

Waterways Ireland is one of the six North/South Implementation Bodies established under the British Irish Agreement in 1999. Waterways Ireland has responsibility for the management, maintenance, development and restoration of inland navigable waterways principally for recreational purposes. The waterways under the remit of the body are the Barrow Navigation, the Erne System, the Grand Canal, the Lower Bann, the Royal, the Shannon-Erne Waterway and the Shannon Navigation (Waterways Ireland).

In Northern Ireland Craigavon Borough Council has with three other local authorities set up the Newry-Portadown Canal Joint Development Committee. Its goal is to reopen the Newry Canal and to provide a range of canalside amenities.

The Department of Culture Arts and Leisure has ownership of and custodial responsibility for the remaining sections of the Lagan and Coalisland Canals held in government ownership following abandonment of navigation in the 1950s. An ongoing programme is in place for each of these highly popular towpaths to upgrade access for pedestrians, cyclists and disabled access.

In the South of Ireland the local Authorities/County Councils have remit for waterways within their statutory jurisdiction and the Office of Public Works is responsible for arterial drainage and flood relief programmes.

## 7.5 Most important projects

The most important projects in Ireland are completion of restoration of the Royal Canal to link with the Shannon navigation and the restoration of the Ulster Canal.

**The Royal Canal:** Restoration of the link to Dublin from the Shannon navigation is part of the National Development Plan and is due to be completed in the beginning of 2008. The restoration process of the Royal Canal started in 1974 when the Royal Canal Amenity Group was established to promote the amenity potential of the canal. Their work included reconstruction of the lock gates and restoring breaches in the canal. Restoration work was fragmented until the canal was acquired by the Office of Public Works in 1986 and in 1995 commissioned the Cairns report. Future prospects for the canal in the Leixlip area include development of increased tourist usage for both anglers and cruising with lay-bys recommended at Leixlip and Carton House, educational facilities for nature and

history studies, and the improvement of walkways for visitors and residents alike (Leixlip Town Council).

Figure 7.2 The Royal Canal

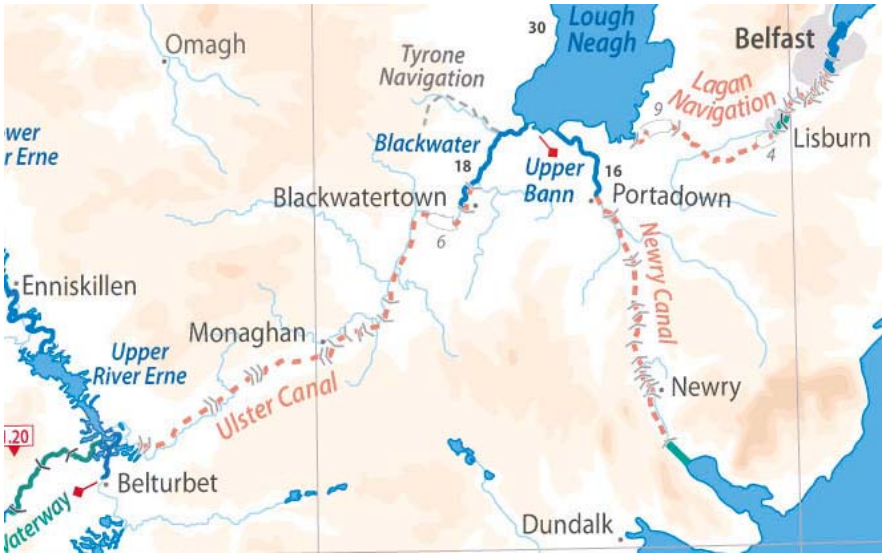

Figure 7.3 The Royal Canal

Source: Leisureways Holidays

Source: Royal Canal Ventures

**The Ulster Canal:** The restoration of the Ulster Canal is planned for the future but to date there has been no political decision to start the works. The Ulster Canal links Lough Neagh to Lough Erne. It straddles the Northern Ireland/Ireland border and passes through the towns or villages of Charlemont, Moy, Blackwater, Benburb, Milltown, Caledon, Tynan, Middletown, Monaghan, Smithborough, and Clones. It was originally constructed in the early part of the 19th century and is 93km long.

Figure 7.4 The Ulster Canal




In October 2005 it was agreed that Waterways Ireland should prepare a report on the feasibility of restoring the north-eastern and south-western sections of the canal and report back to the Ministers. At a meeting in March 2006, they welcomed the publication of these reports (PWC/ Waterways Ireland, February 2006, Socio-economic Summary Report for the NE and SW Sections of the Ulster Canal, Final Report) and noted the potential for the canal to be restored and to boost social and economic development. The reports will now be considered by the Ministers and their Departments, following which a further statement will be made.

## 7.6 ECMT Classification

The ECMT classification can be used for the Irish waterways. The RA to RD categories may be applied to Ireland's waterways, but they are not navigable for bigger boats.

## 7.7 Consulted Literature

Edwards-May, D. (2001), Europe – Voies navigables / Inland waterways / Binnenwasserstraßen / Vaarwegen.
Delany, R. (2006), Ireland's Waterways Map & Directory (Euromapping)
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Leixlip Town Council, kildare.ie/leixlip/places-of-interest/royal-canal.asp
Royal Canal Ventures, www.royal-canal-ventures.com
Leisureways Holidays, www.leisureways.com

# 8 Recreational waterways in Italy

## 8.1 Waterways

Figure 8.1 Map of Italy


Source: Euromapping

The inland recreational waterways are mostly located in the North of Italy and flow into the Adriatic Sea. The most important areas are:

- Around Venice is a network of canals and canalised rivers which are connected to the Littoranea Veneta, the coastal waterway of Venice. These canals, 760 km in total, are ideal for recreational use as they are well marked and hardly used by commercial traffic, outside the channel from Venice to Mestre. They connect the Adriatic Sea with inland cities in the North of Italy.
- The river Po is connected to the waterways developed for shipping. The river is navigable up to Cremona for class IV standard barges and tows and from there to the city of Pavia for smaller boats.
- Lombardy region waterways. In this area there is mostly recreational use of the waterways. There is currently the Naviglio Grande, which goes to Milan. There are plans to reconstruct the connection from Pavia to Milan and Lake Como. This will enable a connection to Switzerland. Together with the Adda and the canals of

Paderno and Martesana may be nominated for the UNESCO list of world heritage sites.
- The lakes are navigable for smaller boats: Lake Garda, Lake Maggiore and Lake Como.
- River Mincio da Mantova where it comes together with the Po. This has a recreational use .

In addition to the waterways in the North of Italy, there are two smaller waterways in Italy, the Tiber and the Navicelli Canal. Both flow into the Tyrrhenian Sea. The Tiber is navigable upstream to Rome and the Navicelli Canal runs inland from Livorno to Pisa.

There are more rivers in Italy but it seems that these are not navigable for boats.
Italy is surrounded by the Mediterranean Sea, the Adriatic Sea, the Ionic Sea and the Tyrrhenian Sea. There are many marinas on the coast for recreational water users.

## 8.2 Water users

There are various types of users of the canals. In case of the 'vie navigabili', canals in use, there are various users: public transport, transport of goods (example of an important transport way: Cremona - Mantova: 25.000 ton of goods). In case of waterways which are not navigable, there is mostly recreational use.

## 8.3 Waterway policy & management

In Italy there is no national authority looking after the recreational waterways. Waterways are managed locally and regionally. The recreational waterways can also be managed by private associations, but the waterways needs to be authorised by the regions. The concessions of use are supplied by the house of Commons. The Ministry of infrastructure and transport is dealing with maritime transport and has for example developed the ‘programme opere marittimo 2006-2008’.

## 8.4 Most important projects

- River Ticino. There are currently locks being built at Miorina in 2005-2006 by the Ticino Consortium. This is estimated to cost 3 million Euro. Organisations involved are the Ticino Consortium and the Ticino Regional Park.
- River Adda from Brivio to Robbiate (northern part of Adda). The river is currently being improved (2004-2006). Costs are estimated at 1,5 million Euro. The organisation involved is the Adda Nord Park.
- River Adda from Camairago to Pizzighettone (southern part of the Adda). The river is currently being improved (2005-2006). Costs are estimated at 600 000 Euro. The organisation responsible is the Adda Nord Park.

## 8.5 ECMT Classification

The ECMT classification can be used for mapping the waterway system in Italy. Currently no classification system is being used in Italy for recreational waterways. However, in 2006 the Northern regions have decided to start using the ECMT classification.

## 8.6 Consulted Literature

Edwards-May, D. (2001), Europe – Voies navigables.
http://www.parcoaddanord.it/ & http://www.parks.it/parco.adda.nord/index.html

# 9 Recreational waterways in Netherlands

## 9.1 Waterways

The Dutch inland waterways are the densest network of inland waterways in Europe. There are more than 6000 km on navigable canals and rivers which are covering the whole country. It is possible to cross the whole country with recreational boats, although some connections can be very busy due to the commercial use for transport. 2200 km of the routes are being used by commercial transport which account for about 40% of international freight movement in the Netherlands and 20% of the domestic freight. For safe recreational use alternative routes are being developed in the Netherlands.

Figure 9.1 Map of the Netherlands


Source: Euromapping

The main river areas are:

- Meuse from the South East (from Belgium) which connects to the Waal and the Rhine in the Middle East of the Netherlands and flows than towards the west over Rotterdam into the Sea and over the Amsterdam Rhine canal and North Sea canal into the North Sea or from Amsterdam up north to Den Helder over the North Holland canal into sea.
- Towards the north there is a network of bigger rivers such as the IJssel, Drentsche Hoofdvaart, Noor Willems canal, Van Starkenborgh canal, Harinxma canal that are suitable for commercial transport. Furthermore the Northern provinces contain an extensive network of recreational waterways, mostly class RC, especially in the province Friesland, but also north from Groningen.

The Dutch waterway system has many locks and bridges. The Netherlands can be reached entered from the North Sea, Belgium (about 5 connections: RC and bigger classes) and Germany (the Rhine, class IV-VII, and in the North City canal (RC) and Emden – Delfzijl (class IV-VII).

## 9.2 Waterway users

The waterways in Holland are used for both commercial and recreational navigation.
In Holland there are approximately 500 000 recreational boats. As there is no registration policy for boats this is estimated. Circa 200 000 of these boats are stored on land and 200 000 are moored in the marinas or on the canals. The remaining boats (100 000) are considered to be no longer in use.
In the Netherlands there are 1096 marinas with a minimum capacity of 20 boats. On open water there are 242 marinas and the remaining 842 are on the inland waterways. The provinces with the most marinas are North Holland, South Holland, Zeeland and Friesland, which together have 641 marinas.

## 9.3 Waterway policy

The main policy on the waterways in the Netherlands is formulated in the ‘Beleidsvisie Recreatietoervaart Nederland 2000’ (BRTN 2000). The ‘Association Recreational Waterways Netherlands’ (SRN) implements the policy of BRTN. Several organisations participate in the Association SRN: the ANWB, Water Sport Association, HISWA Association, Association of Dutch Municipalities (VNG), the Association of Water Boards (UVW), national and regional government. The need for a direct involvement of water sport organisations, decentralisation and shorter procedures were the reasons for establishing the SRN in 1995. The SRN is functions as a contact point and information desk.

The main aim of the BRTN policy is to keep the Dutch navigable waterway system and develop it as one attractive, differentiated and coherent recreational waterway system.
The following goals can be formulated on the basis of this main aim:

- To eliminate the obstacles in the waterway system.

- To show the diversity of the Dutch landscape, cities and villages via the waterway system.
- To integrate the developing waterways with tourism and recreation, social-historical, nature and ecology, professional navigation.
- To promote the exchange of good practice and cohesion in planning and development.
- To contribute to the international position of the Netherlands.

## 9.4 Waterway management

The Dutch waterways are managed by several bodies. The Ministry of Traffic and Water is responsible for the national waterway policy and the large projects. The provinces and the municipalities are concerned with regional development in line with the national policy. Furthermore the Netherlands has authorities for maintaining the water areas: the water boards. They implement the policy and control many waterways.

## 9.5 Most important projects

The policy is materialised each year in specific projects through the multi-annual implementation programme (MUP) of the SRN. An integral approach is being used to implement the projects, using spatial and financial means. Participation of public and private organisations is supported for this implementation programme. The most important projects to be developed in the Netherlands are:

- New connection (RC) between Erica and Ter Apel in the southeast of Drenthe.
- Hals Canal – a new connection (RD) on Goeree Overflakkee.
- Bernisse – an improved connection (RD) between Voorne and Putten.
- Naardertrekvaart – new connection (RC) to the Gooi Lake.
- Zwolse Vaart –new connection (RC) from the Zwolse Vaart to Kuinre in Flevoland.
- Apeldoorns Canal and Grift Canal – new connection (RC) from Hattem via Apeldoorn to Dieren in the east of the Veluwe.
- Westeinder Plassen – new connection (RD) between the Westeinder Plassen and Drecht.
- Wieringerrandmeer – new connection (RD) from the Wieringerrandmeer to the Ijsselmeer.
- A new connection (RB) between the provinces of Groningen and Friesland from Drachten to the Leekstermeer.
- Oude Maasje – new connection (RB) from the Oude Maasje to the river the Maas.
- A new connection (RB) between Veenhoop and Beets.
- A new connection (RB) between the city of Groningen and Germany from Bellingwolde to Rhede.
- The bridge at Bruinisse – creating a better entrance off the Grevelingenmeer.
- Jeltesloot – a new aqueduct between the Heegermeer and the Sneekermeer.
- Galamdammen – a new aqueduct between Fluessen and Morra.
- Woudsend. – a new aqueduct between the Heegermeer and Slotermeer.

- The canals in the city of Utrecht – restructuring of the canals in the city to make them navigable.

Figure 9.2 Canal city of Utrecht

Source: Reis om de wereld

## 9.6 ECMT Classification

In principle the ECMT classification is useful for the Netherlands, but it will take time to change the current Dutch classification, which has been used since 1985. The ECMT classification as it currently stands is not totally appropriate to much of the Dutch waterway system, because the classes do not match with the old system. The length for example would place many craft in RA, while their beam would correspond to category RB.

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Ministry of Transport and Water, www.minvenw.nl
Reis om de wereld, www.reisomdewereld.nl

# 10 Recreational waterways in Norway

## 10.1 Waterways

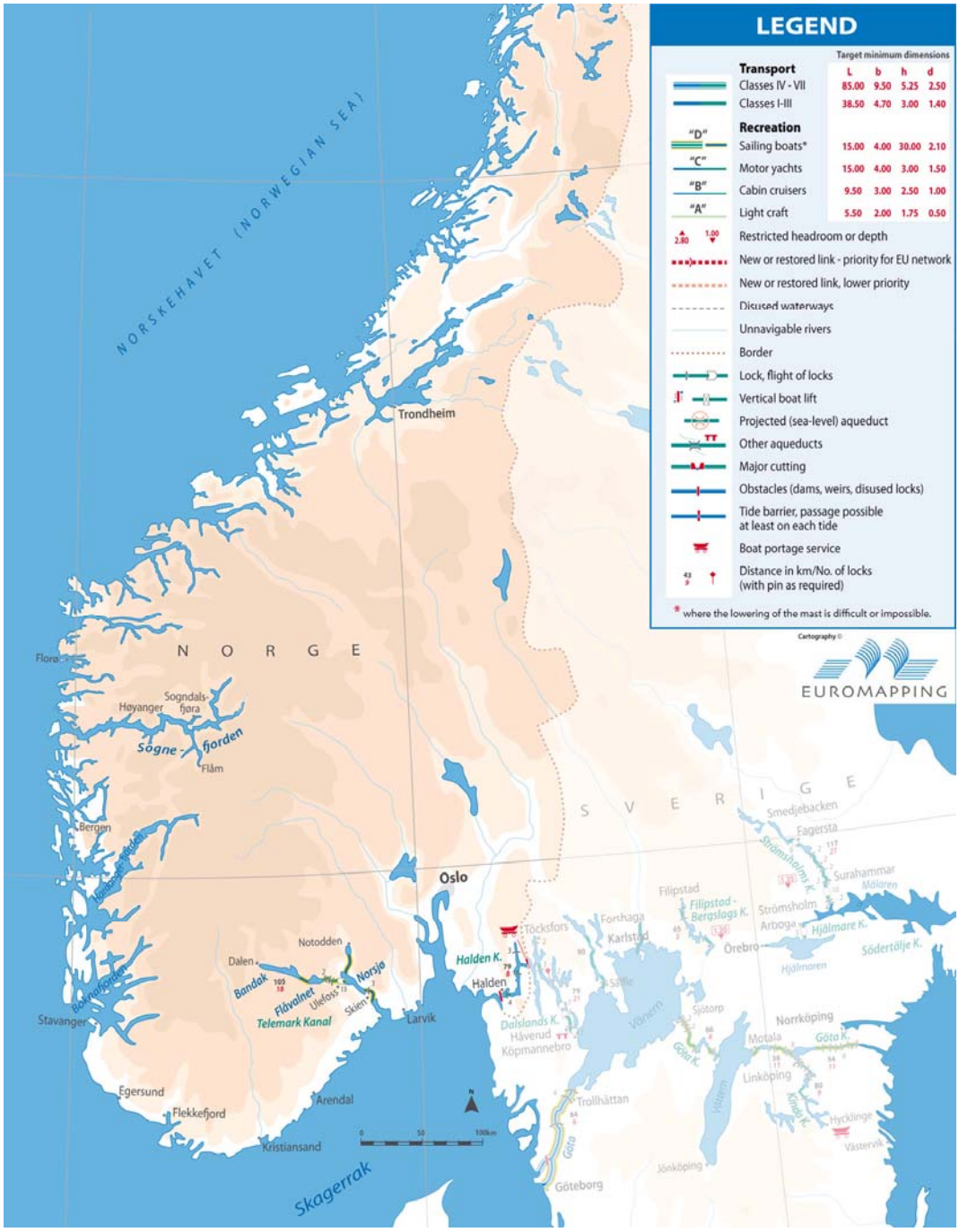
Norway has two waterways which have been developed in the nineteenth century. They were used for wood transportation until the middle of the twentieth century, but nowadays the waterways are primarily used for recreation.

The most important waterway of Norway is the Telemark waterway. This waterway is located in the Southeast of Norway and flows into the Skagerrak. The river brings you up to 107 kilometres inland until the village Dalen.

The second waterway, the Halden waterway, is connected to an outlying area of lakes and forest near the Swedish border in the south of Norway. The best way to reach the Halden waterway is through the Swedish Dalsland Canal after which a trailer transport will transfer you to the Halden waterway. Although the Halden waterway used to be open for recreational water use it is currently closed. This is to avoid a further dissemination of the greyfish, which is mainly a problem in Sweden.

On the coasts of the country Norway has many islands which are suited to visit by boat.

Figure 10.1 Map of Norway




Source: Euromapping

## 10.2 Waterway users

In Norway there is no registration policy for boats so there is no estimation of the number of recreational boats in the country. The waterways are used approximately 80% by recreational users and 20% by professional craft.

## 10.3 Waterway policy & management

In Norway there is no national authority dealing with the policy for recreational waterways. The policy on recreational waterways is part of the general tourist policy and this policy is positive in connection to recreational waterways.

The Norwegian waterways are managed by the local municipalities, but there are also a few waterways, like the Telemark Canal and the Halden Canal, which are managed by their own association.

## 10.4 Most important projects

The most important project for Norway is to enable again recreational use of the Halden waterway.

## 10.5 ECMT Classification

In principle the ECMT Classification can be used in the future. At the moment a Norwegian classification is being used and it will take time to transform the maps to the ECMT classification. The Norwegian authorities expect to be ready to use the ECMT classification in 5 to 6 years from now.

## 10.6 Consulted Literature

Edwards-May, D. (2001), Europe – Voies navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).

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TravelBlog Free Inspiration, http://www.travelblog.org

# 11 Recreational waterways in Spain

## 11.1 Waterways

Spain is surrounded in the east by the Mediterranean Sea, in the south by the Straits of Gibraltar and in the west and north by the Atlantic Ocean. Many cities and villages on the coast can be reached by boat.

Figure 11.1 Map of Spain


Source: Euromapping

Spain has three waterways which can be reached from the sea :

- The Gualdaquivir flows into the Strait of Gibraltar and by this river the port of Seville can be reached by sea-vessels. If the water level permits, recreational boats can go from here upstream to Cordoba.
- The most important waterway for recreational use is the Ebro, south of Barcelona. This river is developed for recreational use (class RC) and makes it possible to go

from the Mediterranean Sea 160 km inland. However, the Ebro is currently divided into three parts, which are separated by dams.

- The Duero is navigable from the Spanish/Portuguese border to sea (Porto). Connected to the Duero is the Canal de Castilla. Here it is possible to rent electric boats to cruise on Canal de Castilla. This canal has three branches. The North Branch: from Alar Del Rey to Ribas de Campos, the South Branch from Ribas de Campos to Valladolid and the Fields Branch from El Serron to Medina de Rioseco. These are currently being developed.

## 11.2 Waterway users

The recreational sector in Spain is believed to be very small. There are approximately a few hundred recreational boats and most of these are small sailing boats and boats with a small motor.
The Castilla Canal has five small marinas which can be used for short stays (not overnight). Furthermore there are marinas at the coast of Spain.

## 11.3 Waterway policy

The policy upon recreational waterways in Spain becomes more important. Recreational waterways can attract more tourism. Therefore more marinas are expected to be developed in the following years. However, as drought is a serious problem in Spain, the environment has to be taken into account when developments are being considered.

## 11.4 Waterways management

The ministry of transport and environment is developing national policy including also the waterways. The system itself is managed by the hydrographical confederation, which falls under the responsibility of the ministry of environment. For each river/canal there is a hydrographical confederation.

## 11.5 Most important projects

Canal de Castilla is the most important project, as there are plans to develop further the Canal de Castilla for recreational users by providing more facilities and restoring more locks to make the rivers accessible.

Figure 11.2 Canal de Castilla

Source: Wikipedia

## 11.6 ECMT Classification

At this moment the Spanish organisations are not familiar with the ECMT classification. Therefore it is not known whether they will adopt the ECMT classification.

## 11.7 Consulted Literature

Edwards-May, D. (2001), Europe – Voies navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).

*Websites*

Wikipedia, es.wikipedia.org/wiki/Canal_de_Castilla

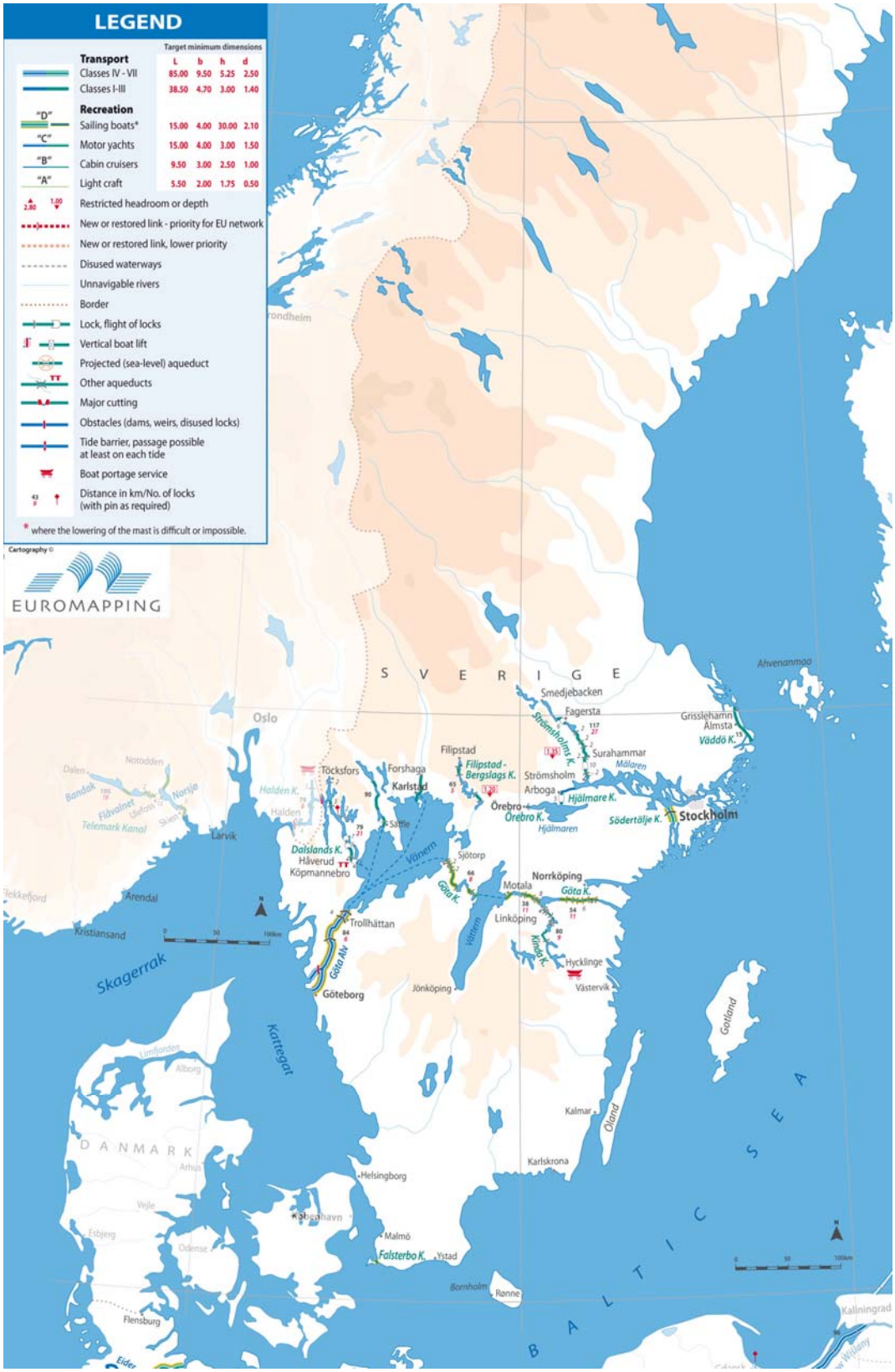
# 12 Recreational waterways in Sweden

## 12.1 Waterways

The inland waterways of Sweden are located in the south of Sweden. Both from Gothenburg and Stockholm it is possible to go with larger boats to the hinterland. From Gothenburg in the south west coast of Sweden (Kattegat) it is possible to go to the south east coast of Sweden (Baltic Sea) through the lakes Vänern and Vättern and canals with RC class boats. The Göta Canal links the lakes. The Göta Canal has 65 locks and the highest level of the channel is 91.8 above sea level. From the Vänern lake it is also possible to go North West to the Dalsland canal and going north at Säffle and Karlstad. From Stockholm it is possible to go to Upsala and to the Strömholms canal through the Mälaren Lake.
The canals were used for industrial and agricultural development until the middle of the twentieth century. Nowadays the Swedish inland waterways have a recreational use from Mid-May to Mid-September.

The coast of Sweden contains a few cities with a harbour making it possible for tourists to visit them by boat from the sea. From Sweden it is possible to go to Norway over the Dalsland canal and use a short boat transfer over land.

Figure 12.1 Map of Sweden




Source: Euromapping

## 12.2 Waterway users

Sweden has no registration policy for boats so there is no estimation of the number of recreational boats. Sweden has 470 marinas which are dispersed over the whole country.

## 12.3 Waterway policy

Sweden has no national authority dealing with the policy for recreational waterways. The policy upon recreational waterways is part of the general tourist policy. On the national level the authorities are concerned with commercial boating.

## 12.4 Waterways management

Swedish waterways are not managed by the national authorities. There are around 10 waterways, each of which has its own association which deals with the management of the waterway.

## 12.5 Most important projects

The current most important projects in Sweden are the Södertälje Canal and lock and the Trollhätte canal:

- **Södertälje Canal and Lock**
  Upgrading of dimensions of the locks in Södertälje to reduce transport cost and allow for larger ships.

Figure 12.2 Södertälje Canal

Source: Intrasea

- **Trollhätte Canal**
  New dimensions for the locks in Göta Älv allow for modern tonnage and a vitalisation of maritime transport on Lake Vänern.

## 12.6 ECMT Classification

In principal the ECMT Classification can be used in the future. At the moment there is a Swedish classification and it will take time to transform the maps, but the Swedish organisations think positive towards the ECMT Classification.

## 12.7 Consulted Literature

Edwards-May, D. (2001), Europe – Voies navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).

*Websites*

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www.gotakanal.se
www.sjofartsverket.se

# 13 Recreational waterways in United Kingdom

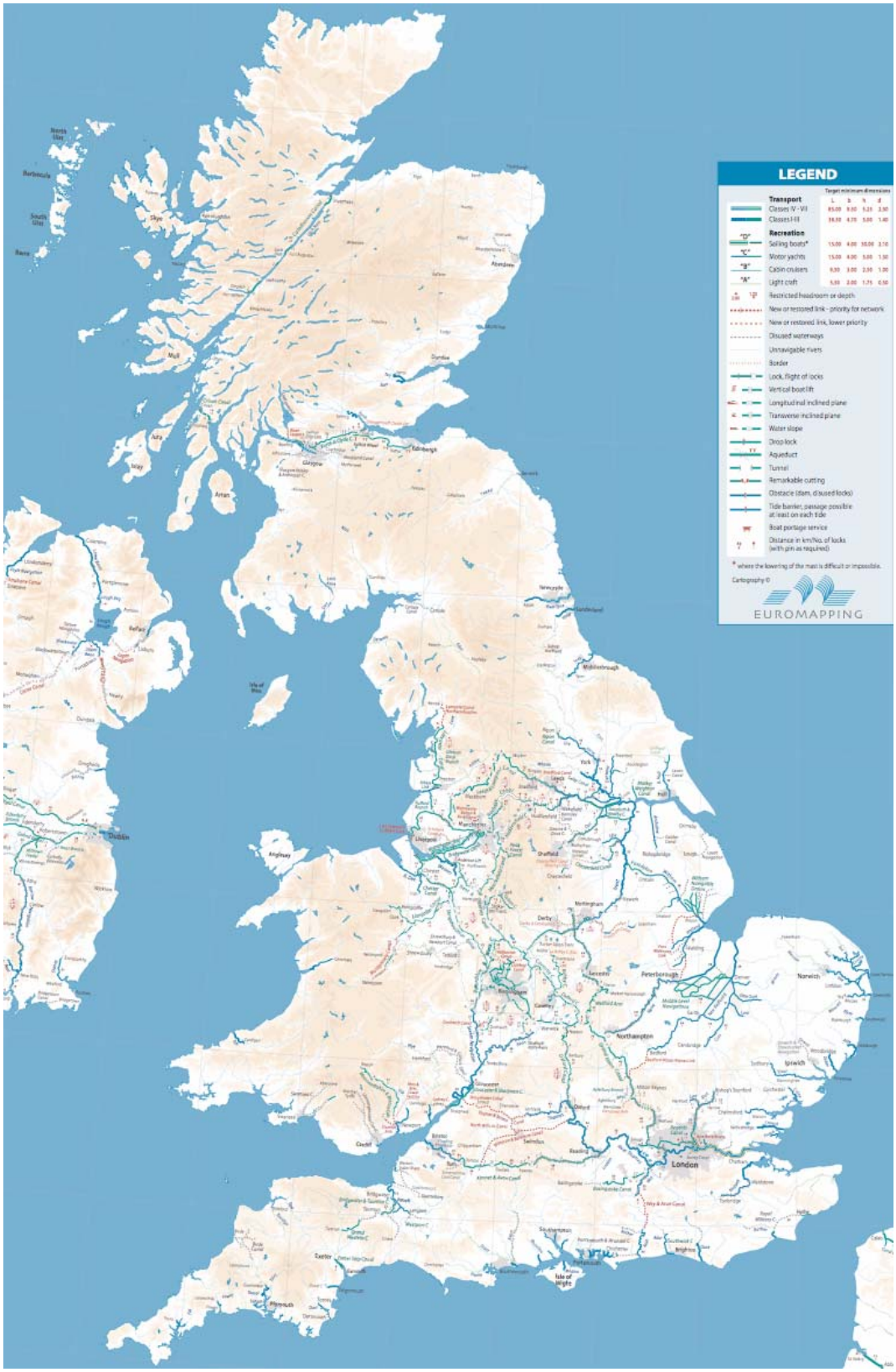
## 13.1 Waterways

The United Kingdom has a dense network of inland waterways. Its maximum extent was 5400 miles. The majority of the British canals were created starting in the second half of the 18th century for transport. Nowadays the most of the inland waterways are primarily used for recreation.

There are four, historically seen as main rivers (Thames, Severn, Trent and the Mersey) in the United Kingdom which are connected to many canals. This system of inland waterways makes it possible to sail from North to South and East to West. The Kennet & Avon Canal for example connects London via the Thames with the city Bristol on the west side of the country and the Grand Union Canal connects London to the city of Birmingham in the middle of the country.

It is possible to sail around the United Kingdom. Many coastal towns and cities have marinas.

Figure 13.1 Map of United Kingdom




Source: Euromapping

## 13.2 Waterway policy

The policy in connection to recreational waterways in the United Kingdom is to create an expanded, vibrant, largely self-sufficient waterway network used by twice as many people as in 2002. It will be regarded as one of the nation's most important and valued national assets.

## 13.3 Waterways management

British Waterways cares for and manages a 2,000-mile nationwide network of canals and rivers. It is a public corporation sponsored by the Department for Environment, Food and Rural Affairs in England and Wales and the Enterprise, Transport and Lifelong Learning Department in Scotland. British Waterways also works closely with the Department of Economic Development and Transport in Wales.

Furthermore British Waterways work in partnership with private companies, local authorities, voluntary groups and other government agencies.

Over 30 navigation authorities, some public bodies and others private, manage the remaining waterways.

## 13.4 Most important projects

The United Kingdom has an extensive list of projects to improve the British inland waterways system:

- **Ashby Canal:** Re-opening the final stretch of canal from the current terminus at Snarestone to Measham and ultimately Moira.
- **Bedford & Milton Keynes Waterway**: Construction of a new broad waterway, linking the Grand Union Canal at Milton Keynes with the River Great Ouse near Bedford.
- **Bow Back Rivers**: Restoration of a network of canals and river channels, adjacent to the Lee Navigation and at the centre of London's biggest regeneration project.
- **Bradford Canal**: Restore to navigation.
- **Chesterfield Canal**: Restore to navigation.
- **Cotswold Canals**: Restoration of the Stroudwater Navigation and Thames & Severn Canal across the Cotswolds, linking the River Thames with the Gloucester & Sharpness Canal.
- **Derby & Sandiacre Canal**: Restore to navigation.
- **Droitwich Canals**: Restoration of the Droitwich Barge & Junction Canals, linking the Worcester & Birmingham Canal with the River Severn through the town of Droitwich.

Figure 13.2 Droitwich Canal

Source: This is the Midlands.

- **Fens Waterways Link**: Creation of a broad beam link between the River Witham near Boston and the River Great Ouse at Ely, via the Rivers Glen, Welland and Nene. The Link would involve making the Forty Foot Drain navigable between the Rivers Witham and Glen and creating a new link between the Rivers Welland and Nene.
- **Forth & Clyde Canal**: Grangemouth Docks Extension: New link at the end of the Forth & Clyde Canal into the Grangemouth Docks.
- **Grantham Canal:** Restoration of the Grantham Canal between Grantham and Nottingham, including the construction of a new link to the River Trent.
- **Lichfield Canal**: Restoration of the Lichfield Canal between the Coventry Canal and the under-used northern Birmingham Canal Navigations. This will form the first stage of creating a new canal network in the region through providing a further link to the Staffordshire & Worcestershire Canal by restoring the Hatherton Canal.
- **Liverpool Link**: Creation of a canal link across the Pier Head area in Liverpool between the South and North Docks complexes, thus linking the South Docks with the canal network via the Leeds & Liverpool Canal
- **Manchester, Bolton & Bury Canal**: Linkage of isolated in-water stretches of canal between the River Irwell in Salford and the towns of Bolton and Bury.
- **Monmouthshire & Brecon Canal**: Restoration of the southern section of the canal from its current terminus near Pontypool to the Usk estuary at Newport.
- **Montgomery Canal**: Completion of the restoration of the Montgomery Canal, from Frankton Junction (Llangollen Canal) to near Newtown.
- **Northern Reaches, Lancaster Canal**: Restoration of the Lancaster Canal from its current terminus at Tewitfield to Kendal, providing a new water link to the Lake District.
- **River Carron Navigation**: Canalisation of a short stretch of the River Carron near Grangemouth in Scotland to improve access to the eastern end of the Forth & Clyde Canal.
- **River Leven**: Securing navigation on the River Leven between Loch Lomond and the River Clyde, Scotland.
- **St. Helens (Sankey) Canal**: Restoration of the St. Helens Canal between the River Mersey near Widnes and St. Helens, with the possibility of linking to the Leeds & Liverpool Canal.
- **Wey & Arun Canal**: Restoration of the canal link between the River Wey (and ultimately the River Thames) and the Sussex coast at Littlehampton via the River Arun.

- **Wendover Arm**: Restoration of the canal link between the Grand Union Canal main line and the town of Wendover in Buckinghamshire.

Figure 13.3 Wendover Arm

Source: The Wendover Arm Trust

- **Wiltshire & Berkshire Canal**: Restoration of the canal link between the River Thames at Abingdon and the Kennet & Avon Canal near Melksham via Swindon. The scheme will include restoration of the North Wiltshire branch, which will connect the main line of the canal near Swindon with the restored Cotswold Canals in the vicinity of the Cotswold Water Park.

## 13.5 ECMT Classification

At the moment it is not possible to use the ECMT classification for the UK. The classification as it currently stands is not totally appropriate to much of the UK waterway system. Much of the network is navigable by “narrow boats”, which have dimensions of 22m length by 2.2m beam. The length would place these craft above the recreational waterway classification, but the beam would put them into the RA category. Overall such waterways would most appropriately be classified as RB – for cabin cruisers.

Perhaps a way round this would be to classify the waterways as RB, but with a suffix (e.g. RB*) to indicate that the dimensions are outside the normal parameters for the class. Such a system could be used for other non-UK waterways where the same problem exists.

## 13.6 Consulted Literature

Edwards-May, D. (2001), Europe – Voies navigables/Inland Waterways/Binnenwasserstraßen/Vaarwegen (Nederlandse editie).

*Websites*

This is the Midlands, features.thisisthemidlands.co.uk

The Wendover Arm Trust, www.wendovercanal.plus.com/

# Annexes

The annexes contain the following information:

- Annex 1 - A list of contact persons
- Annex 2 - The Euromapping legend and extended ECMT classification
- Annex 3 - The replies to the questionnaire

# Annex 1 – Contact persons

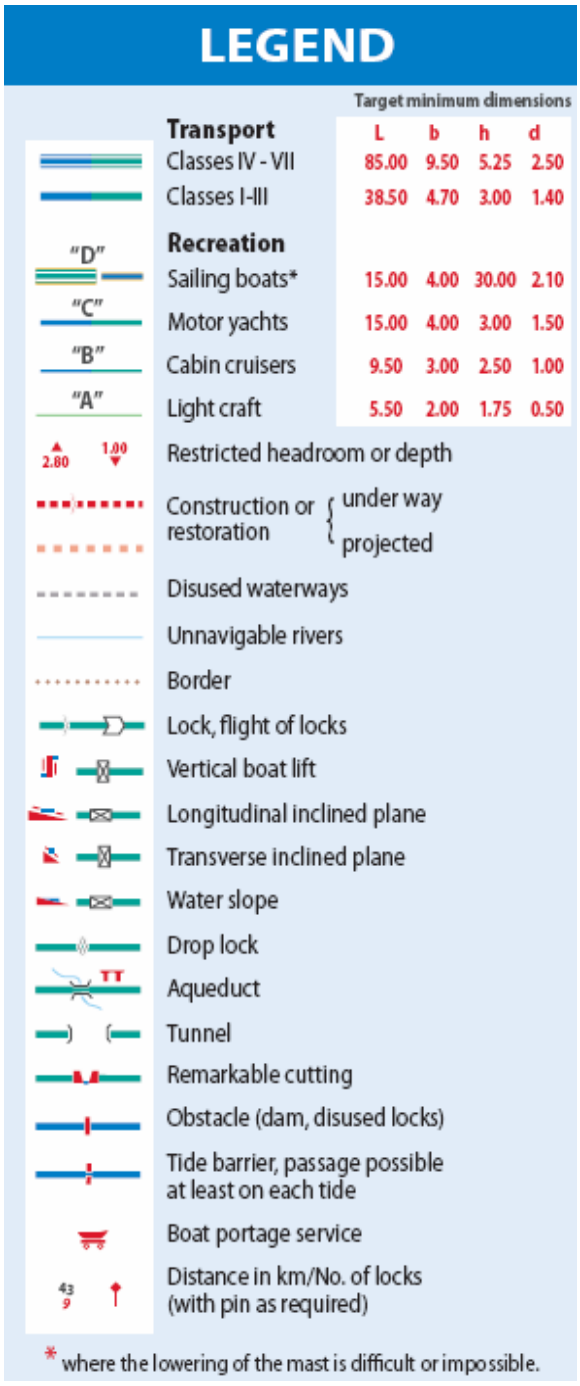
| Name | Organisation | Country |
|---|---|---|
| David Edwards-May | Euromapping | maps |
| Yvo Peeters* | Flemish Waterways Administration | Belgium |
| Jan Balduck* | Waterwegen en Zeekanaal NV | Belgium |
| Koen Vanneste | Provincie West-Flanders | Belgium |
| Pascal Moens* | Ministère de l'Equipement et des Transports | Belgium |
| Isabelle Auquier* | Hainaut Developpement | Belgium |
| Lionel Bonjean | Hainaut Developpement | Belgium |
| Sophie Ryo* | Voies Navigables de France | France |
| Camille Cessieux* | Voies Navigables de France | France |
| Laurent Déprez | Voies Navigables de France | France |
| Helmut Berends* | Berends-Consult | Germany |
| Hans-Peter Weigel | Senator für Bau, Umwelt und Verkehr | Germany |
| Istvan Mayer* | VITUKI, Research Centre | Hungary |
| Istvan Kranicz | National Directorate Environment, Nature & Water | Hungary |
| Roisin MacRory* | Waterways Ireland | Ireland |
| Sinéad Mallon | Waterways Ireland | Ireland |
| Daniela de Pascalis* | Regione Lombardia | Italy |
| Andrea Tosi | Navigli Lobardi S.C.A.L | Italy |
| Claudio Repossi | Navigli Lobardi S.C.A.L | Italy |
| Nico van Lamsweerde* | SRN – Stichting Recreatietoervaart Nederland | Netherlands |
| Gerrit Buwalda | SRN – Stichting Recreatietoervaart Nederland | Netherlands |
| Rene van de Poel | Provincie Drenthe | Netherlands |
| Cor Achterberg | Gemeente Langedijk | Netherlands |
| Casper Meijer | Provincie Noord-Holland | Netherlands |
| Rini van Veen | Gemeente Utrecht | Netherlands |
| Arno Goossens | Gemeente Apeldoorn | Netherlands |
| Jan Maat* | L.J. Harri BV | Norway |
| Elke Karlsen | Kragero Kommune | Norway |
| Throng Kjellevold | Telemark Fylkeskommune | Norway |
| Dawn Syvertsen | Telemark Fylkeskommune | Norway |
| Loreto Madrigal* | Institute of Communitarian Development (Technical attendance of SIRGA) | Spain |
| Manuel Fuentes | Associacion de Pueblos Riberenos del Canal de Castilla | Spain |
| Johan Mannheimer* | Lansstyrelsen Varmland | Sweden |
| Sture Hermansson | Lansstyrelsen Varmland | Sweden |
| Sebastian van den Bergen | Investera i Värmland-INVA | Sweden |
| Glenn Millar* | British Waterways | United Kingdom |
| Chris Barnett | British Waterways | United Kingdom |
| David Crane | British Waterways | United Kingdom |

| | | |
|---|---|---|
| Derek Cochrane | British Waterways (North) | United Kingdom |
| Alison Amoah | Torfaen County Borough Council (Wales) | United Kingdom |
| Mark Strickland | Torfaen County Borough Council (Wales) | United Kingdom |
| Mark Baker | Devon Country Council | United Kingdom |
| Richard Domett | Craft and Regeneration Company | United Kingdom |
| Richard Millar | British Waterways | United Kingdom |
| | | |

* 1st contact: Main person for information and interviews

# Annex 2 – The legend & ECMT classsification

**The legend of the Euromapping map**



## The extended ECMT-classification

**Extended ECMT table for classification of inland waterways proposed by PIANC working group**

| Waterway type | Waterway class | Recreational navigation | | | | Motor barges | | | | Push-tows | | | | Min height under bridges |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Type of vessel - general characteristics | | | | Type of push-tow - general characteristics | | | | |
| | | Designation | Max. length | Max. beam | Draught | | Length | Beam | Draught | Tonnage | Length | Beam | Draught | Tonnage | H (m) |
| | | | L (m) | (m) | (m) | | L (m) | B (m) | d (m) | T (t) | L (m) | B (m) | d (m) | T (t) | |
| Smaller waterways | RA | Open boat | 5.50 | 2.00 | 0.50 | | | | | | | | | | 2.00[3] |
| | RB | Cabin cruiser | 9.50 | 3.00 | 1.00 | | | | | | | | | | 3.25 |
| | RC | Motor yacht | 15.00 | 4.00 | 1.50[1] | Trip boats, local freight | 24.00[2] | | | | | | | | 4.00 |
| | RD | Sailing boat | 15.00 | 4.00 | 2.10 | | | | | | | | | | 30.00 |
| Waterways of regional importance West of Elbe | I | Hotel barge | 38.50 | 5.05 | | Péniche | 38.50 | 5.05 | 1.80-2.20 | 250-400 | | | | | 4.00 |
| | II | | | | | Campine barge | 50-55 | 6.60 | 2.50 | 400-650 | | | | | 4.00-5.00 |
| | III | | | | | Gustav Koenigs | 67-80 | 8.20 | 2.50 | 650-1000 | | | | | 4.00-5.00 |
| Waterways of regional importance East of Elbe | I | | | | | Grosse Finow | 41 | 4.70 | 1.40 | 180 | | | | | 3.00[4] |
| | II | | | | | Barka Motorowa 500 | 57 | 7.50-9.00 | 1.60 | 500-630 | | | | | 3.00[4] |
| | III | | | | | | 67-70 | 8.20-9.00 | 1.60-2.00 | 470-700 | 118-132 | 8.20-9.00 | 1.60-2.00 | 1000-1200 | 4.00 |
| Waterways of international importance | IV | | | | | Johan Welker | 80-85 | 9.50 | 2.50 | 1000-1500 | 85 | 9.50 | 2.50-2.80 | 1250-1450 | 5.25 / 7.00 |
| | Va | | | | | Large Rhine vessels | 95-110 | 11.40 | 2.50-2.80 | 1500-3000 | 95-110 | 11.40 | 2.50-4.50 | 1600-3000 | 5.25 |
| | Vb | | | | 1.80 | | | | | | 172-185 | 11.40 | 2.50-4.50 | 3200-6000 | 7.00 |
| | VIa | Hotel boats | 110.00 | 11.40 | | | | | | | 95-110 | 22.80 | 2.50-4.50 | 3200-6000 | 9.10 |
| | VIb | | | | | | 140.00 | 15.00 | 3.90 | | 185-195 | 22.80 | 2.50-4.50 | 6400-12000 | 7.00 / 9.10 |
| | VIc | | | | | | | | | | 270-280 | 22.80 | 2.50-4.50 | 9600-18000 | 7.00 / 9.10 |
| | | | | | | | | | | | 195-200 | 33.00-34.20 | 2.50-4.50 | 9600-18000 | 9.10 |
| | VII | | | | | | | | | | 285 | 33.00-34.20 | 2.50-4.50 | 14500-27000 | 9.10 |

1 Many waterways shown on the map as belonging to this category currently offer a draught of 1.20m (or even less during low flows).
2 This indication covers the case, frequently encountered, where trip boats operate on historic navigations.
3 Recommended value for additional safety, where new crossings are planned and built.
4 Where trip boats are in operation, it is suggested that this minimum should be raised to 4.00m.

# Annex 3 – Replies to the questionnaire

During the period April to October 2006, information has been gathered from 11 countries through the questionnaire and interviews. The replies reproduced below are from the questionnaires, in some cases complemented with information from the interviews, and with minor editing by the authors. The replies cover:

1. Add or delete waterways: Should recreational waterways be deleted from or added to the existing Euromapping map?
2. Correct details on map: Are the correct details (locks, boat lifts, etc) mentioned on the existing Euromapping map?
3. Most important projects: What are the most important projects for the waterways?
4. European Classification: Can the European ECMT classification be used in your country?
5. Check classification: Is the correct classification indicated on the existing Euromapping map?
6. Other topics?

## 1. Add or delete waterways

*"Are waterways with (potential) recreational use missing on the map? Or should some waterways be deleted from the map?"*

For France, Ireland and Italy no waterways had to be added to or deleted from the existing map. For Sweden a number of smaller waterways were added to the map, but were indicated separately from the questionnaire itself. Therefore Sweden is not included in the following list. For Belgium, Germany, Hungary, the Netherlands, Norway, Spain and United Kingdom the following waterways had to be added/deleted.

*Belgium*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| 2 | IJzer | Fintele to French border | Add | Canoes always, yachts on demand in August and September |
| 3 | Brugge-Damme | | Del | Not accessible |

*Germany*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| 1 | Hohennauener Waterway | Km 0 to km 10.4 | Add | RC |
| 2 | Untere Havel Waterway | Km 145.8 to km 156.75 | Add | RC |

| | | | | |
|---|---|---|---|---|
| 3 | Beetzlake-Riewendlake Waterway | Km 0 to 21.8 | add | RC |

## *Hungary*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| 1 | Ferenc tápcsatorna | Baja - Bezdán | Add | B |
| 2 | Rába | | Delete | |
| 8 | Mosoni-Danube | Rajka – Győr (118 rkm) | Add | A |

## *Netherlands*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| ? | Grevelingskanaal | Zuidlaardermeer-stadskanaal | Add | Name was not on the map |
| 1 | Oosterhomhaven (harbour) | Delfzijl-Termunterzijl) | Add | D |
| 2 | Van Starkenborghkanaal | Visvliet-Zuidhorn | Add | D |
| 12 | | Woudsloot-Kromme Ee | Add | D |
| 19 | Brouwershavendam | | Add | D |
| 20 | Oosterscheldedam | | Add | D |
| 21 | Sluis Veersche Meer | | Add | D |
| 31 | Stadskanaal etc. | Groningen-Zuiderlaardermeer-Ter Apel | Add | C |
| 48 | Kanaal Deventer-Raalte | Deventer-Raalte | Del | |
| 58 | Noordervaart | Weert – Meijel | Del | |
| 60 | Waver – Winkel-Angstel | Ouderkerk – AR Kanaal | Add | B |
| 61 | Vaartse Rijn | Nieuwegein | Add | C |
| 70 | B.L. Tijdenskanaal – Ruiten Aa Kanaal | Nieuwe Schans – Ter Apel | Add | B |
| 71 | Vloddervaart | ? on map | Add | B |
| 72 | S'Gravenlandse Vaart | Weesp- Hilversum | Add | B |
| 73 | Termunterzijl Diep | ? on map | Add | B |
| 74 | Westerwoldsche Aa – Veendiep | Bulsterverlaat – B.L. Tijdenskanaal | Add | B |
| 75 | Pekel Aa | ? on map | Add | B |
| 76 | Holendrecht | Waver – Abcoude | Add | B |
| 77 | Angstel | Abcoude – Loenersloot | Add | B |
| 78 | Waver | Stokkenlaarsbrug – Nessersluis | Add | B |

## *Norway*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| 1 | Araksfjorden (Nidaelva) | Straume – 160km Byglandsfjorden | Add | A |
| 2 | Begna | Lake Speril – 70 km Honefoss | Add | A |

| | | | | |
|---|---|---|---|---|
| 3 | Blindleia | Lillesand – 11 km Natviktangen | Add | C |
| 4 | Glomma | Ormhaugsfoss -20 km Haelva<br>Tolga -50 km Tynset<br>Atna -85 km Rena<br>Lake Oyeren -32 km | Add | A |
| 5 | Haldencanal | Halden – km Swedish border | Add | B |
| 6 | Lagen (Gudbrandsdal) | Lesjaskogsvatnet -35 km Bottheim | Add | A |
| 7 | Lagen (Numedal) | Dagali – 75km Veggli | Add | A |
| 8 | Mjosa | Lake Mjosa -123km | Add | A |
| 9 | Otta | Anstad -50 km Lalm | Add | A |
| 10 | Reisa | Reisa Nat. Park -75 km Storslett | Add | A |
| 11 | Tana-Elv (Tenojoki) | Tana – 56 km Tana Fjord | Add | A |
| 12 | Telemarkcanal | Skien – 107 km dalen | Add | C |
| 13 | Trysilalva (Klaralven) | Sorvika – 66 km Roa | Add | B |
| 14 | Tysla/Rena | Mistra -39 km Flena | Add | A |
| | | | | |

## *Spain*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| 1 | Canal de Castilla | Channel made up of three branches: North branch: from Alar del rey (a) to ribas de campos (b)<br>South branch: from ribas de campos (b) to valladolid (c)<br>Branch fields: from el serron (d) to medina of rioseco(e) | *Add* | In rehabilitation, it will be accessible for class a (light crafts) |
| 2 | River Duero/Douro | From Vega de Terron (Spain) to Porto (Portugal) | Add | Navigable from Vega de Terron (Spain) to Porto (Portugal) |

## *United Kingdom*

| Nr | Name waterway | From – to | Add or Delete? | Correct classification* |
|---|---|---|---|---|
| 16 | Bradford Canal | Leeds & Liverpool Canal to Bradford City centre | Add | Active restoration scheme – class RB |
| 17 | Grangemouth Docks Link | End of Forth & Clyde Canal into Grangemouth Docks | Add | Active new link scheme – class RB |
| 19 | Fens Waterway Link | From R.Witham to R.Glen and from R.Welland to R.Nene | Add | Active new link scheme – class RB |

## 2. Correct details on map

*"On the map details are mentioned for the waterways, for example locks, boat lifts (see legend in annex 2). Are the details for your country correct?"*

For France, Norway and Sweden no changes on the existing maps were requested. For Belgium, Germany, Hungary, Ireland, Italy, the Netherlands, Spain and United Kingdom the following changes were requested on the existing map.

### *Belgium*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| | **Flanders** | | |
| 4 | Bossuit-Kortrijk | Three locks | They are replaced by one lock |
| | **Wallonia** | | |
| 1 | Escaut | Alternat de Tournai | |
| 2 | Canal Nimy-Blaton-Péronnes | No lock at Thieu | Lock at Thieu |
| 3 | Canal Nimy-Blaton-Péronnes | No names at boat lifts | From west to east: 1) Thieu, 2) Bracquegnies, 3) Houdeng Aimeries, 4) Houdeng-Goegnies |
| 4 | Meuse | Four locks | They are replaved by one lock: Anolenne-Seilles |
| 5 | Meuse | Wrong name lock Neuville-sur-Huy | Lock is named: Aupsin-Neuville |
| 6 | Meuse - Ourthe | No lock | Lock Rivage-en-Pot |
| 12 | Ourth | No Lock | Lock Grosses-Battes |
| 7 | Meuse | No Tide barrier | Tide Barrier at Monsin |
| 8 | Meuse | No dam | Dam at Lixhe |
| 9 | Meuse | No Lock | Lock at Dinant |
| 10 | Lesse | No name at river | Put name 'Lesse' at river |
| 11 | Semoy | Wrong name | Name should be Semois |
| 13 | Meuse | No lock | Lock at Visé |

### *Germany*

| Nr | Waterway | Wrong | Correct detail (see also www.elwis.de) |
|---|---|---|---|
| 1 | Rhein from km 639.26 (at Königswinter) to km 857.667 (border of Germany) | Not on map | Class VIc; t = 2.50 m under GIW. Class RC Possible height 8.6 m (high water) (9.1m in general but at three points lower). |
| 2 | Schifffahrtsweg Rhein-Kleve km 10.24 until km 0.44 | Not on map | Class III, class RC. Possible height = 6.9 m (high water) Lock: Brienen (length 67 m, beam 8.20 m). |
| 3 | Wesel – Datteln Canal from km 0.24 (Rhein) to km 60.23 (DEK) | Not on map | Class Vb; t = 2.80 m. Class RC. Possible height at least 4.5m (normal water). Locks at Friedrichsfeld, Hünxe, Dorsten, Flaesheim, Ahsen, Datteln. |
| 4 | Rhein – Herne Canal from km 0.16 (Port Duisburg-Ruhrort) to km 24.53 (Gelsenkirchen) | Not on map | Class Vb; t = 2.80 m. Class RC. Possible height at least 4.5m (normal water). Locks at Duisburg - Meiderich, Oberhausen, Gelsenkirchen. |
| 5 | Rhein – Herne Canal from km 24.53 (Gelsenkirchen) to km 45.60 (DEK) | Not on map | Class IV, t = 2.50 m. Class RC. Possible height at least 4.5m (normal water). Locks at Wanne – Eickel, Herne Ost. www.elwis.de |
| 6 | Ruhr from km 0 to km 11.65 | Not on map | Class Va, t= 2.80 m. Class RC. Possible height 6.5 m (normal water). Locks at Ruhrschleuse Duisburg, Ruhrschleuse Raffelberg. www.elwis.de |

| | | | |
|---|---|---|---|
| 7 | Ruhr from km 11.65 to km 12.209 | Not on map | Boats L=38 m, beam=5.20m, draught=1.7m. Class RC. Possible height = 4.75 m (normal water). |
| 8 | Datteln - HammCanal from km 0.06 (DEK) to 35.87 (Hamm) | Not on map | Class Va, t = 2.70 m. Class RC. Possible height at least 4.00 m (normal water), 4.50 m to 4.90 m until Hamm |
| 9 | Datteln - HammCanal from km 35.87 (Hamm) to 47.20 (Schmehausen) | Not on map | Class IV t = 2.50 m. Class RC. Possible height at least 4.00 m (normal water). Locks at Hamm, Werries |
| 10 A | Dortmund-Ems Canal (Südstrecke) from km 1.44 (Dortmund) to 21.5 (Datteln) | Not on map | Class IV, t = 2.80 m. Class RC. Possible height at least 4.50 m (normal water). Locks at Hennrichenburg, Münster. |
| 10 B | Dortmund-Ems Canal (Südstrecke) from km 21.8 (Datteln) to 108.35 (Abzweig Mittellandkanal) | Not on map | Class IV, t = 2.50 m. Class RC. Possible height at least 4.25 m (normal water height), 4.50 m to 5.00 m. Locks at Hennrichenburg, Münster. |
| 11 | Dortmund-Ems Canal (Nordstrecke) from km 108.35 (Abzweig Mittellandkanal) to km 225.82 (Papenburg) | Not on map | Class IV, t = 2.70 m. Class RC. Possible height at least 4.25 m (normal water). 4.50 m. Locks at Bevergern, Rodde, Altenrheine, Venhaus, Hesselte, Gleesen, Varloh, Meppen, Hüntel, Hilter, Düthe, Bollingerfähr, Herbrum. |
| 12 | Ems from km 44.77 (Rheine) to km 82.65 (Gleesen) | Not on map | Boats length=26.0 m, beam=5.20m, draught= depending on water height (70 to 80 cm). Class RA. Possible height = 2.20 m (normal water height). Locks at Oberschleuse Rheine (26.70 m x 5.80 m), Unterschleuse Rheine (26.70 m x 5.80 m), Bentlage (26.35 m x 5.70 m), Listrup (26.90 m x 5.80 m). |
| 13 | Küstenkanal from km 69.63 (DEK) to km 64 (Stichkanal Dörpen) | Not on map | Class IV, t = 2.70 m. Class RC. Possible height at least 4.50 m (normal water height), 4.90 m to 5.00 m. |
| 14 | Küstenkanal from km 64.0 (Stichkanal Dörpen) to km 8.05 (Moslesfehn) | Not on map | Class IV, t = 2.50 m. Class RC. Possible height at least 4.50 m (normal water), 4.90 m to 5.00 m. Lock at Dörpen |
| 15 | Elisabethfehnkanal from km 0.04 (Küstenkanal) to km 14.83 (Leda) | Not on map | Boats length=20.0 m, beam=4.50 m, draught= 0.9 m. Class RA. Possible height = 4.0 m (normal water). Locks at Reekenfeld, Brandreeken, Elisabethfehn, Osterhausen. |
| | Brandenburger Stadt Canal | | City Lock Brandenburg at 57.94 km. L=22.1, Beam 5.15 |
| | Elbe Havel Canal | | Lock Wusterwitz at 376.7 km. Length 219m, beam 12m |
| | Havel Canal | | Lock Schönwalde at 8.75km. Length 82.2m, beam 12m |
| | Pareyer Verbindungs canal | | Lock Parey at 0.8 km. Length 72.65m, beam 8.55 |
| | Rathenower Havel | | Lock Rathenow at 104.56 km. Length 71.5m, beam 8.6m |
| | Untere Havel Waterway | | Lock Brandenburg at 55.55 km. Length 167m, beam 12.1m |
| | Untere Havel Waterway | | Lock Bahnitz at 81.95 km. Length 200m, beam 10m |
| | Untere Havel Waterway | | Lock Rathenow at 103.3 km. Length 210.6m, beam 9.54m |
| | Untere Havel Waterway | | Lock Grütz at 116.98 km. Length 200.8m, beam 10m |
| | Untere Havel Waterway | | Lock Garz at 129.02 km. Length 200m, beam 9.96m |
| | Untere Havel Waterway | | Lock Havelberg at 147.09 km. Length 225m, beam 12m |
| | Untere Havel Waterway | | Lock Quitzöbel at 156.14 km. Length 21.3m, beam 5.3m |

## *Hungary*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| 3 | Danube (Nagymaros) | Dam | There is no dam |
| 4 | Danube-Tisza K. | Name | Danube-völgyi főcsatorna |

## *Ireland*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| 1 | Shannon-Erne Waterway | 61 km | 63 km |
| 2 | Shannon-Erne Waterway | Draft 1.35 m | Draft 1.2 m |
| 3 | Erne System | 39 + 36 km | 84 km (Entire system – Belleek to Belturbet) |
| 4 | Barrow Navigation | Monasterevan | Monasterevin |
| 5 | Nore | Instioge | Inistioge |

## *Italy*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| 1 | Locks on the Canal | Not on the map | Class V – Length 200 mt – Wide 12 mt. Name: Aquanegra Cremonese (from Cremona to Pizzighettone) |
| 2 | Locks on River Mincio | Not on the map | Class IV - Length 76 mt – Wide 9.7 mt. Name: Governolo (from Mantova to Governolo) |
| 3 | Locks on the Canal | Not on the map | Class V - Length 110 mt – Wide 12.5 mt. Name: Trevenzuolo (from Mantova to Venezia) |
| 4 | Locks on the Canal | Not on the map | Class V - Length 110 mt – Wide 12.5 mt. Name: Canda (from Mantova to Venezia) |
| 5 | Locks on the Canal | Not on the map | Class V - Length 110 mt – Wide 12.5 mt. Name: Bussari (from Mantova to Venezia) |
| 6 | Locks on the Canal | Not on the map | Class V - Length 110 mt – Wide 12.5 mt. Name: Baricetta (from Mantova to Venezia) |
| 7 | Locks on the Basic Canal and River Po | Not on the map | Class V - Length 224.5 mt – Wide 24 mt. Name: Volta Grimana (from Mantova to Venezia and on Po) |
| 8 | Locks on the Canal and River Po | Not on the map | Class V - Length 130 mt – Wide 10 mt. Name: Cavanella Destra (from Mantova to Venezia and on Po) |
| 9 | Locks on the Canal and River Po of Brondolo | Not on the map | Class V - Length 130 mt – Wide 10 mt. Name: Cavanella Sinistra (On Po of Brondolo) |
| 10 | Locks on Canal Mantova – Venice & its entrance | Not on the map | Class V - Length 105 mt – Wide 10 mt. Name: Brondolo nuova (from Po of Brondolo to Adriatic Sea) |
| 11 | Locks on the Canal Naviglio Pavese | Not on the map | Name: Conchetta |
| 12 | Locks on the Canal Naviglio Pavese | Not on the map | Name: Conca Fallata |
| | | | |

## *Netherlands*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| 1 | Delftzijl-Termunterzijl | Lock | There is a lock |
| 2 | Damsterdiep | Lock | There is a lock |
| 3 | Boterdiep | Lock | There is a lock |

| | | | |
|---|---|---|---|
| 4 | Lauwersoog | Lock | There is a lock |
| 5 | Reitdiep | Lock | There is a lock |
| 6 | Aduarterzijl | Lock | There is a lock |
| 7 | Langweerderwielen | Lock | There is no lock |
| 8 | Larservaart | Lock | There is a lock |
| 9 | Markermeer | Lock | There is a lock |
| 10 | Merwedekanaal | Lock in Noordzee-kanaal but has to be in the Merwede canal | Lock in Merwede canal |
| 11 | Vreeswijk | Lock | There is a lock |
| 12 | Vinkeveense Plassen | Lock | There is a lock |
| 13 | Vinkeveense Plassen | Lock | There is a lock |
| 14 | Lek | Lock | There is a lock |
| 15 | Nederrijn | Lock | There is a lock |
| 16 | Hollandse Ijssel | Lock | There is a lock |
| 17 | Brielse Meer | Lock | Lock is drawn in Brielse Meer but has to be drawn on the Hartel Canal |
| 18 | Delfsche Schie | Lock | There is a lock |
| 19 | Hollandse Ijssel | Lock | There is a lock |
| 20 | Oosterscheldedam | Lock | There is a lock |
| 21 | Veerse Meer | Lock | There is a lock |
| | All waterways in Drenthe | classification | All waterways should have same classifi-cation (all lines same colours & thickness) |
| | | | |

## *Spain*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| 1 | Canal de Castilla | The vertical boat lift is not indicated: 49 locks, some are rehabilitated (6 and 7), some will be. | Lock number 6 of NORTH BRANCH<br>Lock number 7 of BRANCH FIELDS |

## *United Kingdom*

| Nr | Waterway | Wrong detail | Correct detail |
|---|---|---|---|
| 1 | Wiltshire & Berkshire Canal | Name not included | Add name |
| 2 | Stroudwater and Thames & Severn Canals | Wrong name | Change name |
| 3 | Monmouthshire & Brecon Canal (lower section) | Name not included | Add name |
| 4 | Ipswich & Stowmarket Navigation | Restoration likely to be very long-term if at all | Change to “Disused waterways” category |
| 5 | Foxton Incline | Not really a restoration, as canal is in use | Remove detail |
| 6 | Higher Avon Link | Creation of link likely to be very long-term if at all | Remove detail |
| 7 | Little Eaton & Derby Canal | Wrong name | Change to Derby & Sandiacre Canal |
| 8 | Un-named | No name included | Call it Grantham Canal |

| | | | |
|---|---|---|---|
| 9 | Un-named | No name included | Call it Chesterfield Canal – Also show whole section of canal circled as a restoration |
| 11 | Anderton Lift | Project completed | Show in black, with “2002” removed |
| 12 | Rochdale Canal and Huddersfield Narrow Canal | Both canals shown as white lines | Both canals should be shown as navigable – Class RB |
| 13 | Driffield Canal | Should be shown as Class RA | Change from restoration scheme to RA. |
| 14 | Falkirk Wheel | Project completed | Show in black, with “2002” removed |
| 15 | Un-named | No name included | Call it Montgomery Canal |
| 18 | St Helens Canal | Restoration in progress | Show as red dotted line, with name in red |
| 20 | Lydney Canal | Project still not completed | Take out “2004” |

## 3. Most important projects

*"What are currently the most important projects in your country for recreational waterways? Are there for example obstacles in the recreational waterways that prevent a European recreational waterway network? Or any upgrading of waterways needed to another class? Any improvement of the waterways needed? What needs to be done and what has highest priority?"*

For Norway no projects have been indicated. The most important projects of Belgium, Germany, Hungary, Ireland, Italy, the Netherlands, Spain, Sweden and United Kingdom are included in the tables below. For France they are described in the French chapter.

### *Belgium*

The most important projects related to recreational waterways in Wallonia are related to port facilities.

### *Germany*

| Nr | Name of waterway | Project | Vital for European network | Other details |
|---|---|---|---|---|
| 3 | Wesel – Datteln Canal from km 0.24 (Rhein) to km 60.23 (DEK) | The following projects already started: starting places for recreational boats, facilities in locks e.g. Friedrichsfeld, Hünxe, Datteln, Flaesheim, Friedrichsfeld, Haltern, Dorsten | Waterway Yes | Developed with Ruhrgebiet Touris-mus GmbH. www.sportbootrevier.de |
| 5 | Rhein – Herne Canal from km 24.53 (Gelsenkirchen) to km 45.60 (DEK) | The following projects already started:<br>1. Build resting places at locks<br>2. Facilities at locks to tie up boats (some already available). 3. Water walking resting place in city port Recklinghausen | Waterway Yes | See www.sportbootrevier.de |
| 8 | Datteln – Hamm Canal from km 0.06 (DEK) to 35.87 (Hamm) | 1. Build resting places at locks<br>2. Facilities at locks to tie up boats | Waterway Yes | |
| 10 | Dortmund-Ems Canal (Südstrecke) from km 0.00 (Dortmund) to 108.35 (link with Mittellandkanal) | These projects already started:<br>1. Build resting places at locks<br>2. Facilities at locks to tie up boats (some already available)<br>3. Registration of places for recreational boats | Waterway Yes | See www.sportbootrevier.de |
| 11 | Dortmund-Ems Canal (Nordstrecke) from km 108.35 (link with Mittellandkanal) to km 225.82 (Papenburg) | The following aspects should get attention for recreational boats:<br>1. Build resting places at locks<br>2. Facilities at locks to tie up boats | Waterway Yes | |
| | Elbe km 0 to km 56.8 | Creating draught of 1.5m | Yes | 2007-2010 |
| | Elbe km 56.8 to 290.7 | Creating draught of 1.6m | Yes | 2007-2010 |

## *Hungary*

| Nr | Name of waterway | Project | Vital for European network: Y/N | Other details (eg. timing, budget, contact) |
|---|---|---|---|---|
| 1 | Ferenc tápcsatorna | Baggering, reconstruction of works | N | 2007 - 2010 |
| | The Danube-Tisza Canal | Long-term project to connect the two rivers in Hungarian territory. | At present the only route from Danube to Tisza is via the Velike Backa Canal in Serbia. | It is not clear when this project will start. |

## *Ireland*

| Nr | Name waterway | Project | Vital for Eur. Netw. | Other details |
|---|---|---|---|---|
| 6 | Royal Canal | Restoring link to Dublin from Shannon Navigation | N – linked to Irish waterways only | Project is being completed as part of the National Development Plan. Due for completion late 2007 or early 2008. |
| | The Ulster Canal | The restoration of Ulster Canal | | Is planned for the future. Not clear when it will start |

## *Italy*

| Nr | Name waterway | Project | Vital for European network: Y/N | Other details (eg. Timing, budget, contact) |
|---|---|---|---|---|
| 13 | River Ticino | Locks of Miorina | Y | 2005-2006, 3 ml €, Consorzio del Ticino (Conticino@tin.it) Parco Regionale Valle del Ticino (parcoticino@endoxa.it) |
| 14 | River Adda from Brivio to Robbiate | Networking ok landing wharf | Y | 2004-2006, 1,5 ml €, Parco Adda Nord (Addanord@tin.it) |
| 15 | River Adda from Camairago to Pizzighettone | Networking ok landing wharf | Y | 2005-2006, 600.000,00 €, Parco Adda Nord (Addanord@tin.it) |

## *Netherlands*

| Nr | Name waterway | Project | Vital for Eur. network |
|---|---|---|---|
| 2 | Halskanaal | New connection in Goeree-Overvlakkee (RD) | Y |
| 3 | Bernisse | Adjustment to the connection on Voorne-Putten (RD) | Y |
| 4 | Naardertrekvaart | New connection to the Gooimeer (RC) | Y |
| 5 | Zwolse Vaart | New connection in the province Flevoland Zwolse Vaart to Kuinre (RC). | N |
| 6 | Apeldoornse Kanaal and the Griftkanaal | New connection from Hattem via Apeldoorn to Dieren (RC) | Y |
| 7 | Westeinderplassen and Drecht | New connection (RD) | Y |
| 8 | Canals city of Utrecht | Improvement of the canals in Utrecht (RD) | Y |
| 9 | Wieringerrandmeer | New connection from Wieringerrandmeer to the IJsselmeer(RD) | N |
| 10 | Leekstermeer | New connection between Drachten and the Leekstermeer (RB) | N |
| 11 | Oude Maasje | New connection between the Oude Maasje and the Maas (RB) | N |

| | | | |
|---|---|---|---|
| 12 | | New connection between Veenhoop and Beets (RB) | N |
| 13 | | New connection between Bellingwoude & Rhede (Germany) (RB) | Y |
| 14 | Grevelingenmeer | Bridge at Bruinisse. Improvement entrance to the Grevelingenmeer (RD | N |
| 15 | Jeltesloot | Aqueduct between Heegermeer and Sneekermeer (RD) | N |
| 16 | Galadammen | Aqueduct between Fluessen and Morra (RD) | N |
| 17 | Woudsend | Aqueduct between Heegermeer and Slotermeer (RD) | N |
| | See map | Canal link between Erica (South of Emmen) & Ter Apel: link between Dutch & German waterway network, see interreg project Boating in the Land of Peat and Honey | Y |
| | See map | Canal link between Zuidlaardermeer en Oost-Groningen | ? |
| | | | |

## *Spain*

| Nr | Name waterway | Project | Vital for European network: Y/N | Other details (eg. Timing, budget, contact) |
|---|---|---|---|---|
| 1 | Canal de Castilla | Plan for the Castille Canal | Y: the only canal in Spain (19th century) | Development in 2006-2010, Budget: 4.200.000 € |

## *Sweden*

| Name waterway | Project |
|---|---|
| Södertälje Canal & Lock | Upgrading of locks in Södertälje to reduce transport cost & allow for larger ships |
| Trollhätte Canal | Improve locks in Göta Älv for modern tonnage and vitalisation of sea transports on lake Vänern |

## *United Kingdom*

| Nr | Name waterway | Project | Vital for European network: Y/N | Other details (eg. Timing, budget, contact) |
|---|---|---|---|---|
| 1 | Wiltshire & Berkshire Canal | Restore to navigation | Y: Important link between existing waterways | Very long-term |
| 2 | Stroudwater and Thames & Severn Canal | Restore to navigation | Y:Important link between existing waterways | Stroudwater: Construction 2006-10. Thames & Severn: Long-term |
| 21 | North Wiltshire Branch | Restore to navigation | Y:Important link between existing waterways | Long-term |
| 3 | Monmouthshire & Brecon Canal (lower section) & Crumlin Arm | Restore to navigation | Y:Links land-locked Monmouthshire & Brecon Canal with the sea | Restoration possible by 2012 |
| 22 | Wendover Arm | Restore to navigation | N: Connects market town of Wendover with the main network | Gradual extension to navigation taking place |
| 23 | Bedford – Milton Keynes Link | New link | Y: Connects Fenland waterways to main network. With Fens Waterways Link creates a broad north-south waterway through England | Very long-term |
| 24 | Bow Back Rivers | Restoration of | Y: Important for 2012 London | Restoration likely by 2012 |

| | | | | |
|---|---|---|---|---|
| | | small network of waterways in East London | Olympics | |
| 25 | Wey & Arun Canal | Restore to navigation | Y: Inland link between London & the south coast | Very long-term |
| 26 | Droitwich Canal | Restore to navigation | Y: Important link between existing waterways | Restoration under way – completion 2008 |
| 27 | Hatherton and Lichfield Canals | Restore to navigation | Y: Important link between existing waterways | Long-term |
| 28 | Ashby Canal – Extension to Moira | Restore to navigation | N: Extension of navigation to market town of Moira | Restoration partly under way |
| 19 | Fens Waterway Link | Part new link; part introduction of navigation on drainage canal | Y: Connects Fenland waterways & with Bedford & Milton Keynes Link creates a broad north-south waterway through England | Medium-term |
| 8 | Grantham Canal | Restore to navigation | N: Extends network through attractive countryside | Medium / long-term |
| 7 | Derby & Sandiacre Canal | Restore to navigation | N: Creates regional crusing route | Long-term |
| 15 | Montgomery Canal | Restore to navigation | Y: Extends navigation into the heart of mid-Wales in an attractive crusing area | Restoration partly underway |
| 9 | Chesterfield Canal | Restore to navigation | N: Extends network to market town of Chesterfield | Restoration partly underway |
| 16 | Bradford Canal | Restore to navigation | Y: Links major city of Bradford with the canal network | First phase of work under development |
| 18 | St Helens Canal | Restore to navigation | N: Extends network to town of St Helens | Medium / long-term |
| 29 | Manchester, Bolton & Bury Canal | Restore to navigation | Y: Extends network to north of Manchester – important focus for regeneration | First phase of restoration under way |
| 30 | Leeds & Liverpool Canal – Extension to Albert Dock ("Liverpool Link") | New link | Y: Provides link through World Heritage Site | Under way – completion by 2008 |
| 31 | Lancaster Canal – Northern Reaches | Restore to navigation | Y: Extends navigation to the edge of the Lake District National Park | Medium / long-term |
| 17 | Forth & Clyde Canal: Grangemouth Docks Extension | New link | N: Creates better entrance to Forth & Clyde Canal; focus for regeneration of Grangemouth | Medium-term |
| 32 | River Leven | Make river navigable | Y: Creates link to Loch Lomond | Long-term |

## 4. European Classification

*"In Annex 2 the extended ECMT-classification is included. The classes A, B, C and D are especially for the recreational use. Furthermore the classes I-VII indicate which waterways are also accessible for larger boats. Is it possible to use this ECMT-classification in your country?"*

On the question whether the ECMT classification can be applied in their country, 9 of the 11 respondents indicated that the ECMT classification could be used in their country: Belgium, France, Germany, Hungary, Ireland, Italy, the Netherlands, Norway and Sweden. Spain and the United Kingdom replied that it is not possible to use the ECMT classification. In Spain the classification is not known. In the United Kingdom another system exists. More detailed replies can be found below.

### *Belgium*
Yes. Only categories I to VI are used in Wallonia. There are no specific waterways under the A to D specifications.

### *France*
Yes. The ECMT classification is used for the French waterways (VnF).

### *Germany*
Yes. 1) But it is not considered necessary. 2) It would be good to include as well extra levels for the possible height of boats between 4 and 30 m.

### *Hungary*
Yes

### *Ireland*
The ECMT classification can be used for the Irish waterways. The RA to RD classification is OK for Ireland's waterways, but the Irish waterways are not navigable for bigger boats.

### *Italy*
Yes. Currently no classification is being used in Italy. In September 2006 it was agreed to start using the ECMT classification in the North of Italy.

### *Netherlands*
Yes. In principal the ECMT classification is useful for the Netherlands, but it will take time to change the current Dutch classification, which is used since 1985. The ECMT classification as it currently stands is not totally appropriate to much of the Dutch waterway system, because the classes do not match with the old system. The length for example would place a craft the RA class, but the beam would put them into the RB category.

### *Norway*
Yes, currently a Norwegian classification system is being used. In future it will be possible to adapt to the ECMT classification.

*Spain*

At this moment the Spanish organisations are not familiar with the ECMT classification, so it is not possible to say something about the ECMT Classification

*Sweden*

Yes, currently a Swedish classification system is being used. In future it will be possible to adapt to the ECMT classification.

*United Kingdom*

No. The classification as it currently stands is not totally appropriate to much of the UK waterway system. Much of the network is navigable by "narrowboats", which have dimensions of 22m length by 2.2m beam. The length would place these craft above the recreational waterway classification, but the beam would put them into the RA category. Overall such waterways would most appropriately be classified as RB – for cabin cruisers (as has been done on the map). Perhaps a way round this would be to classify the waterways as RB, but with a suffix (e.g. RB*) to indicate that the dimensions are outside the normal parameters for the class. Such a system could be used for other non-UK waterways where the same problem exists.

## 5. Check classification

*"Is the correct classification used for the recreational waterways on the map?"*

The existing map already uses the ECMT classification. A check on the classification has been made by asking if the correct class has been used for the recreational waterways on the map. France, Italy, Norway and Sweden indicated that no changes are needed on the map. Germany, Hungary, Ireland, the Netherlands, Spain and United Kingdom requested the changes on the map indicated below. Belgium indicated that the classification is not being used.

### *Belgium*

Wallonia indicated that the classification has not been used correctly but did not indicate what was wrong, as the recreational classes are not in use in Belgium.

### *Germany*

The classification is not clearly readable on the map. Therefore use the responses given to question 2.

### *Hungary*

| Nr | Name Waterway | Current class | Correct class | Other |
|---|---|---|---|---|
| 4 | Danube-völgyi főcsatorna | C | A | |
| 5 | Hortobágy-Berettyó | C | B | |
| 6+7 | Keleti főcsatorna + Berettyó | C | B | |

### *Ireland*

| Nr | Name Waterway | Current class | Correct class | Other |
|---|---|---|---|---|
| 7 | Lower Bann | | B | 1.0 m draft currently |
| 3 | Erne System | | B | 1.2 m draft currently |
| 1 | Shannon-Erne Waterway | | B | Max draft 1.2 m |

### *Netherlands*

| Nr | Name Waterway | Current class | Correct class | Other |
|---|---|---|---|---|
| 3 | Haukesloot | ? | D | |
| 4 | Geeuw | ? | D | |
| 5 | Wokummer Trekvaart | D | C | |
| 6 | Van Panhuyskanaal | D | C | |
| 7 | Vliet + harbour Workum | D | C | |
| 8 | Peanster Ee | D | C | |
| 9 | Graft + Lange Lits | D | C | |
| 10 | Prinses Margrietkanaal-Teherne | D | C | |
| 11 | Sneekermeer | C | D | |
| 13 | Jonkers-Helomavaart | D | C | |
| 14 | Zwanediep Vollenhove kanaal | D | C | |
| 15 | Knollendammervaart | D | C | |
| 16 | Nauernasche Vaart | D | C | |
| 17 | Grecht | D | C | |

| | | | | |
|---|---|---|---|---|
| 18 | Ruigt of Reugt | D | C | |
| 30 | Noorder Oudeweg | ? | C | |
| 31 | Stadskanaal etc. (There is a new link to Groningen. Therefore also mentioned in 1st question | ? | C | |
| 32 | Aduarderdiep | ? | C | |
| 33 | Hoendiep | ? | C | |
| 34 | Stroobosseertrekvaart | ? | C | |
| 35 | Nieuwe Zwemmer | ? | C | |
| 36 | Petsloot- Kuikhornstervaart | ? | C | |
| 37 | Wartenaasterwijd | ? | C | |
| 38 | Woudvaart | ? | C | |
| 39 | Noord Willemsvaart | ? | C | |
| 40 | Hoogeveense Vaart + extension | ? | C | |
| 41 | Lemstervaart | ? | C | |
| 42 | Urkervaart/ Zwolse Vaart | ? | C | |
| 43 | Overijsselse Vecht | ? | C | |
| 44 | Kalenbergergracht- Wetering | ? | C | |
| 45 | Steenwijkerdiep | ? | C | |
| 46 | Beukergracht | ? | C | |
| 47 | Goot | ? | C | |
| 49 | Dronter Vaart | ? | C | |
| 50 | Larser Vaart | ? | C | |
| 51 | Lage Dwarsvaart | ? | C | |
| 52 | Slootvaart-Den Oeversevaart | ? | C | |
| 53 | Kanaal Schagen-Kolhorn | ? | C | |
| 54 | Trekvaart Edam – Monnickendam | ? | C | |
| 55 | Ringvaart Purmer | ? | C | |
| 56 | Naarder Trekvaart | ? | C | |
| 57 | Hollandse IJssel | ? | C | |
| 59 | Steenbergse Vliet | C | B | |
| 79 | Oude Rijn | B | A | |
| 80 | Dubbele Wiericke | B | A | |
| 81 | Beemsterringvaart Oost | B | A | |
| 82 | Trekvaart Leiden – Haarlem | B | A | |
| 83 | Noorderkanaal | B | A | |
| 84 | Schinkel | B | A | |
| | | | | |

## *Spain*

| Nr | Name Waterway | Current class | Correct class | Other |
|---|---|---|---|---|
| 1 | Canal de Castilla | Disused waterways | Restoration foreseen | |

## *United Kingdom*

| Nr | Name Waterway | Current class | Correct class | Other |
|---|---|---|---|---|
| 6 | Royal river | C | D | |

## 6. Other topics

*"Are there other topics that need to be mentioned? Or other remarks that are important for creating a European network of recreational waterways?"*

As a last question the respondents had the opportunity to indicate if there were any other topics. Belgium, Germany, The United Kingdom and Spain used the opportunity to make the following remarks.

### *Belgium*

From 7th March 2006 there are no longer any navigation fees on Walloon waterways, and this applies to both recreational and commercial craft. However, it is mandatory to advise the authorities of arrival on Walloon waters. There are several tools and procedures to assist boaters in completing the formalities. Users are invited to address themselves to one of the waterway offices.

### *Germany*

Detailed maps on the recreational use of waterways in Germany are created by the 'Motoryachtverband', the motor yacht association. In these maps is information provided on the heights of bridges and information on the waterways, information on facilities in harbours and tourist attractions. For the recreational water user is it interesting to know if the lock is self service of automatic or when it is in use, under which internet address or phone number up to date information can be found for preparing a tour by boat and which organisations are responsible for the area.

Information for the recreational use of waterways in WSD West can be found under www.sportbootrevier.de and www.emsland.com.

### *United Kingdom*

- There should be a provision under any map published to say that the dimensions of the classifications are indicative. People planning to use the waterways should contact the appropriate navigation authorities to get detailed information on dimensions, navigation conditions etc.

- It is important that the advantages of a classification are clearly stated, so that everyone knows why it is important:
  - helping to achieve greater official recognition of recreational waterways in Europe, particularly in relation to their international dimension;
  - providing greater protection for inland waterways, especially in respect of headroom. (Lowering of bridges for road schemes has often led to waterways becoming effectively closed to navigation in the past.);

Publicising the international inland waterway network to boaters, thus promoting tourism visits from outside EU, as well as for European citizens

*Spain*

1.- **The Castille Canal (Canal de Castilla)**, there are at the moment two navigable sections, for boats with electric motors, that have been indicated in the map, thanks to the rehabilitation of two locks. The project "Plan of excellence of the canal" (2006-2010), contemplates the restoration of further sections to navigation, but these have not yet been indicated. The respondent considers it very important that it is indicated in the map as a canal under restoration, since is unique not only in Spain but also in the European context. The association's contact e-mail address is vne@idcfederacion.org.

2.- **The river Duero /Douro**:

The classification is correct, but the river is navigable from Porto (Portugal), to Vega de Terrón (Spain), and the Spanish section does non figure on the map.