MARKET OBSERVATION

FOR EUROPEAN INLAND NAVIGATION

2005 - I

Central Commission for Navigation on the Rhine

European Commission
Directorate-general Energy and Transport

Foreword

This initial publication as part of the tool for observation of the market for inland waterway transport in Europe is the result of thinking carried out by the CCNR Secretariat in close collaboration with representatives of both the profession and the European Commission.

While its purpose is to provide a statement of the current situation of the market for inland waterway transport and its short-term prospects, we felt that it was important for this initial publication to give a brief historical overview of the evolution of the economic situation over the past three years, to provide a reference base for assessing the present and future situation. The data on freight transport set out in this publication therefore refers to the years 2002 to 2004.

Because of the complexity of the approaches necessary for obtaining an objective view of the economic situation from statistical data of varied nature and origin, we also felt it was important to describe in this initial publication the methodology applied to processing the basic data.

Methodological aspects will not be described in subsequent publications. The approaches will, however, evolve as they are gradually improved on and extended in geographical terms, in accordance with user expectations.

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General introduction

Following on from the policy of structural reorganisation applied throughout the European Union between 1989 and 1999, the professional organisations for inland waterway transport in Europe requested that a tool be set up to carry out regular monitoring of the economic environment of this mode of transport. The purpose of such monitoring is to make it possible in the near future to detect as soon as they arise any structural imbalances between the market's offer and demand for transport capacity, so that policies likely to provide a prompt remedy can be introduced.

This mission was entrusted to the Secretariat of the Central Commission for Navigation on the Rhine (CCNR) in collaboration with DG-TREN. The CCNR has been monitoring the economic situation of navigation on the Rhine for many years and therefore has experience in the matter. The professional organisations for inland waterway transport in Europe are closely and genuinely involved in compiling this observation of the market. The monitoring tool is in three main parts:

- monitoring of offer of transport capacity;
- monitoring of demand for transport capacity;
- a microeconomic analysis to assess the health of inland waterways transport companies.

There are additional elements such as the cargoes carried, the price of fuel, water conditions, and other related elements that affect inland waterway transport.

In geographical terms, this initial document on inland waterway transport in Germany, Austria, Belgium, France, the Grand Duchy of Luxembourg, the Netherlands and Switzerland. The geographical coverage of the monitoring will gradually be extended to cover all European States with inland waterways inasmuch as the data can be obtained.

For this first document, the methodology refers mainly to the situation on the Rhine, and the period under consideration runs from 2002 to 2004 (2003 for the 2001 microeconomic section). A further document will be produced at the end of 2005; this will contain initial impressions of the activity in 2005, prospects for the first few months of 2006, and microeconomic data for the 2004 financial year.

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Chapter 1 : Analysis of demand of transport

A. General economic evolution

Despite a degree of flexibility, the evolution of demand for transport on the market is directly linked to that of the economy in general, such that it would appear to be unavoidable to take account of the evolution in the GDPs of the Member States covered by this study. In the context of inland waterway transport, we can also see the influence

Evolution of the GDP in %	**2000**	**2001**	**2002**	**2003**	**2004**	**2005 (forecast)**
Germany	3.1	1.0	0.1	-0.1	1.2	1.4
Austria	3.4	0.7	1.2	0.8	1.8	2.3
Belgium	3.7	0.9	0.9	1.3	2.7	2.4
France	4.2	2.1	1.1	0.5	2.1	2.0
G.D. Luxembourg	9	1.5	2.5	2.9	4.2	4.5
Netherlands	3.5	1.4	0.6	-0.9	1.2	1.2
Switzerland	3.6	1.0	0.3	-0.4	1.9	1.9
OECD area	3.9	1.1	1.6	2.2	3.6	2.9

(Source: OECD Factbook 2005)

of the evolution of the economy on the world market. Starting in 2004, the explosion of commercial trade with China, a country where GDP is growing at the rate of 9% per year, and other south-east Asian countries has had a substantial impact on the increase in transport between sea ports and the hinterland. At the same time, demand (for steel, in particular) from these countries has also contributed to GDP growth in the countries of western Europe.The evolution of overall demand for transport is on the whole more marked than that of the economy. It is therefore necessary to take into account the evolution in overall demand for transport, including all land-based modes, as described in the table below.

B. Evolution of transport of goods by land in the States

in million of tons	**2002**	**2003**	**2004**
Germany	3332,0	3360,0	3407,0
Austria	381,7	390,2	392,1
Belgium	284,2	281,9	
France	1119,7		
Netherlands	1034,2	1091,5	

(Sources: national statistics offices)

At the same time, it is necessary to examine the evolution in demand for transport using inland waterways. Comparison of these two aspects allows measurement of the evolution of the modal share of inland waterway transport. Such an evaluation can be deduced from the summary table opposite.

It must however be noted that the modal share of inland waterway transport in the States is largely dependent on the existence and the features of the river network present on its territory. In the case of inland waterway transport, meteorological phenomena such as periods of low water or the formation of ice may temporarily limit the market share of inland waterway transport. A phenomenon of this kind can be observed in 2003, when the lengthy drought in the summer limited the volume transported and services during the year in the countries of Western Europe.

C. Evolution of inland waterway transport

(summary table)

Summary table

		Volumes carried, in 1000 t			Services, in TKM		
		2002	2003	2004	2002	2003	2004
Switzerland		**8356**	**7006**	**7246**	**58**	**49**	**49**
	of which national	-	-	-	-	-	-
	of which international	8356	7006	7246	58	49	49
France		**68942**	**65429**	**69059**	**8875**	**8647**	**9106**
	of which national	28310	28880	29121	4206	4302	4429
	of which international	40632	36467	39834	4371	4005	4257
Germany		**231738**	**219999**	**235861**	**64170**	**58175**	**63675**
	of which national	55844	53419	55209	11670	10833	11296
	of which international	175894	166581	180653	52495	47322	52372
Netherlands		**314007**	**303207**	**329867**	**40911**	**41031**	**44975**
	of which national	101770	95105	105553	10407	10601	12662
	of which international	212237	208102	224314	30504	30430	32313
Belgium		**135114**	**137756**	**144719**	**8148**	**8302**	**8675**
	of which national	30473	31120	32488	2779	2831	2946
	of which international	104641	106636	112231	5369	5471	5731
Austria		**12316**	**10741**	**9074**	**2845**	**2277**	**1747**
	of which national	560	922	192	71	61	33
	of which international	11756	9819	8882	2775	2216	1714
G.D. Luxembourg		**8568**	**9690**	**11180**			
	of which national	-	-	-	-	-	-
	of which international	8568	9690	11180			
Overall (*)		**471996**	**454575**	**484436**	**125007**	**118481**	**128227**

NB : Transit is included in international transport
(*) transported volumes have been treated to avoid double countings,

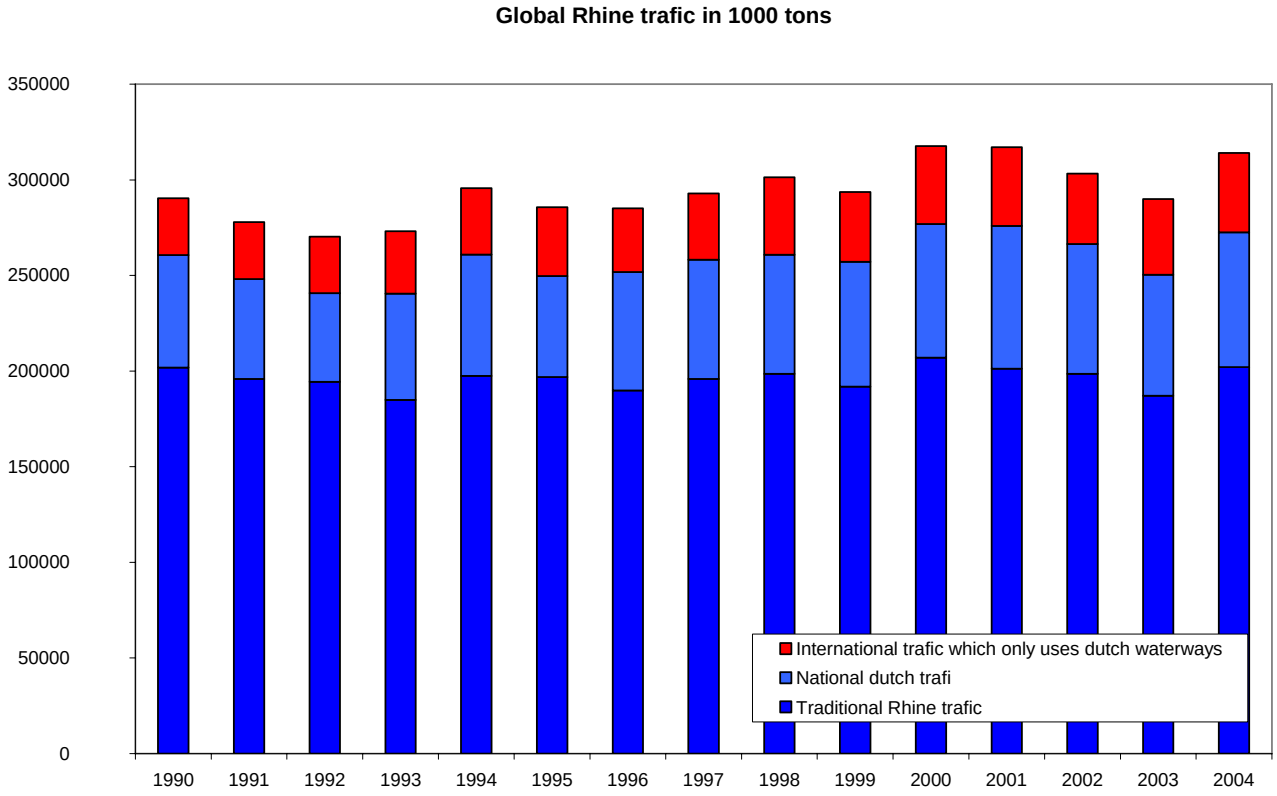
In analysing the evolution of inland waterway transport in Europe, consideration must be given to the main corridors for goods traffic. By doing so, it is possible to analyse the modal share of inland waterway transport within the modal split of land-based transport. The purpose is not only to take a momentary measurement of the situation, but also to decide on suitable measures to promote the development of its modal share in certain geographical sectors and on certain major routes.

There are four transport routes to be taken into consideration, namely:

- the Rhine route, which still represents about two-thirds of all transport by inland waterway in western Europe;
- the Danube route;
- the north/south route (France, Belgium, the Netherlands);
- the east/west route, linking the Netherlands , northern Germany and Poland).

1) Traffic on the Rhine route

The CCNR has been monitoring traffic on the Rhine route since the nineteenth century; the criteria have remained constant, such that historical monitoring of this traffic is perfectly possible. A distinction is generally drawn between traditional Rhine traffic (only traffic using the German and French sections of the Rhine) and total Rhine traffic, which covers transport over the entire length of the Rhine. The evolution of these two concepts is described in the graph below.



2) Traffic on the Danube in Germany and Austria

In addition to traffic on the Danube in Germany and Austria, this also covers traffic crossing between the Rhine and the Danube using the Main-Danube Canal. It should be noted that in 2003 the quantity of traffic crossing between the Rhine and the Danube was seriously reduced because of very poor water conditions on the Rhine, which was exceptional in comparison with 2002.

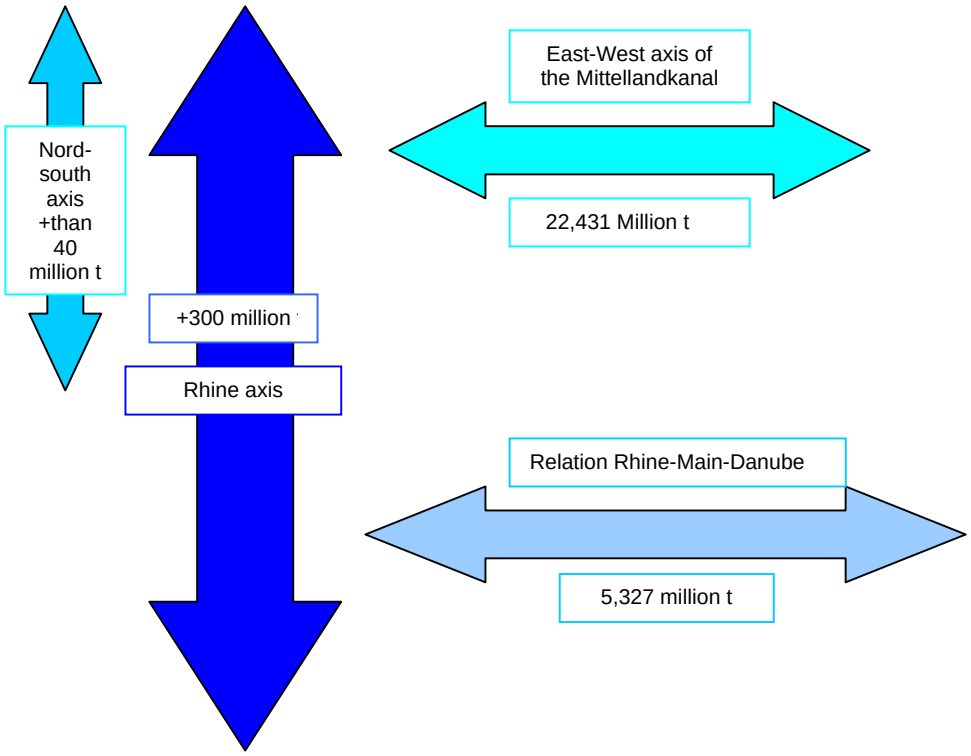
In 2004, when the economic climate and water conditions were favourable, the 5 327 million tonnes transported represented an increase of more than 16%, although the level achieved in 2002 was not reached.

3) North/south traffic

North/south traffic covers transport between France, Belgium and the Netherlands, and mainly involves traffic with sea ports. This is an area that has seen substantial development, particularly for the transport of goods in containers.

4) East/west traffic

This includes both traffic between Poland, the Czech Republic, Germany and sea ports, and German national and international traffic using the canals of northern Germany.



D. Evolution of the main categories of goods

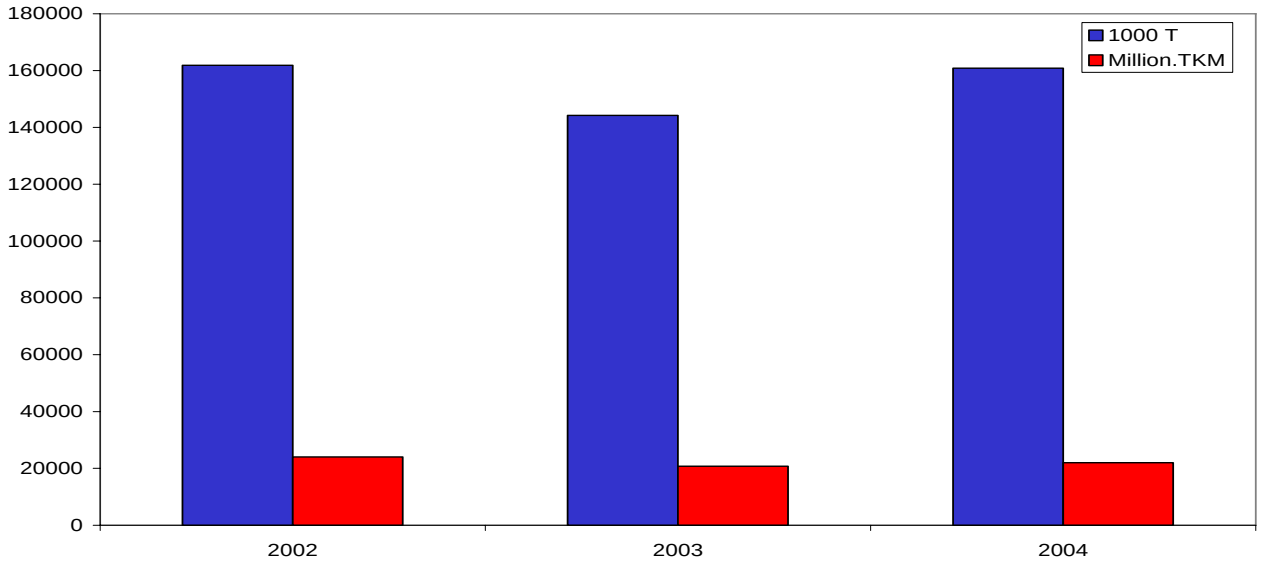
1) Agricultural products

Traditionally, agricultural products constitute the type of goods suitable for transport by inland waterway because of their volume and their packaging. They are, however, a very cyclical type of transport because of their seasonal nature. The volumes transported are also dependent on the volume of harvests (for cereals) and deliveries arriving in sea ports (for soy beans, for example).

Over the period from 2002 to 2004, the volume transported and the services provided increased by 3% and 9% respectively over the inland waterways of Europe as a whole. At the same time, the transport of fertilisers decreased by about 2.5% over the same period.

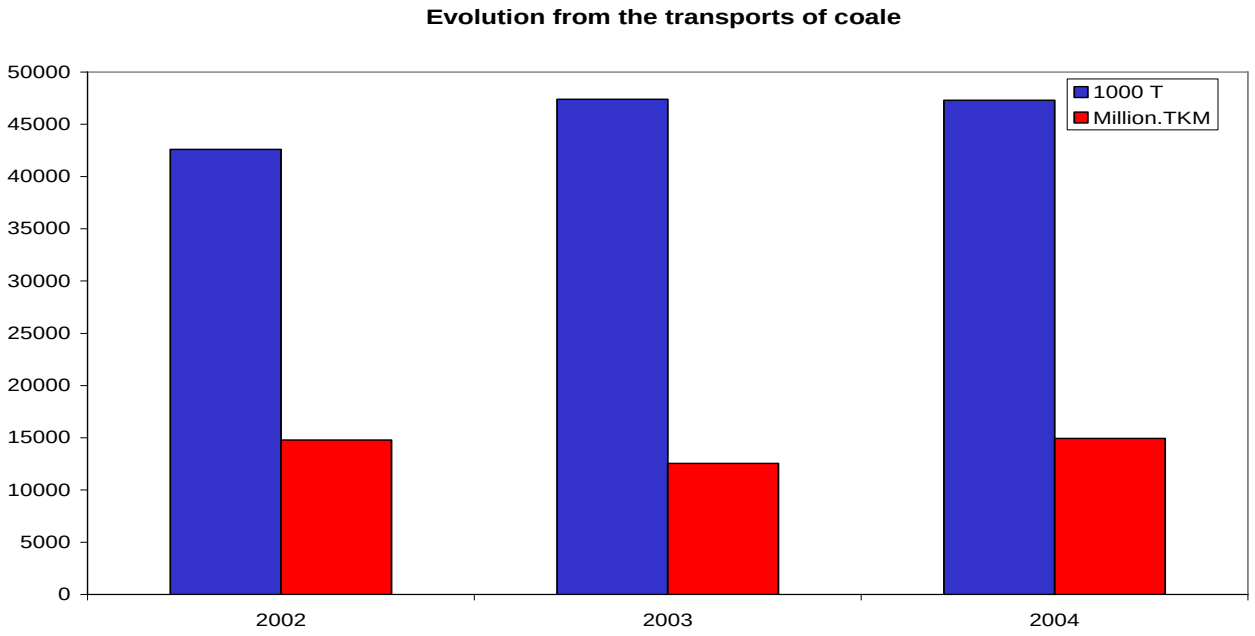
Although in France the volume transported fell by more than 13% between 2002 and 2004, this was due to the poor harvest in 2003 caused by the drought, thereby generating a smaller volume of products for export. Globally and structurally, we are in the presence of relative stability in the use of inland waterways for the transport of this type of product, because of the cost advantage and its suitability for bulk quantities.

Evolution from the transports of agricultural products



2) Coal and coal products

Between 2002 and 2004 the transport of solid mineral fuels in Europe advanced by 11%; indeed the figure for the Rhine route was +12%. This evolution is due to the considerable increase in Germany's importing of coal, due partly to the country's phasing out of coalmining on its own territory which is therefore compensated by imports, and also to increased consumption of coal by the iron and steel industry and in the production of energy in power stations. The evolution of oil prices has also been a factor in the increased use of this type of energy. This situation is expected to continue in 2005 and 2006.

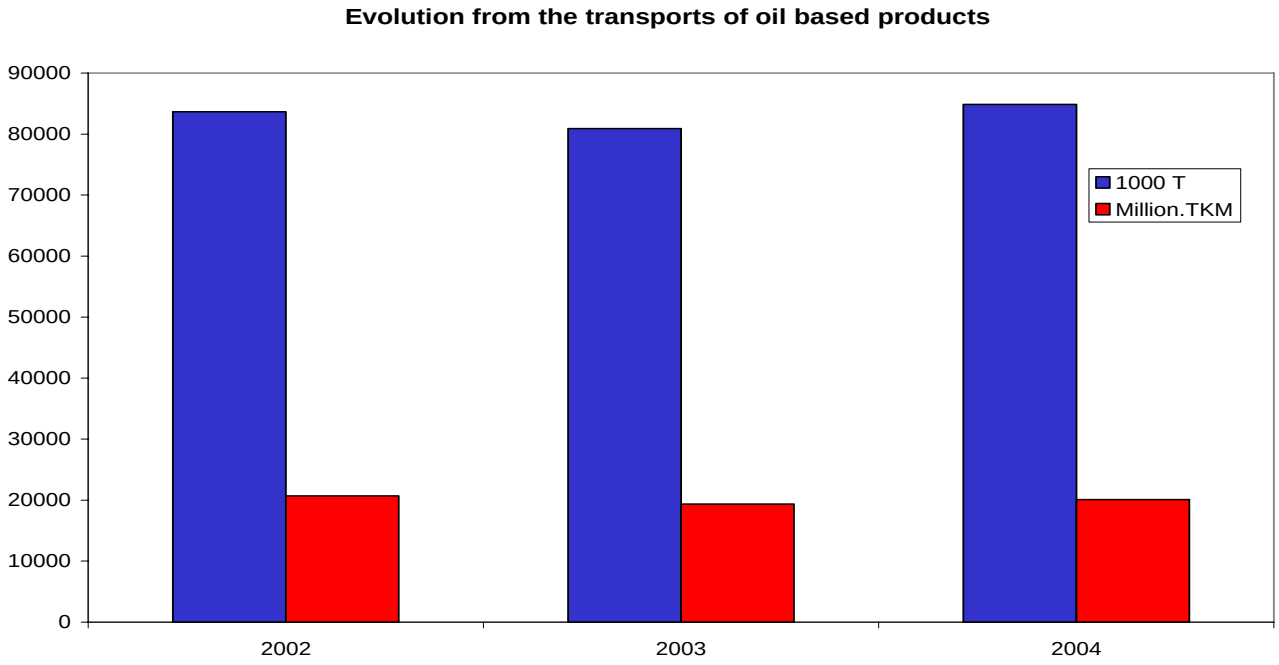


3) Oil-based products

Over the three-year period, the transport of oil-based products in the countries under consideration progressed by about 1.5%. Over the same period, European consumption of oil-based products increased by about 3%. These figures therefore reflect a smaller market share for inland waterway transport.

	2000	2001	2002	2003	2004
Consumption of oil - EU (in million tonnes)	594	600	595	608	613

The increased volume of products consumed, and therefore carried, has been absorbed by the use of pipelines.



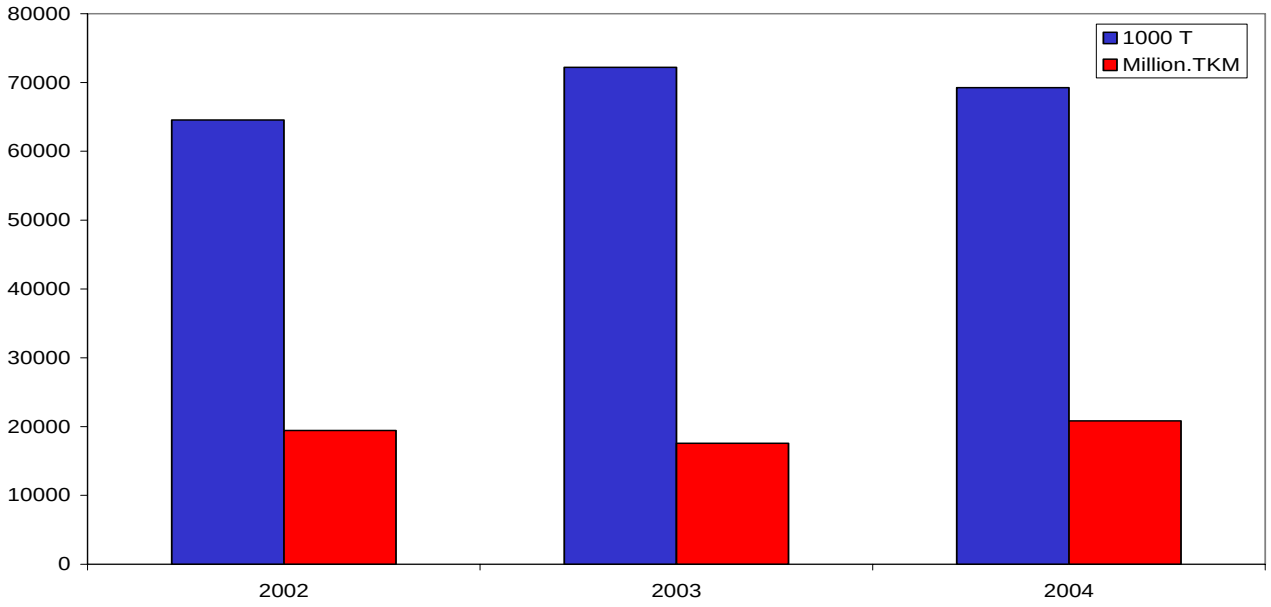
4) Iron and steel products

The volume of products related to the iron and steel industry transported increased by more than 7% in Europe between 2002 and 2004. This was because, as a result of sustained world demand, particularly from 2004 onwards, German steelworks have been operating at maximum capacity to meet demand from China and south-eastern Asia in general.

	2000	2001	2002	2003	2004
World production of steel	848	850	902	969	1057

As these products are intended for export, they are sent to the sea ports in the form of semi-finished goods. Conversely, the raw materials used (ore and scrap for the metal industry) are brought in by boat from these ports. This worldwide situation of sustained demand for steel is expected to continue for several years yet.

Evolution from the transports of iron and steel products

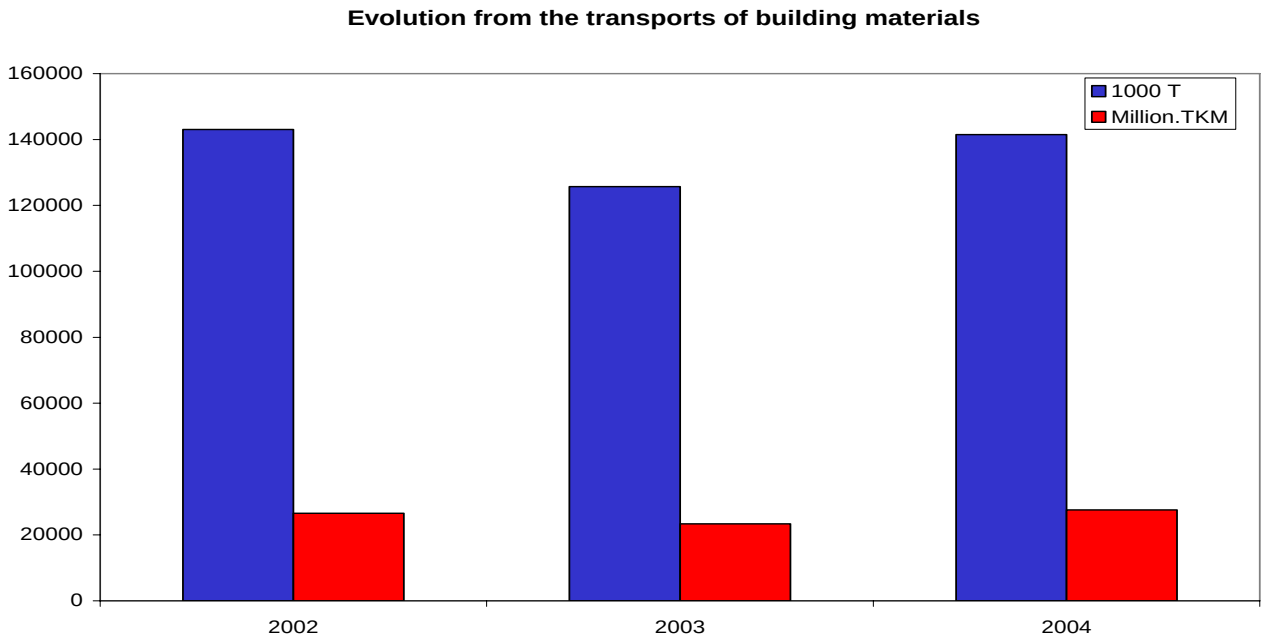


5) Building materials

The structure of transport in this sector on the Rhine has been shrinking regularly for a number of years. This is due partly to the building and public works industry suffering from difficult conditions at present, particularly in Germany, and partly also to the gradual exhaustion of sites for quarrying sand and gravel the length of the upper Rhine and the development of new quarrying sites in the North Sea.

2003 saw a real drop in transport of this type over all the inland waterways, with volume falling by more than 12%. This temporary drop is a consequence of the water conditions in 2003. When there is less freight space available on the market, the cost of transport encourages market players to keep available space available for other goods, and be prepared to defer the transport of building materials or transferring part of it to road haulage.

The volume transported in 2004 was closer to normal, but still slightly less than the figures for 2002, confirming the structural evolution towards less volume in this sector.

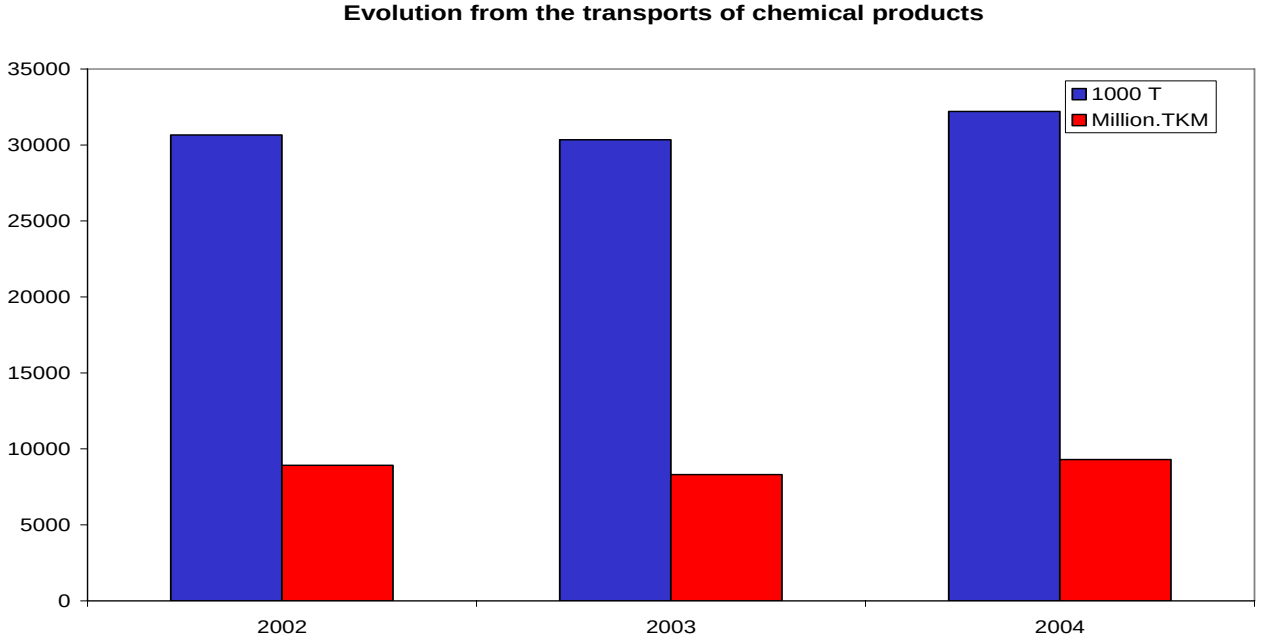


6) Chemicals

After a number of lean years in the chemical sector, the upturn that has been expected for some months began to be visible in the chemical industry in 2004. As a result the increase in transport began in 2004, and the trend is expected to continue in 2005 and even into 2006.

	2000	2001	2002	2003	2004
Chemical production – EU (index 100 in 2000)	100	102	107	109	112

In view of the security inland waterway transport offers for the transport of goods of this type, it would appear to be well placed to increase its market share in this sector. Thus in western Europe the volume of chemicals carried has progressed by 5% and the services provided has increased by 4%.



7) Manufactured goods and containers

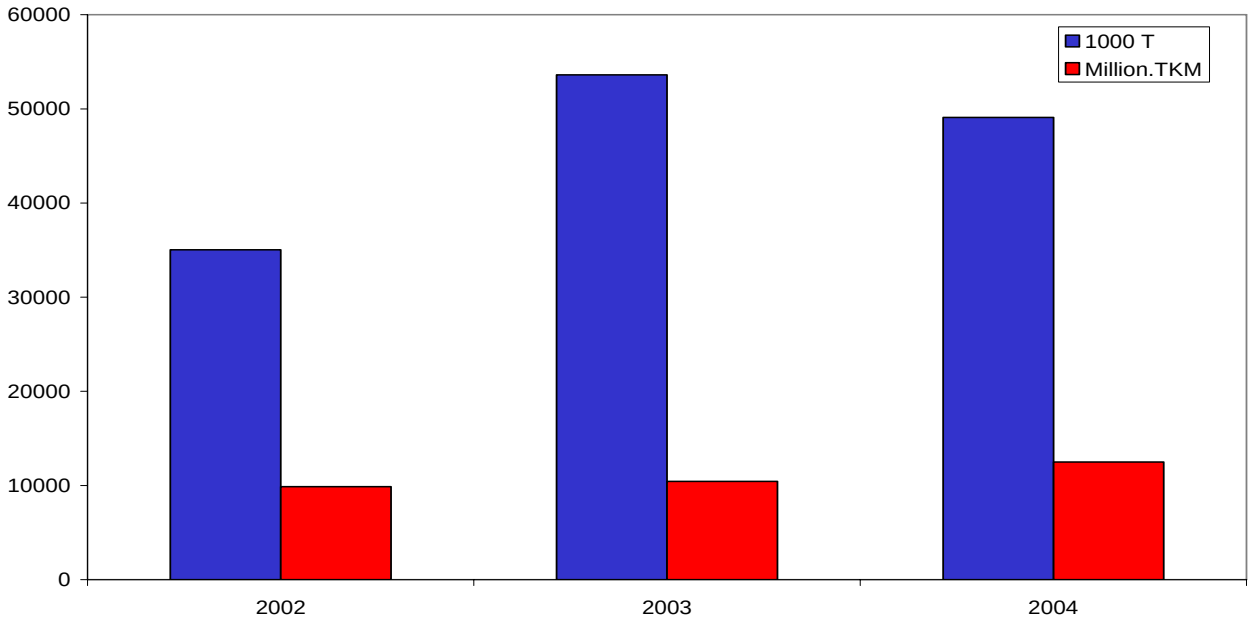
80% of the volume of this category covering the transport of manufactured goods involves the transport of containers. The transport by inland waterway of vehicles and other finished goods has increased substantially, in line with exports, and the same is true of the transport of containerised goods.

This last type of transport developed in Europe by +40% between 2002 and 2004. While the increase is more than 26% on the Rhine, where this sector has developed considerably over the past decade or more, the figure is much higher on other routes – the north/south route showed 2004 an increase of more than 35% in northern France. This high figure is above all due to the fact that this type of transport is more recent here than on the Rhine.

Moreover, there has also been an increase in containerised transport in the delta further to the creation of multi-modal platforms in the close hinterland. In general, we can also see that the increase in transhipments of containers in the delta sea ports as a result of growth in Asian countries was more than 25% between 2002 and 2004. This very rapid development has resulted in congestion that was prejudicial to the competitiveness and reliability of inland waterway transport in 2004, forcing the sea ports to do their utmost to accelerate the development of their infrastructures, increase their staff, and rationalise their operation.

This trend is expected to continue over the coming years. The market share held by inland waterway transport has been able to progress considerably for links between sea ports and their hinterland. Inland waterway transport must find ways of accompanying the very favourable evolution of demand in this sector.

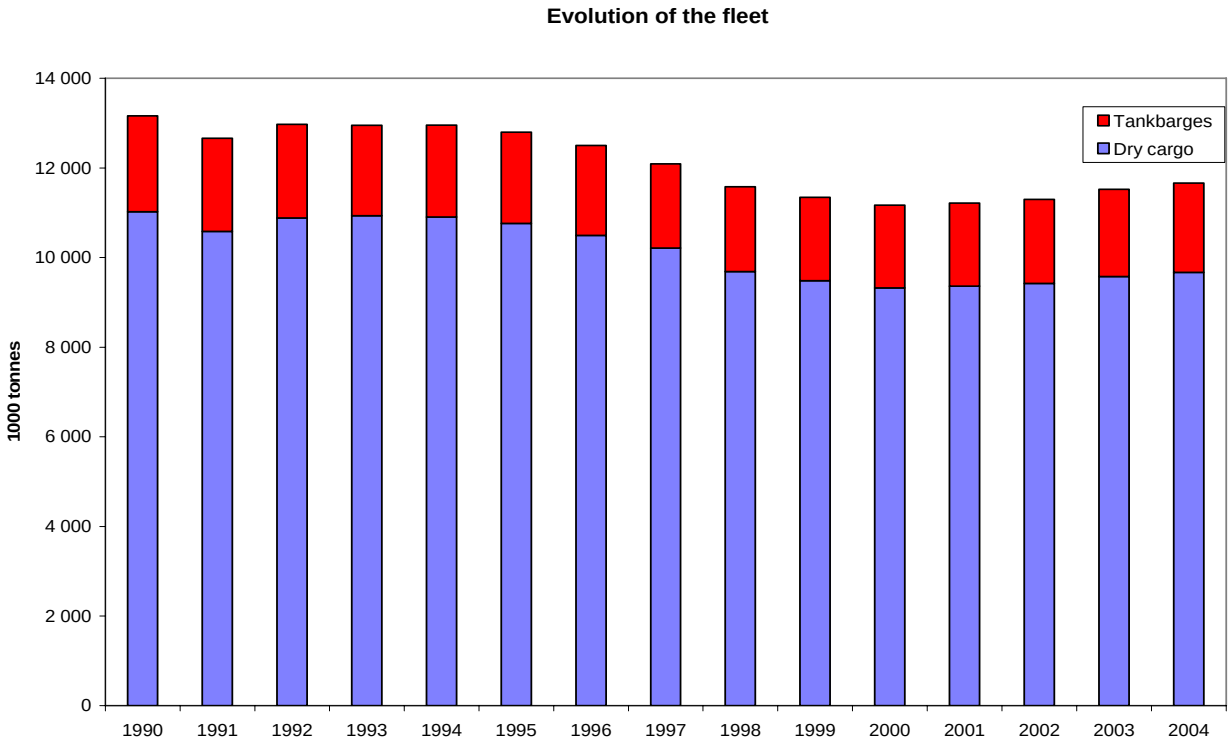
Evolution from the transports of container and manufactured goods



Chapter 2 - Analysis of offer of transport

A. Structure of the national fleets

Observation of the evolution of capacity on the European market and on the Rhine in particular points to a reduction in offer on the market in the course of implementation of the policy of structural reorganisation. It was more particularly between 1995 and 2000 that a substantial reduction was visible.



From 2001 onwards, but particularly in 2003, a clear inversion of this trend has been apparent, with the gradual change in the “old for new” rule. This trend continued in 2004, and indeed was even more apparent for tanker transport.

It should be noted that the average size of the new units on the market since 2001 is considerably larger than that of older vessels, and this element is not without its impact on the offer of transport during periods of low water. Furthermore, the operating mode of these new units (24 hours a day) means that the productivity of one recent tonne of transport is not the same as that of an earlier tonne (12 to 14 hour / day).

To measure the effect of the contribution new capacity makes to the offer of transport, it is therefore necessary to apply a weighting coefficient to new tonnage on the basis of this factor.

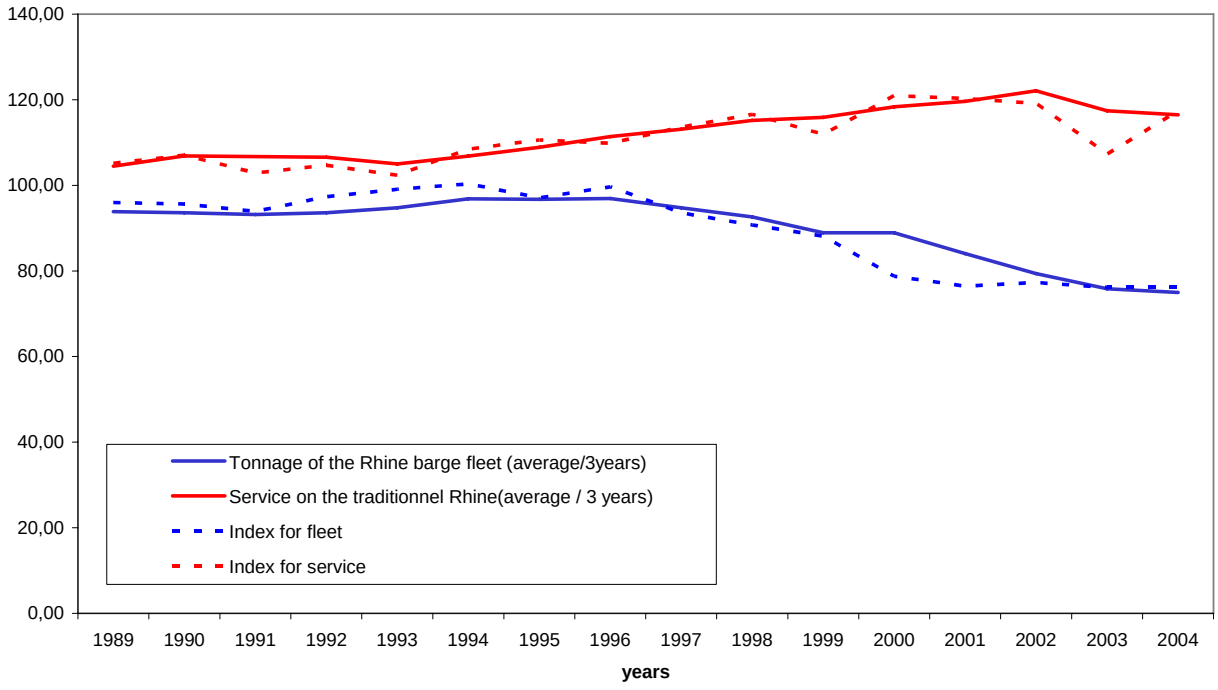
It was during the period of prolonged drought in the summer of 2003 that the value of small units became apparent. Indeed, during such periods, large-scale units cannot travel under satisfactory conditions – and at times are indeed unable to move at all – so that there is more demand for the smaller units as they can still be filled to maximum capacity, and at good rates since there is a shortage of offer. This was in fact the case on the Rhine and its tributaries. These small units are no longer being replaced by the new units at the moment, in fact, and they play a vital, irreplaceable role in serving the hinterland, throughout the entire network of canals.

B. Arrival of new transport capacity on the market

Examination of the evolution in the capacity on the market compared with that of services provided shows that while there is no major difference between the two for the transport of dry goods, the same does not apply to transport by tanker. Between 2002 and 2004, indeed, capacity on the market increased whereas the services provided in the sectors concerned have not developed in the same direction. This may well point to a trend towards the appearance of over-capacity; this trend was confirmed in 2005 in view of the volume of new transport capacity put on the market.

It is therefore recommended that investors remain prudent, and keep sight of the prospects for the evolution of demand in the sector concerned. *(The example below shows the situation on the Rhine.)*

Comparision between the of evolution of service on the traditional Rhine and the capacity of the Rhine Fleet



Chapter 3 – Navigation conditions

Water conditions

In terms of methodology, it is agreed that this factor should be considered on the basis of observation of water levels at Maxau, Kaub and Ruhrort for the Rhine and at Hofkirchen for the western part of the Danube.

The phenomenon of water conditions is not significant for the canals, but periods of ice must be taken into consideration, particularly in northern Germany. This also applies to rivers such as the Elbe and the Oder.

While the years 2002 and 2004 saw average water conditions, featuring periods of low water and short-lived seasonal flooding, 2003 may be viewed as an exception year because of the long period of drought observed during the summer, which seriously reduced inland waterway transport capacity in Europe for a number of months, particularly on the Rhine and its tributaries. This situation was exceptional in its importance and its duration, and it highlighted firstly the importance and usefulness of small units within the European fleet, and secondly the importance of the modal share of inland waterway transport which, should it fail, cannot be replaced by other land-based modes of transport in the short term, particularly for the main goods that by tradition are transported on waterways.

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Chapter 4 - Microeconomic analysis

A. Procedure for the microeconomic approach

Introduction

Alongside the monitoring of the evolution of offer and demand on the market, it proved to be important to have the means of examining the conditions under which a vessel is operated. A good understanding of these elements should make it possible firstly to detect shortcomings that in the long run have results such as poor vessel maintenance, and secondly to measure the impact of a substantial variation in certain items of expenditure by carrying out simulations.

As this is a new approach as regards market observation and directly concerns vessel operators, the preparatory work leading to the setting up of this monitoring tool has been carried out in close collaboration with representatives from the main organisations involved in inland waterway transport in Europe.

To enable the reader to understand the structure and the methodology of these studies, we felt it was useful, in this initial document, to set out the ideas and reasons behind the breakdowns selected.

The microeconomic approach of this tool operates at four levels:

1) characteristic categories of vessels;
2) cost items;
3) compilation of an approach to income based on turnover and therefore the level of activity;
4) the determination of indicative ratios and indexes allowing monitoring and comparisons over time.

1) Definition of the categories of vessels to be included

In compiling this monitoring tool, the vessels used for inland waterway transport have been divided into eight categories, in order to allow the most precise approach possible as regards their characteristics not only in terms of operating costs, but also in terms of their operating mode.

a. Ordinary self-propelled barges with a capacity of between 100 and 700 tonnes

This type of vessel is frequently found on canals and is used for exchange traffic on the Rhine. The vessels are usually owned by individuals and require only a minimum two-man crew. It is therefore on this basis that we evaluate labour costs. These vessels have the highest average age, although this does not preclude intermediate restoration work which may raise their technical level. In terms of operation, these vessels usually work on the basis of 14 hours per day. It can be seen, however, that the number of vessels in this category is falling, although they still represent 21% of the market's transport capacity.

b. Ordinary self-propelled barges with a capacity of between 700 and 1500 tonnes
Vessels of this type also have a relatively high average age; they are mainly operated by individuals. They nevertheless need a crew of at least two and often operate on a daily basis of 14 hours out of 24. Their activity is not the same as that of larger vessels when water levels are low – these vessels can continue to operate and take advantage of attractive freight rates. This category of vessel currently represents approximately 45% of the market's transport capacity.

c. Ordinary self-propelled barges with a capacity of between 1500 and 2500 tonnes
This category of vessel is representative of traffic on the Rhine and on wide-gauge inland waterways. These are vessels that comply with up-to-date technical norms and are operated in an optimal fashion on a round-the-clock basis. As a result, a minimum crew of four is required. These vessels have the lowest average age of all vessels currently on the market. As such, they represent 23% of available capacity in the CCNR's member States. Their size makes these vessels heavily dependent on water conditions for operation at full capacity.

d. Ordinary self-propelled barges with a capacity of over 2500 tonnes
This category includes the most recent and the best equipped vessels in the market. They are mainly to be found on the Rhine and in the delta. They currently represent 12% of available transport capacity in the member States, and their market share is growing constantly.

e. Self-propelled tanker barges with a capacity of between 100 and 700 tonnes
This category includes only a very small number of vessels, mainly operating in Belgium and France(*); it represents 7.5% of capacity in the CCNR's member States.

f. Self-propelled tanker barges with a capacity of between 700 and 1500 tonnes
This category includes the oldest self-propelled barges with single hulls, requiring just a two-man crew. These vessels represent approximately 32% of the market's transport capacity.

g. Self-propelled tanker barges with a capacity of between 1500 and 2500 tonnes
This category is representative of the generation of self-propelled tanker barges that went into service in the 1980s and 1990s. Most have double hulls with the specific features in terms of operation and costs that this involves. They have a crew of at least four. In view of the lower average age of these vessels, differences will appear in terms of interest costs and amounts allocated to amortisation. This category represents approximately 39% of the market's transport capacity.

h. Self-propelled tanker barges with a capacity of over 2500 tonnes
This category includes the most recent vessels in the market. They mainly operate on the Rhine and in sea ports as supply vessels. Their current market share may be estimated at approximately 21%, and it is growing constantly.

(*) Vessels specialising in the transport of cement are included in this category.

2. Definition of cost headings to be monitored

Table 1

This table shows the data compiled by the Secretariat in order to show the relative importance of the various categories in the market and to allow monitoring of their cost structures over time. Thus it will be possible to monitor the addition of new vessels and the gradual decline of small vessels and, more importantly, incorporated in our market model.

At the foot of this table are details of the data to be taken into account in calculating the operating result. This includes the value of the vessel based on the replacement cost or the amount for which the vessel is insured.

The operating mode and the number of days also supply information that is useful when evaluating the annual result. These elements are obtained from the profession and from the insurance companies.

Table 2

This table covers the main headings for income and expenditure. The first part covers the fixed costs for keeping the vessel operational. The second part covers the variable costs directly related to the activity. The third part covers revenue and the creation of reserves.

Fixed costs

- ***Personnel costs***

  Although personnel costs, including social charges, for an employee on a relatively large vessel may be evaluated at between 40 000 and 60 000 euros per year, the amount is not the same for smaller vessels, which are often operated by the owner. In this case, from the accountant's point of view, personnel costs are often very low and the operating profit should be added to the operator's profit. Remuneration for the entrepreneur should also be taken into account because, although the owner operating the vessel receives remuneration for his work on board, this additional remuneration is for his activities in connection with the administration of the vessel in his capacity as owner. This involves remunerating the activities and risks incumbent on the owner in his capacity as entrepreneur that are carried out in addition to the work directly connected with navigation (administrative work, chartering, investment risks, various ancillary activities, etc). These costs should be put down to either the owner operating the vessel or to the managing body (corporation, charter agency, association of operators, etc). The purpose of this operation is to examine accounts in order to determine average values likely to supply indications as to profit capacity and investment potential.

- ***Insurance***

  The amount of insurance premiums, including any excesses, will be indicated by the insurance companies.

- ***Other costs***

  These include canal dues, pilots' fees, port taxes, etc.

The notion of **the loss of the vessel's value** covers:

- ***the cost of repairs and maintenance***

  The amount of expenditure on repairs and maintenance will be obtained from the central file.

- ***Allocations to amortisation***

  The amount allocated to amortisation depends on the residual life of vessels in that particular category.

  As the vessel ages, these two concepts move in opposite directions (allocations to amortisation decrease, while the cost of repairs increases).

- ***Interest charges and capital remuneration***

  This information should be obtained from the banks. In the event of substantial fluctuation in interest rates, a lump-sum amount could be taken into account for simulation purposes.

Variable costs

- **Cost of diesel oil and lubricants**

  This decisive element can be obtained from the profession, perhaps supplemented by information from the central file.

- **Cost of minor items**

  This information cannot be obtained from the central file; it covers painting costs, etc.

- **Other costs**

  This umbrella heading covers all other operating expenditure (cost of communications, port dues, pilots' fees, etc).

  Once the list of costs is complete, it is possible to determine the profitability threshold by adding up the columns. This makes it possible to evaluate, for each category, the profitability and the capacity for investing effectively in order to maintain the vessel in good condition in the long term.

  This table also provides information on turnover, gross result and capacity to constitute reserves. These data elements should be compared against costs from an accountant's point of view.

3. Considering income in terms of turnover and therefore the level of activity

Table 3

This table shows a number of indicators that should permit a description summarising the situation in graph form.

- ***Margin on variable costs***

  This is calculated by deducting the amount of variable costs from sale income.

- ***Margin on variable costs / actual turnover***

  This ratio should make it possible to follow the evolution of profitability over a number of years and to indicate trends.

4. Indicators allowing monitoring and comparisons over time

Table 4 - Indicators

This table shows monthly values, making it easier to understand evolutions at the microeconomic level. It is not appropriate for these to be broken down by category of vessel.

- ***Diesel oil index***
  This index is based on data concerning the price of diesel oil.
- ***Freight index***
  This index is drawn up using a weighted average of freight carried for important items and important relations.
- ***Load index***
  The purpose of this index is to represent the possibilities for operating available transport capacity in relation to the water conditions (for the Rhine only).

B. Evaluation of the microeconomic situation over the years 2001 to 2003

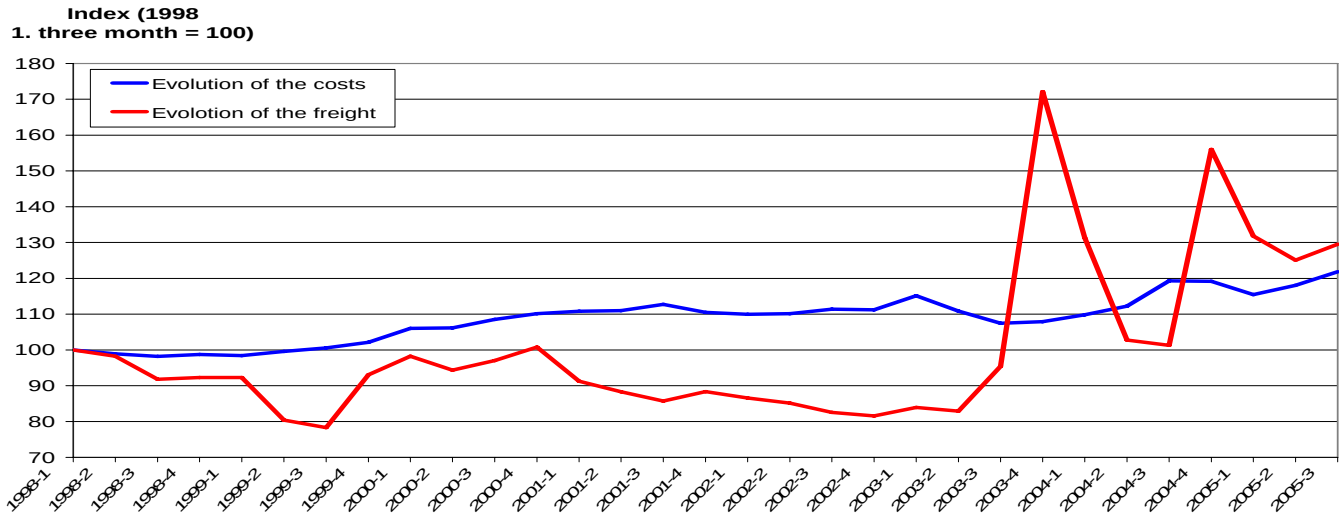
1) Freight rates

It would appear to be essential to present a reliable approach to the freight rates charged over significant routes and for given types of transport, inasmuch as it is the combination of these rates with the volumes transported, and more particularly with the services provided, that produces the figure for the turnover achieved by the vessels. This factor is therefore an important indicator in the evaluation of operating conditions in the market.

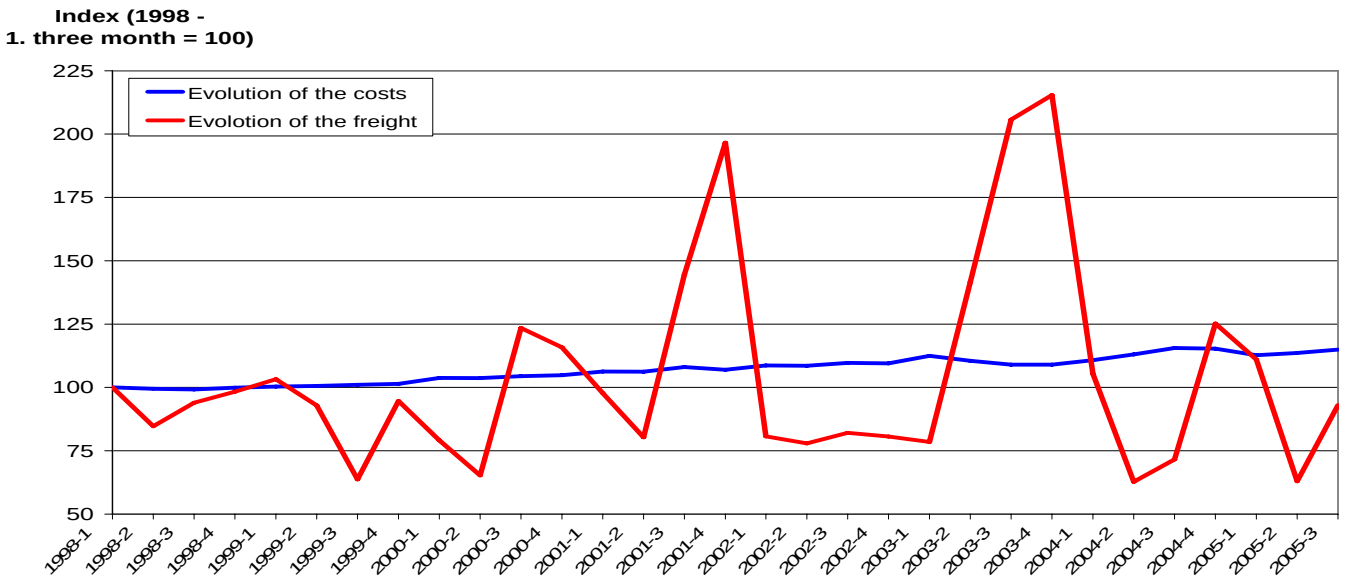
As applied here, the setting up of a realistic and reliable approach to monitoring freight rates comes up against the difficulty in accessing information that is representative, regular and reliable.

It is still necessary to consult the profession's representatives in order to determine possible sources of information and the methodology to apply. It should be possible in the next publication to present a more precise approach for monitoring freight rates on the market. Until then, we shall limit ourselves to presenting two charts drawn up by NEA that compare, in index form, the evolution of freight rates and operating costs for dry transport and tanker transport.

Market for transport of dry goods



Market for transport by tanker



2) Analysis of cost structure

The study carried out by NEA was intended to allow evaluation of the situation of undertakings in terms of the evolution of their running and operating costs; initially it covered a sample of 220 self-propelled vessels for transporting dry goods and 42 self-propelled vessels for tanker transport belonging to the Dutch fleet.

Despite the small size of this first sample analysed, it supplies indications concerning the structure of loads by type and size of vessel. This approach will be adapted as the sample examined is extended. The aim is two-fold: firstly to provide the operator with a reference enabling him to ascertain his position in relation to the segment in which he operates, and secondly to be able to follow or indeed anticipate the evolution of various items of expenditure at the same time as assessing the impact of their evolution on operation and, as appropriate, to detect the onset of a crisis situation.

For this innovative approach among market observation publications, a major difficulty was constituted by access to representative data. A number of possibilities are currently coming to the fore, and these will make it possible in the next publication to present not only elements concerning 2004 but also to extend the sample to include a larger number of vessels. From 2006 it should be possible to also include vessels belonging to the Belgian, French and German fleets, which would make it possible to take account of specific local features of operating the vessels. On the basis of this data covering the entire European market, it may be possible to forecast the evolution of costs.

The elements available to us in compiling this initial publication nevertheless enable us to note that for both dry and tanker transport there is a difference in the structure of fixed and variable costs that depends on the size of the vessel, its age, the crew it requires and its operating mode.

Thus it appears that it is among the smallest vessels (100-700 tonnes) that the average age is highest. This would appear to be logical, in that it is this type of vessel is no longer being built. On consequence, their annual depreciation rate substantially lower that than of larger and on the whole much more recent vessels.

Quite logically, the proportion of expenditure on insurance and financial charges also follows this trend.

Regarding the cost of maintenance and repairs, it appears that these occupy a similar proportion of costs whether the vessel is large or small. This is due to the fact that while the small units require maintenance because of their age, the new units also need very regular maintenance because they are operated very intensively (24 hours a day).

The proportion of personnel costs falls as the size of the vessel increases.

During this period from 2001 to 2003, a clear drop in financial charges is noticeable in every category, mainly due to the fall in the banks' interest rates.

The price of fuel oil averaged approximately 29 euros in 2002; this figure is about 3 euros less than the price in 2001, which is on the whole reflected by a drop in this expenditure heading. From autumn 2002 onwards, oil prices on world markets rocketed with the prospect of war in Iraq. It was not until towards the end of the first half of 2003 that oil prices returned to a lower level, as the risk of war had been averted. In the second half of 2003, prices evolved in a fairly stable manner.

In 2004, however, they generally tended to increase, despite a short calm period towards the end of the year.

Conclusions and forecasts

In view of the period covered by this initial publication (2001-2004), it does not appear to be possible to make forecasts for 2005, which indeed will soon be over. The main aim of this first publication has therefore been to lay down markers for a series of publications that are intended to analyse the current situation and forecast the situation over coming months. Thus the publication scheduled for the end of 2005 will include forecasts for the start of 2006.

Analysis of evolution over the period 2001-2004 nevertheless permits a number of statements concerning inland waterway transport in Europe and in current evolution.

Thus the very lengthy period of low water levels during the summer of 2003 highlighted the importance of having smaller vessels in fleets during periods of low water levels, both on major inland waterways and at a time when the only units coming onto the market are in fact large vessels, for reasons of economy of scale.

This period of exceptional water conditions also made it possible to note the modal position of inland waterway transport in the market for land-based transport. This it became apparent that, in the event of the temporary partial failure of inland waterway transport, it is impossible for the other modes of transport to step in rapidly and absorb the demand for transport not covered by inland waterway transport as they are far from having sufficient flexibility and capacity to take over.

The speed with which new vessels, particularly those offering tanker transport, are being put on the market since the end of the policy of structural reorganisation and the gradual change in the “old for new” rule is such that there are fears that over-capacity may reappear. Indeed comparison of the volume of new transport capacity put on the market and the evolution of demand for tanker transport (which is stagnant, to say the least) points to the fact that an obvious gap is developing.

The substantial increase in transport using containers observed over almost a decade but which has accelerated recently offers inland waterway transport a chance to increase its market share, if it is able to respond to demand by adapting and rationalising its operation so that is can be integrated into logistics chains. While it is clear that the port organisations need to make an effort in terms of developing their infrastructures – which they are currently doing – it is also important for inland waterway transport to adapt its method of operating so that it is able to respond to demand effectively. Its activity in traditional markets such as the transport of agricultural goods and above all transport in connection with the iron and steel industry and the transport of coal and chemicals has increased between 2002 and 2004; the resulting high level is due to economic growth and more particularly to demand from the countries of south-eastern Asia. This situation is expected to continue in the coming years.

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Appendices

Offer of transport capacity

Methodology

Definitions, methods and nomenclature

Concerning these statistics on the evolution of inland fleets, the CCNR has been trying for decades to determine as reliably as possible the available transport capacity in the transport market. This has always been a difficult objective to attain, as the information passed on by the member States is not always completely harmonised, despite the CCNR's adoption of a resolution on precisely this point in 2000 for the fleets of its member States.

The elements of data transmitted to the CCNR in the form of data files come from the national registers. Some of these, including France, are unfortunately still undergoing the restructuring which will make them more reliable.

To reflect the most faithful image possible of the offer of transport capacity on the market, the States only take into account those vessels that actually provided transport during the previous year, ie active vessels, or what may be regarded as the "operational" fleet because the vessels comprising the fleet have the necessary certificates to become active at any time in response to demand for transport on the market.

For the future, harmonisation aimed at taking account of the "operational" fleet is desirable, but the present state of some registers does not permit this for the time being.

In view of the small number of "chaland" barges still in the market and their negligible impact on the offer of transport capacity, they are not included in these statistics either.

When basic changes are made to statistics at the national level, as much care as possible is taken over transmitting information to ensure the possibility of using the figures in analyses. When the data for a given year is not available or is incomplete, the data elements for previous years are used as an indication so as not to leave a gap.

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Table OM1 – INLAND FLEETS 2000-2004 (Summary)
BY CATEGORY OF VESSEL

Country	Ordinary self-propelled barges			Ordinary barges			Total capacity of the dry cargo fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
				31.12.2000					
Germany	1028	1198527	516452	982	891738		**2010**	**2090265**	**516452**
Austria							**0**	**0**	**0**
Belgium	1158	971571	456941	146	359903		**1304**	**1331474**	**456941**
France	1126	520353	233675	611	593838		**1737**	**1114191**	**233675**
Luxembourg	26	26803	13096	2	5660		**28**	**32463**	**13096**
Netherlands	3404	3278465	1579760	751	1292402		**4155**	**4570867**	**1579760**
Switzerland	18	33052	20404				**18**	**33052**	**20404**
total	**6760**	**6028771**	**2820328**	**2492**	**3143541**		**9252**	**9172312**	**2820328**
				31.12.2001					
Germany	988	1188918	506960	954	892591		**1942**	**2081509**	**506960**
Austria							**0**	**0**	**0**
Belgium	1131	982986	471275	157	380602		**1288**	**1363588**	**471275**
France	1129	526289	237152	625	601349		**1754**	**1127638**	**237152**
Luxemburg	25	26345	12969	1	2830		**26**	**29175**	**12969**
Netherlands	3322	3236288	1582483	759	1314625		**4081**	**4550913**	**1582483**
Switzerland	14	24560	15648				**14**	**24560**	**15648**
total	**6609**	**5985386**	**2826487**	**2496**	**3191997**		**9105**	**9177383**	**2826487**
				31.12.2002					
Germany	975	1182878	508002	920	877802		**1895**	**2060680**	**508002**
Austria							**0**	**0**	**0**
Belgium	1103	997928	485124	165	382858		**1268**	**1380786**	**485124**
France	1152	542743	146921	609	588232		**1761**	**1130975**	**146921**
Luxemburg	23	23741	12093	1	2830		**24**	**26571**	**12093**
Netherlands	3240	3285722	1608718	772	1334681		**4012**	**4620403**	**1608718**
Switzerland	12	23369	14210				**12**	**23369**	**14210**
total	**6505**	**6056381**	**2775068**	**2467**	**3186403**		**8972**	**9242784**	**2775068**
				31.12.2003					
Germany	955	1139124	503123	894	855735		**1849**	**1994859**	**503123**
Austria							**0**	**0**	**0**
Belgium	1099	1024409	507005	200	379695		**1299**	**1404104**	**507005**
France	1141	545351	235136	612	609431		**1753**	**1154782**	**235136**
Luxemburg	21	21340	10868	1	2830		**22**	**24170**	**10868**
Netherlands	3194	3380582	1570231	800	1427738		**3994**	**4808320**	**1570231**
Switzerland	12	23369	14210				**12**	**23369**	**14210**
total	**6422**	**6134175**	**2840573**	**2507**	**3275429**		**8929**	**9409604**	**2840573**
				31.12.2004					
Germany	950	1127796	507802	1014	949093		**1964**	**2076889**	**507802**
Austria	5	7058		54	84807		**59**	**91865**	**0**
Belgium	1113	1046203	522158	223	432111		**1336**	**1478314**	**522158**
France	956	506196	183181	465	494245		**1421**	**1000441**	**183181**
Luxemburg	19	19521	9931	1	2830		**20**	**22351**	**9931**
Netherlands	3155	3432160	1534350	818	1468427		**3973**	**4900587**	**1534350**
Switzerland	13	25942	14909	1	1258		**14**	**27200**	**14909**
total	**6211**	**6164876**	**2772331**	**2576**	**3432771**		**8787**	**9597647**	**2772331**

Table OM1 – INLAND FLEETS 2000-2004 (Summary)
BY CATEGORY OF VESSEL

Country	Self-propelled tankerbarges			Tanker barges			Total capacity of tanker fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
				31.12.2000					
Germany	305	446043	211918	41	55352		**346**	**501395**	**211918**
Austria							**0**	**0**	**0**
Belgium	205	242262	108761	8	9144		**213**	**251406**	**108761**
France	70	51414	20734	64	90823		**134**	**142237**	**20734**
Luxemburg	27	47103	23284	2	8444		**29**	**55547**	**23284**
Netherlands	719	721217	370963	49	80666		**768**	**801883**	**370963**
Switzerland	45	102604	45210	0	0		**45**	**102604**	**45210**
total	**1371**	**1610643**	**780870**	**164**	**244429**		**1535**	**1855072**	**780870**
				31.12.2001					
Germany	313	459700	222904	41	55279		**354**	**514979**	**222904**
Austria							**0**	**0**	**0**
Belgium	200	236952	108422	7	9826		**207**	**246778**	**108422**
France	65	53233	23236	69	97475		**134**	**150708**	**23236**
Luxemburg	23	38569	19313	2	8435		**25**	**47004**	**19313**
Netherlands	709	718939	369598	44	75806		**753**	**794745**	**369598**
Switzerland	40	90712	40535	0	0		**40**	**90712**	**40535**
total	**1350**	**1598105**	**784008**	**163**	**246821**		**1513**	**1844926**	**784008**
				31.12.2002					
Germany	324	486517	240106	43	55888		**367**	**542405**	**240106**
Austria							**0**	**0**	**0**
Belgium	197	240981	112357	6	11838		**203**	**252819**	**112357**
France	66	54949	22953	67	95575		**133**	**150524**	**22953**
Luxemburg	21	34927	18050	2	8435		**23**	**43362**	**18050**
Netherlands	705	718258	368577	47	79646		**752**	**797904**	**368577**
Switzerland	36	85332	38109	0	0		**36**	**85332**	**38109**
total	**1349**	**1620964**	**800152**	**165**	**251382**		**1514**	**1872346**	**800152**
				31.12.2003					
Germany	336	508502	258021	45	54930		**381**	**563432**	**258021**
Austria							**0**	**0**	**0**
Belgium	200	242349	114844	6	11838		**206**	**254187**	**114844**
France	71	65421	23020	65	91815		**136**	**157236**	**23020**
Luxemburg	18	30481	15720	2	8435		**20**	**38916**	**15720**
Netherlands	720	771759	354130	44	75294		**764**	**847053**	**354130**
Switzerland	31	78036	33144	0	0		**31**	**78036**	**33144**
total	**1376**	**1696548**	**798879**	**162**	**242312**		**1538**	**1938860**	**798879**
				31.12.2004					
Germany	345	522619	271217	49	53280		**394**	**575899**	**271217**
Austria	5	5601		15	22055		**20**	**27656**	**0**
Belgium	217	281516	132661	6	11838		**223**	**293354**	**132661**
France	35	39234	12990	47	67418		**82**	**106652**	**12990**
Luxemburg	18	30481	15720	2	8435		**20**	**38916**	**15720**
Netherlands	746	824283	335545	43	74177		**789**	**898460**	**335545**
Switzerland	29	72860	33105	0	0		**29**	**72860**	**33105**
total	**1395**	**1776594**	**801238**	**162**	**237203**		**1557**	**2013797**	**801238**

Table OM1 – INLAND FLEETS 2000-2004 (Summary)
BY CATEGORY OF VESSEL

Country	Tugs			Pusher tugs			Total propelled vessels		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
				31.12.2000					
Germany	163		33776	286		107041	**449**		**140817**
Austria				10		9200	**10**		**9200**
Belgium	21		5819	59		33517	**80**		**39336**
France	3		835	196		91481	**199**		**92316**
Luxemburg	0		0	20		17609	**20**		**17609**
Netherlands	546		119435	549		241795	**1095**		**361230**
Switzerland	1		368	7		5444	**8**		**5812**
total	**734**		**160233**	**1127**		**506087**	**1861**		**666320**
				31.12.2001					
Germany	158		31757	297		113817	**455**		**145574**
Austria							**0**		**0**
Belgium	22		6282	57		33557	**79**		**39839**
France	24		3580	177		88354	**201**		**91934**
Luxemburg	0		0	20		17609	**20**		**17609**
Netherlands	561		126578	555		238618	**1116**		**365196**
Switzerland	1		368	6		4120	**7**		**4488**
total	**766**		**168565**	**1112**		**496075**	**1878**		**664640**
				31.12.2002					
Germany	158		31757	291		121166	**449**		**152923**
Austria							**0**		**0**
Belgium	3		655	92		44580	**95**		**45235**
France	25		3821	179		89019	**204**		**92840**
Luxemburg	3		655	92		44580	**95**		**45235**
Netherlands	525		120535	559		237739	**1084**		**358274**
Switzerland	1		368	5		1947	**6**		**2315**
total	**715**		**157791**	**1218**		**539031**	**1933**		**696822**
				31.12.2003					
Germany	148		32556	289		126943	**437**		**159499**
Austria							**0**		**0**
Belgium	10		2575	102		48252	**112**		**50827**
France	24		3572	171		85001	**195**		**88573**
Luxemburg	10		2575	102		48252	**112**		**50827**
Netherlands	521		116222	556		232277	**1077**		**348499**
Switzerland	1		368	5		1947	**6**		**2315**
total	**714**		**157868**	**1225**		**542672**	**1939**		**700540**
				31.12.2004					
Germany	143		29234	300		135723	**443**		**164957**
Austria				10		9200	**10**		**9200**
Belgium	13		4303	112		52435	**125**		**56738**
France	24		3572	171		85101	**195**		**88573**
Luxemburg	0		0	18		15220	**18**		**15220**
Netherlands	494		103237	541		224440	**1035**		**327677**
Switzerland	1		368	5		1947	**6**		**2315**
total	**675**		**140714**	**1157**		**523966**	**1832**		**664680**

Austria: *non-detailed data available only from 2004*
France: *no data available for tugs, pusher tugs and passenger vessels*

Table OM1 – INLAND FLEETS 2000-2004 (Summary)
BY CATEGORY OF VESSEL

Country	Excursion vessels			Cruise vessels			Total passenger vessels		
	Units no.	Passengers no.	Power kW	Units no.	Passengers no.	Power kW	**Units no.**	**Passengers no.**	**Power kW**
				31.12.2000					
Germany							**1007**	**204644**	**234398**
Austria							**0**	**0**	**0**
Belgium							**153**	**0**	**23606**
France							**0**	**0**	**0**
Luxemburg							**6**	**1550**	**3257**
Netherlands							**834**	**48885**	**159919**
Switzerland							**39**	**6782**	**40637**
total							**2039**	**261861**	**461817**
				31.12.2001					
Germany							**1044**	**198741**	**250189**
Austria							**0**	**0**	**0**
Belgium							**141**	**9651**	**21983**
France							**0**	**0**	**0**
Luxemburg							**5**	**1300**	**3092**
Netherlands							**853**	**51713**	**164895**
Switzerland							**41**	**7051**	**43796**
total							**2084**	**268456**	**483955**
				31.12.2002					
Germany	1003	194692	225043	34	3500	33636	**1037**	**198192**	**258679**
Austria							**0**	**0**	**0**
Belgium							**141**	**9730**	**21647**
France	303	45035		87	4640		**390**	**49675**	**0**
Luxemburg	5	1300	3092	0	0	0	**5**	**1300**	**3092**
Netherlands	739	36564	110598	166	15295	64957	**905**	**51859**	**175555**
Switzerland	7	2552	2875	38	4999	46921	**45**	**7551**	**49796**
total	**2057**	**280143**	**341608**	**325**	**28434**	**145514**	**2523**	**318307**	**508769**
				31.12.2003					
Germany	1006	194801	227862	43	4912	47289	**1049**	**199713**	**275151**
Austria							**0**	**0**	**0**
Belgium							**144**	**9800**	**21900**
France	303	45035		87	4640		**390**	**49675**	**0**
Luxemburg	5	1300	3092	0	0	0	**5**	**1300**	**3092**
Netherlands	739	34877	103306	184	14464	59392	**923**	**49341**	**162698**
Switzerland	7	2552	2875	40	5053	48301	**47**	**7605**	**51176**
total	**2060**	**278565**	**337135**	**354**	**29069**	**154982**	**2558**	**317434**	**514017**
				31.12.2004					
Germany	1012	192999	212498	47	5894	54246	**1059**	**198893**	**266744**
Austria							**0**	**0**	**0**
Belgium							**149**	**9900**	**22379**
France	303	45035		87	4640		**390**	**49675**	**0**
Luxemburg	6	1700	3636	0	0	0	**6**	**1700**	**3636**
Netherlands	737	35222	97820	187	14999	58447	**924**	**50221**	**156267**
Switzerland	6	2052	1993	39	4943	48371	**45**	**6995**	**50364**
total	**2064**	**277008**	**315947**	**360**	**30476**	**161064**	**2573**	**317384**	**499390**

Table OM2 - INLAND FLEETS AT 31.12.2004 BY TONNAGE

Country	Ordinary self-propelled barges			Ordinary barges			Total capacity of the dry cargo fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
up to 249 t	27	4317	2806	71	8925		**98**	**13242**	**2806**
250 - 399 t	54	17222	10488	63	22122		**117**	**39344**	**10488**
400 - 649 t	46	24024	12945	402	178566		**448**	**202590**	**12945**
650 - 999 t	211	176247	78677	183	154840		**394**	**331087**	**78677**
1000 - 1499 t	404	486239	225130	95	117101		**499**	**603340**	**225130**
1500 - 1999 t	117	201417	89140	62	105294		**179**	**306711**	**89140**
2000 - 2499 t	51	112491	45165	57	132619		**108**	**245110**	**45165**
2500 - 2999 t	31	83142	33917	75	206199		**106**	**289341**	**33917**
3000 t and over	7	22697	9339	6	23427		**13**	**46124**	**9339**
not known	2	0	195	0	0		**2**	**0**	**195**
total	**950**	**1127796**	**507802**	**1014**	**949093**		**1964**	**2076889**	**507802**
Austria									
up to 249 t							**0**	**0**	**0**
250 - 399 t	1	364		1	259		**2**	**623**	**0**
400 - 649 t							**0**	**0**	**0**
650 - 999 t							**57**	**91242**	**0**
1000 - 1499 t							**0**	**0**	**0**
1500 - 1999 t							**0**	**0**	**0**
2000 - 2499 t	4	6694		53	84548		**0**	**0**	**0**
2500 - 2999 t							**0**	**0**	**0**
3000 t and over							**0**	**0**	**0**
not known							**0**	**0**	**0**
total	**5**	**7058**	**0**	**54**	**84807**		**59**	**91865**	**0**
Belgium									
up to 249 t	4	318	1094	5	549		**9**	**867**	**1094**
250 - 399 t	332	120369	66107	19	6523		**351**	**126892**	**66107**
400 - 649 t	177	96503	49115	36	18688		**213**	**115191**	**49115**
650 - 999 t	184	147309	76168	10	8329		**194**	**155638**	**76168**
1000 - 1499 t	233	279866	140461	22	28090		**255**	**307956**	**140461**
1500 - 1999 t	75	123864	61664	14	25164		**89**	**149028**	**61664**
2000 - 2499 t	54	118993	54000	25	59600		**79**	**178593**	**54000**
2500 - 2999 t	37	101585	47411	55	153978		**92**	**255563**	**47411**
3000 t and over	17	57396	26138	37	131190		**54**	**188586**	**26138**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**1113**	**1046203**	**522158**	**223**	**432111**		**1336**	**1478314**	**522158**
France									
up to 249 t	1	242	110	0	0		**1**	**242**	**110**
250 - 399 t	635	240324	97456	50	17176		**685**	**257500**	**97456**
400 - 649 t	140	69021	27093	191	95104		**331**	**164125**	**27093**
650 - 999 t	109	90519	31922	87	65256		**196**	**155775**	**31922**
1000 - 1499 t	52	63795	20306	16	19262		**68**	**83057**	**20306**
1500 - 1999 t	6	9608	3260	17	28668		**23**	**38276**	**3260**
2000 - 2499 t	6	14532	772	26	55871		**32**	**70403**	**772**
2500 - 2999 t	7	18155	2262	77	209659		**84**	**227814**	**2262**
3000 t and over	0	0	0	1	3249		**1**	**3249**	**0**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**956**	**506196**	**183181**	**465**	**494245**		**1421**	**1000441**	**183181**

Table OM2 - INLAND FLEETS AT 31.12.2004 BY TONNAGE

Country	Ordinary self-propelled barges			Ordinary barges			Total capacity of the dry cargo fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Luxemburg									
up to 249 t	0	0	0	0	0		**0**	**0**	**0**
250 - 399 t	3	1127	741	0	0		**3**	**1127**	**741**
400 - 649 t	3	1550	892	0	0		**3**	**1550**	**892**
650 - 999 t	3	2341	1213	0	0		**3**	**2341**	**1213**
1000 - 1499 t	7	8557	4348	0	0		**7**	**8557**	**4348**
1500 - 1999 t	1	1587	707	0	0		**1**	**1587**	**707**
2000 - 2499 t	2	4359	2030	0	0		**2**	**4359**	**2030**
2500 - 2999 t	0	0	0	1	2830		**1**	**2830**	**0**
3000 t and over	0	0	0	0	0		**0**	**0**	**0**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**19**	**19521**	**9931**	**1**	**2830**		**20**	**22351**	**9931**
Netherlands									
up to 249 t	133	20538	16428	106	13424		**239**	**33962**	**16428**
250 - 399 t	292	97702	51052	31	10282		**323**	**107984**	**51052**
400 - 649 t	528	285843	141270	69	38239		**597**	**324082**	**141270**
650 - 999 t	763	616281	297573	34	28610		**797**	**644891**	**297573**
1000 - 1499 t	740	889475	410960	47	58492		**787**	**947967**	**410960**
1500 - 1999 t	289	490739	210831	54	92429		**343**	**583168**	**210831**
2000 - 2499 t	139	310771	135386	102	232605		**241**	**543376**	**135386**
2500 - 2999 t	145	397191	171403	224	623578		**369**	**1020769**	**171403**
3000 t and over	91	323620	93439	94	370768		**185**	**694388**	**93439**
not known	35	0	6008	57	0		**92**	**0**	**6008**
total	**3155**	**3432160**	**1534350**	**818**	**1468427**		**3973**	**4900587**	**1534350**
Switzerland									
up to 249 t	0	0	0	0	0		**0**	**0**	**0**
250 - 399 t	1	373	169	0	0		**1**	**373**	**169**
400 - 649 t	0	0	0	0	0		**0**	**0**	**0**
650 - 999 t	0	0	0	0	0		**0**	**0**	**0**
1000 - 1499 t	1	1178	948	1	1258		**2**	**2436**	**948**
1500 - 1999 t	6	11445	6881	0	0		**6**	**11445**	**6881**
2000 - 2499 t	2	4442	2560	0	0		**2**	**4442**	**2560**
2500 - 2999 t	2	5198	2859	0	0		**2**	**5198**	**2859**
3000 t and over	1	3306	1492	0	0		**1**	**3306**	**1492**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**13**	**25942**	**14909**	**1**	**1258**		**14**	**27200**	**14909**
Total									
up to 249 t	165	25415	20438	182	22898		**347**	**48313**	**20438**
250 - 399 t	1318	477481	226013	164	56362		**1482**	**533843**	**226013**
400 - 649 t	894	476941	231315	698	330597		**1592**	**807538**	**231315**
650 - 999 t	1274	1039391	485553	367	341583		**1641**	**1380974**	**485553**
1000 - 1499 t	1437	1729110	802153	181	224203		**1618**	**1953313**	**802153**
1500 - 1999 t	494	838660	372483	147	251555		**641**	**1090215**	**372483**
2000 - 2499 t	254	565588	239913	210	480695		**464**	**1046283**	**239913**
2500 - 2999 t	222	605271	257852	432	1196244		**654**	**1801515**	**257852**
3000 t and over	116	407019	130408	138	528634		**254**	**935653**	**130408**
not known	37	0	6203	57	0		**94**	**0**	**6203**
total	**6211**	**6164876**	**2772331**	**2576**	**3432771**		**8787**	**9597647**	**2772331**

Table OM2 - INLAND FLEETS AT 31.12.2004
BY TONNAGE

Country	Self-propelled tankerbarges			Tanker barges			Total capacity of tanker fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
up to 249 t	4	696	688	4	505		**8**	**1201**	**688**
250 - 399 t	2	633	511	2	782		**4**	**1415**	**511**
400 - 649 t	4	1965	1285	13	6414		**17**	**8379**	**1285**
650 - 999 t	20	17151	9510	8	7071		**28**	**24222**	**9510**
1000 - 1499 t	166	208677	109989	2	2582		**168**	**211259**	**109989**
1500 - 1999 t	60	101184	51513	4	6604		**64**	**107788**	**51513**
2000 - 2499 t	52	115233	52324	11	24471		**63**	**139704**	**52324**
2500 - 2999 t	23	61902	28650	3	7851		**26**	**69753**	**28650**
3000 t and over	5	15178	7353	0	0		**5**	**15178**	**7353**
not known	9	0	9394	2	0		**11**	**0**	**9394**
total	**345**	**522619**	**271217**	**49**	**56280**		**394**	**578899**	**271217**
Austria									
up to 249 t							**0**	**0**	**0**
250 - 399 t							**0**	**0**	**0**
400 - 649 t							**0**	**0**	**0**
650 - 999 t							**20**	**27656**	**0**
1000 - 1499 t							**0**	**0**	**0**
1500 - 1999 t							**0**	**0**	**0**
2000 - 2499 t	5	5601		15	22055		**0**	**0**	**0**
2500 - 2999 t							**0**	**0**	**0**
3000 t and over							**0**	**0**	**0**
not known							**0**	**0**	**0**
total	**5**	**5601**	**0**	**15**	**22055**		**20**	**27656**	**0**
Belgium									
up to 249 t	35	4010	4301	0	0		**35**	**4010**	**4301**
250 - 399 t	19	6362	3811	0	0		**19**	**6362**	**3811**
400 - 649 t	30	15132	7874	0	0		**30**	**15132**	**7874**
650 - 999 t	9	7229	4257	1	945		**10**	**8174**	**4257**
1000 - 1499 t	52	64605	33822	2	2203		**54**	**66808**	**33822**
1500 - 1999 t	17	29581	13782	1	1970		**18**	**31551**	**13782**
2000 - 2499 t	27	62000	27396	0	0		**27**	**62000**	**27396**
2500 - 2999 t	13	36140	15803	1	2923		**14**	**39063**	**15803**
3000 t and over	15	56457	21615	1	3797		**16**	**60254**	**21615**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**217**	**281516**	**132661**	**6**	**11838**		**223**	**293354**	**132661**
France									
up to 249 t	0	0	0	0	0		**0**	**0**	**0**
250 - 399 t	11	4040	1532	0	0		**11**	**4040**	**1532**
400 - 649 t	9	4504	1355	14	6510		**23**	**11014**	**1355**
650 - 999 t	1	672	257	10	8037		**11**	**8709**	**257**
1000 - 1499 t	2	2680	801	3	3159		**5**	**5839**	**801**
1500 - 1999 t	3	5088	1858	5	9033		**8**	**14121**	**1858**
2000 - 2499 t	4	9305	4909	3	7196		**7**	**16501**	**4909**
2500 - 2999 t	5	12945	2278	9	24297		**14**	**37242**	**2278**
3000 t and over	0	0	0	3	9186		**3**	**9186**	**0**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**35**	**39234**	**12990**	**47**	**67418**		**82**	**106652**	**12990**

Table OM2 - INLAND FLEETS AT 31.12.2004 BY TONNAGE

Country	Self-propelled tankerbarges			Tanker barges			Total capacity of tanker fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Luxemburg									
up to 249 t	0	0	0	0	0		**0**	**0**	**0**
250 - 399 t	0	0	0	0	0		**0**	**0**	**0**
400 - 649 t	0	0	0	0	0		**0**	**0**	**0**
650 - 999 t	1	920	544	0	0		**1**	**920**	**544**
1000 - 1499 t	10	12588	6910	0	0		**10**	**12588**	**6910**
1500 - 1999 t	2	3656	1704	0	0		**2**	**3656**	**1704**
2000 - 2499 t	2	4269	1934	0	0		**2**	**4269**	**1934**
2500 - 2999 t	1	2895	2648	0	0		**1**	**2895**	**2648**
3000 t and over	2	6153	1980	2	8435		**4**	**14588**	**1980**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**18**	**30481**	**15720**	**2**	**8435**		**20**	**38916**	**15720**
Netherlands									
up to 249 t	224	23347	25962	1	79		**225**	**23426**	**25962**
250 - 399 t	29	9047	5371	1	314		**30**	**9361**	**5371**
400 - 649 t	58	29659	15578	4	1834		**62**	**31493**	**15578**
650 - 999 t	57	45823	21384	5	4323		**62**	**50146**	**21384**
1000 - 1499 t	108	136049	70920	6	8319		**114**	**144368**	**70920**
1500 - 1999 t	74	123458	55232	4	6768		**78**	**130226**	**55232**
2000 - 2499 t	74	162452	69261	11	24506		**85**	**186959**	**69261**
2500 - 2999 t	40	111369	28317	8	20940		**48**	**132309**	**28317**
3000 t and over	48	183079	40832	2	7094		**50**	**190173**	**40832**
not known	34	0	2688	1	0		**35**	**0**	**2688**
total	**746**	**824283**	**335545**	**43**	**74177**		**789**	**898461**	**335545**
Switzerland									
up to 249 t	0	0	0	0	0		**0**	**0**	**0**
250 - 399 t	0	0	0	0	0		**0**	**0**	**0**
400 - 649 t	0	0	0	0	0		**0**	**0**	**0**
650 - 999 t	0	0	0	0	0		**0**	**0**	**0**
1000 - 1499 t	3	3930	1894	0	0		**3**	**3930**	**1894**
1500 - 1999 t	1	1563	589	0	0		**1**	**1563**	**589**
2000 - 2499 t	3	6714	3702	0	0		**3**	**6714**	**3702**
2500 - 2999 t	17	44633	19748	0	0		**17**	**44633**	**19748**
3000 t and over	5	16020	7172	0	0		**5**	**16020**	**7172**
not known	0	0	0	0	0		**0**	**0**	**0**
total	**29**	**72860**	**33105**	**0**	**0**		**29**	**72860**	**33105**
Total									
up to 249 t	263	28053	30951	5	584		**268**	**28637**	**30951**
250 - 399 t	61	20082	11225	3	1096		**64**	**21178**	**11225**
400 - 649 t	101	51260	26092	31	14758		**132**	**66018**	**26092**
650 - 999 t	93	77396	35952	39	42431		**132**	**119827**	**35952**
1000 - 1499 t	341	428529	224336	13	16263		**354**	**444792**	**224336**
1500 - 1999 t	157	264530	124678	14	24375		**171**	**288905**	**124678**
2000 - 2499 t	162	359973	159526	25	56174		**187**	**416147**	**159526**
2500 - 2999 t	99	269884	97444	21	56011		**120**	**325895**	**97444**
3000 t and over	75	276887	78952	8	28512		**83**	**305399**	**78952**
not known	43	0	12082	3	0		**46**	**0**	**12082**
total	**1395**	**1776594**	**801238**	**162**	**240203**		**1557**	**2016797**	**801238**

Table OM3 - INLAND FLEETS AT 31.12.2004
BY POWER

Country	Ordinary self-propelled barges			Self-propelled tankerbarges			Total		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
Up to 49 KW	3	232	129	0	0	0	**3**	**232**	**129**
50 - 249 KW	97	34741	15874	5	1345	890	**102**	**36086**	**16764**
250 - 399 KW	231	203125	77428	20	16931	6671	**251**	**220056**	**84099**
400 - 999 KW	563	763722	347189	242	349313	166764	**805**	**1113035**	**513953**
1000 - 1999 KW	52	119861	63171	76	152169	94300	**128**	**272030**	**157471**
2000 - 2999 KW	2	5337	4011	1	2861	2592	**3**	**8198**	**6603**
3000 KW et plus	0	0	0	0	0	0	**0**	**0**	**0**
Not known	2	778	0	1	0	0	**3**	**778**	**0**
total	**950**	**1127796**	**507802**	**345**	**522619**	**271217**	**1295**	**1650415**	**779019**
Austria									
Up to 49 KW							**0**	**0**	**0**
50 - 249 KW							**0**	**0**	**0**
250 - 399 KW							**0**	**0**	**0**
400 - 999 KW							**0**	**0**	**0**
1000 - 1999 KW							**0**	**0**	**0**
2000 - 2999 KW							**0**	**0**	**0**
3000 KW et plus							**0**	**0**	**0**
Not known	5	7058		5	5601		**10**	**12659**	**0**
total	**5**	**7058**		**5**	**5601**		**10**	**12659**	**0**
Belgium									
Up to 49 KW	0	0	0	0	0	0	**0**	**0**	**0**
50 - 249 KW	7	124694	56086	59	13880	8615	**66**	**138574**	**64701**
250 - 399 KW	317	159506	82549	29	15031	8716	**346**	**174537**	**91265**
400 - 999 KW	268	530874	266553	82	118393	55849	**350**	**649267**	**322402**
1000 - 1999 KW	434	215917	107042	46	129557	57243	**480**	**345474**	**164285**
2000 - 2999 KW	87	15212	9928	1	4655	2238	**88**	**19867**	**12166**
3000 KW et plus	0	0	0	0	0	0	**0**	**0**	**0**
Not known	0	0	0	0	0	0	**0**	**0**	**0**
total	**1113**	**1046203**	**522158**	**217**	**281516**	**132661**	**1330**	**1327719**	**654819**
France									
Up to 49 KW	0	0	0	0	0	0	**0**	**0**	**0**
50 - 249 KW	536	212627	86423	15	6326	2606	**551**	**218953**	**89029**
250 - 399 KW	173	94436	50642	3	2513	852	**176**	**96949**	**51494**
400 - 999 KW	84	86237	43854	5	8927	3078	**89**	**95164**	**46932**
1000 - 1999 KW	2	5171	2262	5	12336	6454	**7**	**17507**	**8716**
2000 - 2999 KW	0	0	0	0	0	**0**	**0**	**0**	**0**
3000 KW et plus	0	0	0	0	0	0	**0**	**0**	**0**
Not known	161	107725	0	7	9132	0	**168**	**116857**	**0**
total	**956**	**506196**	**183181**	**35**	**39234**	**12990**	**991**	**545430**	**196171**

Table OM3 - INLAND FLEETS AT 31.12.2004
BY POWER

Country	Ordinary self-propelled barges			Self-propelled tankerbarges			Total bateaux propulseurs		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Luxemburg									
Up to 49 KW	0	0	0	0	0	0	**0**	**0**	**0**
50 - 249 KW	3	1575	628	0	0	0	**3**	**1575**	**628**
250 - 399 KW	4	1835	1226	0	0	0	**4**	**1835**	**1226**
400 - 999 KW	11	13773	6783	14	20989	9377	**25**	**34762**	**16160**
1000 - 1999 KW	1	2338	1294	3	6597	3695	**4**	**8935**	**4989**
2000 - 2999 KW	0	0	0	1	2895	2648	**1**	**2895**	**2648**
3000 KW et plus	0	0	0	0	0	0	**0**	**0**	**0**
Not known	0	0	0	0	0	0	**0**	**0**	**0**
total	**19**	**19521**	**9931**	**18**	**30481**	**15720**	**37**	**50002**	**25651**
Netherlands									
Up to 49 KW	9	4436	231	5	271	170	**14**	**4707**	**401**
50 - 249 KW	667	264207	111399	270	44286	**34562**	**937**	**308493**	**145961**
250 - 399 KW	796	583445	255242	72	42125	22548	**868**	**625570**	**277790**
400 - 999 KW	1313	1686164	795806	218	329891	151761	**1531**	**2016055**	**947567**
1000 - 1999 KW	215	553600	278172	92	226859	114106	**307**	**780459**	**392278**
2000 - 2999 KW	39	103384	89028	5	14492	**12398**	**44**	**117876**	**101426**
3000 KW et plus	1	2916	4472	0	0	0	**1**	**2916**	**4472**
Not known	115	234008	0	84	166359	0	**199**	**400367**	**0**
total	**3155**	**3432160**	**1534350**	**746**	**824283**	**335545**	**3901**	**4256443**	**1869895**
Switzerland									
Up to 49 KW	0	0	0	0	0	0	**0**	**0**	**0**
50 - 249 KW	1	373	169	0	0	0	**1**	**373**	**169**
250 - 399 KW	1	1978	353	0	0	0	**1**	**1978**	**353**
400 - 999 KW	3	5465	2457	9	18388	7012	**12**	**23853**	**9469**
1000 - 1999 KW	7	15501	9770	19	51014	23888	**26**	**66515**	**33658**
2000 - 2999 KW	1	2625	2160	1	3458	**2205**	**2**	**6083**	**4365**
3000 KW et plus	0	0	0	0	0	0	**0**	**0**	**0**
Not known	0	0	0	0	0	0	**0**	**0**	**0**
total	**13**	**25942**	**14909**	**29**	**72860**	**33105**	**42**	**98802**	**48014**
Total									
Up to 49 KW	12	4668	360	5	271	170	**17**	**4939**	**530**
50 - 249 KW	1311	638217	270579	349	65837	46673	**1660**	**704054**	**317252**
250 - 399 KW	1522	1044325	467440	124	76600	38787	**1646**	**1120925**	**506227**
400 - 999 KW	2242	3086235	1462642	570	845901	393841	**2812**	**3932136**	**1856483**
1000 - 1999 KW	711	912388	461711	241	578532	299686	**952**	**1490920**	**761397**
2000 - 2999 KW	129	126558	105127	9	28361	22081	**138**	**154919**	**127208**
3000 KW et plus	1	2916	4472	0	0	0	**1**	**2916**	**4472**
Not known	283	349569	0	97	181092	0	**380**	**530661**	**0**
total	**6211**	**6164876**	**2772331**	**1395**	**1776594**	**801238**	**7606**	**7941470**	**3573569**

Table OM3 - INLAND FLEETS AT 31.12.2004
BY POWER

Country	Tugs			Pusher tugs			Total propelled vessels		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
Up to 49 KW	7		271	4		165	**11**	**0**	**436**
50 - 249 KW	94		12511	164		23202	**258**	**0**	**35713**
250 - 399 KW	26		7738	34		11044	**60**	**0**	**18782**
400 - 999 KW	16		8714	68		40545	**84**	**0**	**49259**
1000 - 1999 KW	0		0	12		17603	**12**	**0**	**17603**
2000 - 2999 KW	0		0	4		**11848**	**4**	**0**	**11848**
3000 KW et plus	0		0	8		31316	**8**	**0**	**31316**
Not known	0		0	6		0	**6**	**0**	**0**
total	**143**		**29234**	**300**		**135723**	**443**	**0**	**164957**
Austria									
Up to 49 KW							**0**	**0**	**0**
50 - 249 KW							**0**	**0**	**0**
250 - 399 KW							**0**	**0**	**0**
400 - 999 KW							**0**	**0**	**0**
1000 - 1999 KW							**0**	**0**	**0**
2000 - 2999 KW							**0**	**0**	**0**
3000 KW et plus							**0**	**0**	**0**
Not known							**0**	**0**	**0**
total	**0**		**0**	**10**		**9200**	**10**	**0**	**9200**
Belgium									
Up to 49 KW	0		0	0		0	**0**	**0**	**0**
50 - 249 KW	6		856	33		5824	**39**	**0**	**6680**
250 - 399 KW	5		1591	36		10414	**41**	**0**	**12005**
400 - 999 KW	1		530	32		21697	**33**	**0**	**22227**
1000 - 1999 KW	1		1324	11		14500	**12**	**0**	**15824**
2000 - 2999 KW	0		0	0		**0**	**0**	**0**	**0**
3000 KW et plus	0		0	0		0	**0**	**0**	**0**
Not known	0		0	0		0	**0**	**0**	**0**
total	**13**		**4301**	**112**		**52435**	**125**	**0**	**56736**
France									
Up to 49 KW	2		70	2		69	**4**	**0**	**139**
50 - 249 KW	20		2292	57		9498	**77**	**0**	**11790**
250 - 399 KW	0		0	28		8675	**28**	**0**	**8675**
400 - 999 KW	2		1212	66		43166	**68**	**0**	**44378**
1000 - 1999 KW	0		0	17		21477	**17**	**0**	**21477**
2000 - 2999 KW	0		0	1		2116	**1**	**0**	**2116**
3000 KW et plus	0		0	0		0	**0**	**0**	**0**
Not known	0		0	0		0	**0**	**0**	**0**
total	**24**		**3574**	**171**		**85001**	**195**	**0**	**88575**

France: *as a guide; data for tugs and pusher tugs at 31.12.2003*

Table OM3 - INLAND FLEETS AT 31.12.2004
BY POWER

Country	Tugs			Pusher tugs			Total propelled vessels		
	Units	Tonnage	Power	Units	Tonnage	Power	**Units**	**Tonnage**	**Power**
	no.	t	kW	no.	t	kW	**no.**	**t**	**kW**
Luxemburg									
Up to 49 KW	0		0	0		0	**0**	**0**	**0**
50 - 249 KW	0		0	1		147	**1**	**0**	**147**
250 - 399 KW	0		0	4		1320	**4**	**0**	**1320**
400 - 999 KW	0		0	6		4603	**6**	**0**	**4603**
1000 - 1999 KW	0		0	7		9150	**7**	**0**	**9150**
2000 - 2999 KW	0		0	0		0	**0**	**0**	**0**
3000 KW et plus	0		0	0		0	**0**	**0**	**0**
Not known	0		0	0		0	**0**	**0**	**0**
total	**0**		**0**	**18**		**15220**	**18**	**0**	**15220**
Netherlands									
Up to 49 KW	11		383	0		0	**11**	**0**	**383**
50 - 249 KW	339		44267	199		**32730**	**538**	**0**	**76997**
250 - 399 KW	72		21417	147		44240	**219**	**0**	**65657**
400 - 999 KW	37		21735	151		92589	**188**	**0**	**114324**
1000 - 1999 KW	2		2111	17		21542	**19**	**0**	**23653**
2000 - 2999 KW	4		9324	2		**5559**	**6**	**0**	**14883**
3000 KW et plus	1		4000	7		27780	**8**	**0**	**31780**
Not known	28		0	18		0	**46**	**0**	**0**
total	**494**		**103237**	**541**		**224440**	**1035**	**0**	**327677**
Switzerland									
Up to 49 KW	0		0	0		0	**0**	**0**	**0**
50 - 249 KW	0		0	2		302	**2**	**0**	**302**
250 - 399 KW	1		368	1		353	**2**	**0**	**721**
400 - 999 KW	0		0	2		1292	**2**	**0**	**1292**
1000 - 1999 KW	0		0	0		0	**0**	**0**	**0**
2000 - 2999 KW	0		0	0		0	**0**	**0**	**0**
3000 KW et plus	0		0	0		0	**0**	**0**	**0**
Not known	0		0	0		0	**0**	**0**	**0**
total	**1**		**368**	**5**		**1947**	**6**	**0**	**2315**
Total									
Up to 49 KW	20		724	**6**		**234**	**26**	**0**	**958**
50 - 249 KW	459		59926	**456**		**71703**	**915**	**0**	**131629**
250 - 399 KW	104		31114	**250**		**76046**	**354**	**0**	**107160**
400 - 999 KW	56		32191	**325**		**203892**	**381**	**0**	**236083**
1000 - 1999 KW	3		3435	**64**		**84272**	**67**	**0**	**87707**
2000 - 2999 KW	4		9324	**7**		**19523**	**11**	**0**	**28847**
3000 KW et plus	1		4000	**15**		**59096**	**16**	**0**	**63096**
Not known	28		0	**24**		**0**	**52**	**0**	**0**
total	**675**		**140714**	**1157**		**523966**	**1832**	**0**	**664680**

France: *as a guide; data for tugs and pusher tugs at 31.12.2003*

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Ordinary self-propelled barges			Ordinary barges			Total capacity of the dry cargo fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
before 1930	244	231659	103661	26	8635		**270**	**240294**	**103661**
1930 - 1949	125	125630	56956	10	2696		**135**	**128326**	**56956**
1950 - 1969	419	454180	202674	136	99332		**555**	**553512**	**202674**
1970 - 1979	98	166418	79202	194	236215		**292**	**402633**	**79202**
1980 - 1989	51	121180	51514	517	458112		**568**	**579292**	**51514**
1990 - 1999	5	9895	4841	112	134757		**117**	**144652**	**4841**
2000 - 2004	7	18834	8954	4	9090		**11**	**27924**	**8954**
Not known	1	0	0	5	256		**6**	**256**	**0**
total	**950**	**1127796**	**507802**	**1004**	**949093**		**1954**	**2076889**	**507802**
Austria									
before 1930							**0**	**0**	**0**
1930 - 1949							**0**	**0**	**0**
1950 - 1969							**0**	**0**	**0**
1970 - 1979							**0**	**0**	**0**
1980 - 1989							**0**	**0**	**0**
1990 - 1999							**0**	**0**	**0**
2000 - 2004							**0**	**0**	**0**
Not known							**0**	**0**	**0**
total	**5**	**7058**		**54**	**84807**		**59**	**91865**	**0**
Belgium									
before 1930	113	94471	42275	3	1504		**116**	**95975**	**42275**
1930 - 1949	101	76621	38153	6	2502		**107**	**79123**	**38153**
1950 - 1969	721	515134	266097	31	41462		**752**	**556596**	**266097**
1970 - 1979	70	121218	54171	23	61225		**93**	**182443**	**54171**
1980 - 1989	42	84589	40365	81	219700		**123**	**304289**	**40365**
1990 - 1999	38	88293	43826	22	41723		**60**	**130016**	**43826**
2000 - 2004	28	65877	37271	57	63995		**85**	**129872**	**37271**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**1113**	**1046203**	**522158**	**223**	**432111**		**1336**	**1478314**	**522158**
France									
before 1930	30	18455	7394	18	9369		**48**	**27824**	**7394**
1930 - 1949	127	64081	27156	23	10853		**150**	**74934**	**27156**
1950 - 1969	604	280763	129942	174	110719		**778**	**391482**	**129942**
1970 - 1979	8	3899	1674	40	45535		**48**	**49434**	**1674**
1980 - 1989	21	19432	10410	31	49737		**52**	**69169**	**10410**
1990 - 1999	5	8442	3844	83	150743		**88**	**159185**	**3844**
2000 - 2004	1	2671	1159	17	11596		**18**	**14267**	**1159**
Not known	160	108453	1602	79	105693		**239**	**214146**	**1602**
total	**956**	**506196**	**183181**	**465**	**494245**		**1421**	**1000441**	**183181**

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Ordinary self-propelled barges			Ordinary barges			Total capacity of the dry cargo fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Luxemburg									
before 1930	4	2597	1659	0	0		**4**	**2597**	**1659**
1930 - 1949	4	4757	2264	0	0		**4**	**4757**	**2264**
1950 - 1969	8	6222	3271	0	0		**8**	**6222**	**3271**
1970 - 1979	2	3607	1443	1	2830		**3**	**6437**	**1443**
1980 - 1989	1	2338	1294	0	0		**1**	**2338**	**1294**
1990 - 1999	0	0	0	0	0		**0**	**0**	**0**
2000 - 2004	0	0	0	0	0		**0**	**0**	**0**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**19**	**19521**	**9931**	**1**	**2830**		**20**	**22351**	**9931**
Netherlands									
before 1930	617	399733	182721	13	5659		**630**	**405392**	**182721**
1930 - 1949	244	190007	93652	11	4465		**255**	**194472**	**93652**
1950 - 1969	1592	1427604	672613	220	170384		**1812**	**1597988**	**672613**
1970 - 1979	271	453476	197694	193	397500		**464**	**850976**	**197694**
1980 - 1989	137	272999	117726	185	427025		**322**	**700024**	**117726**
1990 - 1999	174	400070	214844	151	361230		**325**	**761300**	**214844**
2000 - 2004	120	288271	55100	45	102164		**165**	**390435**	**55100**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**3155**	**3432160**	**1534350**	**818**	**1468427**		**3973**	**4900587**	**1534350**
Switzerland									
before 1930	1	2573	699	0	0		**1**	**2573**	**699**
1930 - 1949	0	0	0	0	0		**0**	**0**	**0**
1950 - 1969	2	1551	1117	0	0		**2**	**1551**	**1117**
1970 - 1979	1	1713	810	0	0		**1**	**1713**	**810**
1980 - 1989	5	10040	5818	0	0		**5**	**10040**	**5818**
1990 - 1999	1	2625	2160	0	0		**1**	**2625**	**2160**
2000 - 2004	3	7440	4305	1	1258		**4**	**8698**	**4305**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**13**	**25942**	**14909**	**1**	**1258**		**14**	**27200**	**14909**
Total									
before 1930	1009	749488	338409	60	25167		**1069**	**774655**	**338409**
1930 - 1949	601	461096	218181	50	20516		**651**	**481612**	**218181**
1950 - 1969	3346	2685454	1275714	561	421897		**3907**	**3107351**	**1275714**
1970 - 1979	450	750331	334994	451	743305		**901**	**1493636**	**334994**
1980 - 1989	257	510578	227127	814	1154574		**1071**	**1665152**	**227127**
1990 - 1999	223	509325	269515	368	688453		**591**	**1197778**	**269515**
2000 - 2004	159	383093	106789	124	188103		**283**	**571196**	**106789**
Not known	166	108507	1602	84	105949		**245**	**214402**	**1602**
total	**6211**	**6157876**	**2772331**	**2512**	**3347964**		**8718**	**9505782**	**2772331**

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Self-propelled tankerbarges			Tanker barges			Total capacity of tanker fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
before 1930	0	0	0	1	383		**1**	**383**	**0**
1930 - 1949	7	6286	3324	0	0		**7**	**6286**	**3324**
1950 - 1969	133	165782	83301	11	11318		**144**	**177100**	**83301**
1970 - 1979	142	230152	120984	17	31152		**159**	**261304**	**120984**
1980 - 1989	33	65787	30740	16	10587		**49**	**76374**	**30740**
1990 - 1999	19	33598	20039	3	2840		**22**	**36438**	**20039**
2000 - 2004	11	21014	12829	0	0		**11**	**21014**	**12829**
Not known	0	0	0	1	0		**1**	**0**	**0**
total	**345**	**522619**	**271217**	**49**	**56280**		**394**	**578899**	**271217**
Austria									
before 1930							**0**	**0**	**0**
1930 - 1949							**0**	**0**	**0**
1950 - 1969							**0**	**0**	**0**
1970 - 1979							**0**	**0**	**0**
1980 - 1989							**0**	**0**	**0**
1990 - 1999							**0**	**0**	**0**
2000 - 2004							**0**	**0**	**0**
Not known	5	5601		15	22055		**20**	**27656**	**0**
total	**5**	**5601**		**15**	**22055**		**20**	**27656**	**0**
Belgium									
before 1930	12	4710	2699	0	0		**12**	**4710**	**2699**
1930 - 1949	11	4072	2933	0	0		**11**	**4072**	**2933**
1950 - 1969	100	85102	42740	4	5118		**104**	**90220**	**42740**
1970 - 1979	38	67066	31518	2	6720		**40**	**73786**	**31518**
1980 - 1989	26	59367	23825	0	0		**26**	**59367**	**23825**
1990 - 1999	17	26122	13431	0	0		**17**	**26122**	**13431**
2000 - 2004	13	35077	15515	0	0		**13**	**35077**	**15515**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**217**	**281516**	**132661**	**6**	**11838**		**223**	**293354**	**132661**
France									
before 1930	0	0	0	0	0		**0**	**0**	**0**
1930 - 1949	2	1841	595	0	0		**2**	**1841**	**595**
1950 - 1969	19	13896	5473	29	33748		**48**	**47644**	**5473**
1970 - 1979	4	7459	2748	8	15714		**12**	**23173**	**2748**
1980 - 1989	3	6906	4174	0	0		**3**	**6906**	**4174**
1990 - 1999	0	0	0	6	10436		**6**	**10436**	**0**
2000 - 2004	0	0	0	0	0		**0**	**0**	**0**
Not known	7	9132	0	4	7520		**11**	**16652**	**0**
total	**35**	**39234**	**12990**	**47**	**67418**		**82**	**106652**	**12990**

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Self-propelled tankerbarges			Tanker barges			Total capacity of tanker fleet		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Luxemburg									
before 1930	0	0	0	0	0		**0**	**0**	**0**
1930 - 1949	0	0	0	0	0		**0**	**0**	**0**
1950 - 1969	3	4333	2088	0	0		**3**	**4333**	**2088**
1970 - 1979	8	11490	6012	1	3959		**9**	**15449**	**6012**
1980 - 1989	5	11635	5878	1	4476		**6**	**16111**	**5878**
1990 - 1999	2	3023	1742	0	0		**2**	**3023**	**1742**
2000 - 2004	0	0	0	0	0		**0**	**0**	**0**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**18**	**30481**	**15720**	**2**	**8435**		**20**	**38916**	**15720**
Netherlands									
before 1930	24	2161	2215	0	0		**24**	**2161**	**2215**
1930 - 1949	27	8215	4824	1	1218		**28**	**9433**	**4824**
1950 - 1969	358	202998	110037	13	13164		**371**	**216162**	**110037**
1970 - 1979	100	159076	64151	12	23494		**112**	**182570**	**64151**
1980 - 1989	60	99840	42795	7	13849		**67**	**113689**	**42795**
1990 - 1999	101	178702	96996	8	19618		**109**	**198320**	**96996**
2000 - 2004	76	173291	14527	2	2934		**78**	**176225**	**14527**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**746**	**824283**	**335545**	**43**	**74277**		**789**	**898560**	**335545**
Switzerland									
before 1930	1	3458	2205	0	0		**1**	**3458**	**2205**
1930 - 1949	0	0	0	0	0		**0**	**0**	**0**
1950 - 1969	5	7753	3885	0	0		**5**	**7753**	**3885**
1970 - 1979	5	13914	6450	0	0		**5**	**13914**	**6450**
1980 - 1989	11	29765	11642	0	0		**11**	**29765**	**11642**
1990 - 1999	7	17970	8923	0	0		**7**	**17970**	**8923**
2000 - 2004	0	0	0	0	0		**0**	**0**	**0**
Not known	0	0	0	0	0		**0**	**0**	**0**
total	**29**	**72860**	**33105**	**0**	**0**		**29**	**72860**	**33105**
Total									
before 1930	37	10329	7119	1	383		**38**	**10712**	**7119**
1930 - 1949	47	20414	11676	1	1218		**48**	**21632**	**11676**
1950 - 1969	618	479864	247524	57	63348		**675**	**543212**	**247524**
1970 - 1979	297	489157	231863	40	81039		**337**	**570196**	**231863**
1980 - 1989	138	273300	119054	24	28912		**162**	**302212**	**119054**
1990 - 1999	146	259415	141131	17	32894		**163**	**292309**	**141131**
2000 - 2004	100	229382	42871	2	2934		**102**	**232316**	**42871**
Not known	12	14733	0	20	29575		**32**	**44308**	**0**
total	**1395**	**1776594**	**801238**	**162**	**240303**		**1557**	**2016897**	**801238**

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Tugs			Pusher tugs			Total propelled vessels		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Germany									
before 1930	44		10236	22		5404	**66**		**15640**
1930 - 1949	29		5118	19		7037	**48**		**12155**
1950 - 1969	53		9989	103		33454	**156**		**43443**
1970 - 1979	11		2033	57		57229	**68**		**59262**
1980 - 1989	3		865	86		29853	**89**		**30718**
1990 - 1999	2		883	7		2474	**9**		**3357**
2000 - 2004	0		0	1		213	**1**		**213**
Not known	1		110	5		59	**6**		**169**
total	**143**		**29234**	**300**		**135723**	**443**		**164957**
Austria									
before 1930							**0**		**0**
1930 - 1949							**0**		**0**
1950 - 1969							**0**		**0**
1970 - 1979							**0**		**0**
1980 - 1989							**0**		**0**
1990 - 1999							**0**		**0**
2000 - 2004							**0**		**0**
Not known				10		9200	**10**		**9200**
total	**0**		**0**	**0**		**9200**	**0**		**9200**
Belgium									
before 1930	1		330	18		5405	**19**		**5735**
1930 - 1949	**1**		**85**	**26**		7961	**27**		**8046**
1950 - 1969	5		1417	29		15124	**34**		**16541**
1970 - 1979	4		2022	22		12382	**26**		**14404**
1980 - 1989	1		75	7		3565	**8**		**3640**
1990 - 1999	1		374	7		3466	**8**		**3840**
2000 - 2004	0		0	3		4532	**3**		**4532**
Not known	0		0	0		0	**0**		**0**
total	**13**		**4303**	**112**		**52435**	**125**		**56738**
France									
before 1930	14		1528	42		16006	**56**		**17534**
1930 - 1949	7		1663	25		9899	**32**		**11562**
1950 - 1969	0		381	77		43134	**77**		**43615**
1970 - 1979	3		0	20		12568	**23**		**12568**
1980 - 1989	0		0	3		572	**3**		**572**
1990 - 1999	0		0	4		2822	**4**		**2822**
2000 - 2004	0		0	0		0	**0**		**0**
Not known	0		0	0		0	**0**		**0**
total	**24**		**3572**	**171**		**85001**	**195**		**88673**

France : for information, data for push tugs and tugs at the 31.12.2003

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Tugs			Pusher tugs			Total propelled vessels		
	Units no.	Tonnage t	Power kW	Units no.	Tonnage t	Power kW	**Units no.**	**Tonnage t**	**Power kW**
Luxemburg									
before 1930	0		0	5		2248	**5**		**2248**
1930 - 1949	0		0	3		1699	**3**		**1699**
1950 - 1969	0		0	1		323	**1**		**323**
1970 - 1979	0		0	4		4535	**4**		**4535**
1980 - 1989	0		0	1		1075	**1**		**1075**
1990 - 1999	0		0	4		5340	**4**		**5340**
2000 - 2004	0		0	0		0	**0**		**0**
Not known	0		0	0		0	**0**		**0**
total	**0**		**0**	**18**		**15220**	**18**		**15220**
Netherlands									
before 1930	108		15539	104		31194	**212**		**46733**
1930 - 1949	121		20797	109		35801	**230**		**56598**
1950 - 1969	193		41193	189		69872	**382**		**111065**
1970 - 1979	46		9260	67		37019	**113**		**47179**
1980 - 1989	16		15321	42		35926	**58**		**51247**
1990 - 1999	8		926	27		14527	**35**		**15453**
2000 - 2004	2		201	3		101	**5**		**302**
Not known	0		0	0		0	**0**		**0**
total	**494**		**103237**	**541**		**224440**	**1035**		**328577**
Switzerland									
before 1930	0		0	1		563	**1**		**563**
1930 - 1949	1		368	1		353	**2**		**721**
1950 - 1969	0		0	3		1031	**3**		**1031**
1970 - 1979	0		0	0		0	**0**		**0**
1980 - 1989	0		0	0		0	**0**		**0**
1990 - 1999	0		0	0		**0**	**0**		**0**
2000 - 2004	0		0	0		0	**0**		**0**
Not known	0		0	0		0	**0**		**0**
total	**1**		**368**	**5**		**1947**	**6**		**2315**
Total									
avant 1930	167		27633	192		60820	**359**		**88453**
1930 - 1949	159		28031	183		62750	**342**		**90781**
1950 - 1969	251		52980	402		162938	**653**		**216018**
1970 - 1979	64		13315	170		123733	**234**		**137948**
1980 - 1989	20		16261	139		70991	**159**		**87252**
1990 - 1999	11		2183	49		28629	**60**		**30812**
2000 - 2004	2		201	7		4846	**9**		**5047**
inconnues	1		110	15		9259	**16**		**9369**
total	**675**		**140714**	**1157**		**523966**	**1832**		**665680**

France : for information, data for push tugs and tugs at the 31.12.2003

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Excursion vessels			Cruise vessels			Total passenger vessels		
	Units no.	Passengers no.	Power kW	Units no.	Passengers no.	Power kW	**Units no.**	**Passengers no.**	**Power kW**
Germany									
before 1930	209	26079	23265	2	143	783	**211**	**26222**	**24048**
1930 - 1949	129	16576	17484	4	100	990	**133**	**16676**	**18474**
1950 - 1969	241	48514	49114	2	6	334	**243**	**48520**	**49448**
1970 - 1979	105	24638	23653	1	99	804	**106**	**24737**	**24457**
1980 - 1989	115	30701	29780	3	654	5197	**118**	**31355**	**34977**
1990 - 1999	167	38223	**57360**	13	1454	14960	**180**	**39677**	**72320**
2000 - 2004	40	7959	11257	22	3438	31178	**62**	**11397**	**42435**
Not known	6	309	585	0	0	0	**6**	**309**	**585**
total	**1012**	**192999**	**212498**	**47**	**5894**	**54246**	**1059**	**198893**	**266744**
Austria									
before 1930							**0**	**0**	**0**
1930 - 1949							**0**	**0**	**0**
1950 - 1969							**0**	**0**	**0**
1970 - 1979							**0**	**0**	**0**
1980 - 1989							**0**	**0**	**0**
1990 - 1999							**0**	**0**	**0**
2000 - 2004							**0**	**0**	**0**
Not known							**0**	**0**	**0**
total							**0**	**0**	**0**
Belgium									
before 1930							**0**	**0**	**5816**
1930 - 1949							**36**	**0**	**3900**
1950 - 1969							**24**	**0**	**6217**
1970 - 1979							**32**	**0**	**958**
1980 - 1989							**12**	**0**	**1742**
1990 - 1999							**23**	**0**	**3220**
2000 - 2004							**16**	**0**	**526**
Not known							**6**	**0**	**0**
total							**149**	**9900**	**22379**
France									
before 1930							**0**	**0**	**0**
1930 - 1949							**0**	**0**	**0**
1950 - 1969							**0**	**0**	**0**
1970 - 1979							**0**	**0**	**0**
1980 - 1989							**0**	**0**	**0**
1990 - 1999							**0**	**0**	**0**
2000 - 2004							**0**	**0**	**0**
Not known							**0**	**0**	**0**
total	**303**	**45035**		**87**	**4640**	**0**	**390**	**49675**	**0**

(*) as a guide; estimate for 2002

Table OM4 - INLAND FLEETS AT 31.12.2004
BY YEAR OF CONSTRUCTION

Country	Excursion vessels			Cruise vessels			Total passenger vessels		
	Units no.	Passengers no.	Power kW	Units no.	Passengers no.	Power kW	**Units no.**	**Passengers no.**	**Power kW**
Luxemburg									
before 1930	0	0	0	0	0	0	**0**	**0**	**0**
1930 - 1949	0	0	0	0	0	0	**0**	**0**	**0**
1950 - 1969	2	600	700	0	0	0	**2**	**600**	**700**
1970 - 1979	0	0	0	0	0	0	**0**	**0**	**0**
1980 - 1989	1	100	1156	0	0	0	**1**	**100**	**1156**
1990 - 1999	2	500	1044	0	0	0	**2**	**500**	**1044**
2000 - 2004	1	500	736	0	0	0	**1**	**500**	**736**
Not known	0	0	0	0	0	0	**0**	**0**	**0**
total	**6**	**1700**	**3636**	**0**	**0**	**0**	**6**	**1700**	**3636**
Netherlands									
before 1930	415	5157	38013	75	2451	10050	**490**	**7608**	**48063**
1930 - 1949	53	2986	7246	29	3098	10716	**82**	**6084**	**17962**
1950 - 1969	99	11290	17475	35	3588	12682	**134**	**14878**	**30157**
1970 - 1979	29	3589	5546	10	1123	8074	**39**	**4712**	**13620**
1980 - 1989	48	3626	7340	11	1218	4014	**59**	**4844**	**11354**
1990 - 1999	69	7476	19833	16	2179	9488	**85**	**9655**	**29321**
2000 - 2004	24	1098	2367	11	1342	3423	**35**	**2440**	**5790**
Not known	0	0	0	0	0	0	**0**	**0**	**0**
total	**737**	**35222**	**97820**	**187**	**14999**	**58447**	**924**	**50221**	**156267**
Switzerland									
before 1930	1	82	114	0	0	0	**1**	**82**	**114**
1930 - 1949	0	0	0	0	0	0	**0**	**0**	**0**
1950 - 1969	0	0	0	6	858	6459	**6**	**858**	**6459**
1970 - 1979	2	630	537	5	746	6043	**7**	**1376**	**6580**
1980 - 1989	2	740	754	2	143	1231	**4**	**883**	**1985**
1990 - 1999	1	600	588	13	1672	17651	**14**	**2272**	**18239**
2000 - 2004	0	0	0	12	1524	16987	**12**	**1524**	**16987**
Not known	0	0	0	1	0	0	**1**	**0**	**0**
total	**6**	**2052**	**1993**	**39**	**4943**	**48371**	**45**	**6995**	**50364**
Total									
before 1930	625	31318	61392	77	2594	10833	**702**	**33912**	**78041**
1930 - 1949	182	19562	24730	33	3198	11706	**251**	**22760**	**40336**
1950 - 1969	342	60404	67289	43	4452	19475	**409**	**64856**	**92981**
1970 - 1979	136	28857	29736	16	1968	14921	**184**	**30825**	**45615**
1980 - 1989	166	35167	39030	16	2015	10442	**194**	**37182**	**51214**
1990 - 1999	239	46799	78825	42	5305	42099	**304**	**52104**	**124144**
2000 - 2004	65	9557	14360	45	6304	51588	**126**	**15861**	**66474**
Not known	6	309	585	1	0	0	**13**	**309**	**585**
total	**2064**	**277008**	**315947**	**360**	**30476**	**161064**	**2573**	**317384**	**499390**

Table OM5 – NEW CONSTRUCTIONS AT SEPTEMBER 2005

Type of vessel	2002			2003			2004		
	Units	Tonnage	kW	Units	Tonnage	kW	Units	Tonnage	kW
Ordinary self-propelled barges	45	113114	56138	34	89676	41894	28	71326	34400
Ordinary barges	29	37180		28	78156		14	23636	
total	**74**	**150294**	**56138**	**62**	**167832**	**41894**	**42**	**94962**	**34400**
Self-propelled tanker barges	22	65548	30547	45	131455	50332	54	139718	61236
Tanker barges	2	178		1	1800		3	2427	
total	**24**	**65726**	**30547**	**46**	**133255**	**50332**	**57**	**142145**	**61236**
Pusher tugs	2		1276	0		0	1		992
Tugs	3		11670	1		279	1		177
total	**5**		**12946**	**1**		**279**	**2**		**1169**
Cruise vessels	17		13251	10		7238	5		4021
Excursion vessels	9		4834	1		1566	1		662
total	**26**		**18085**	**11**		**8804**	**6**		**4683**

Type of vessel	2005 (8 months)			total 2002 - 2005		
	Units	Tonnage	kW	Units	Tonnage	kW
Ordinary self-propelled barges	2	6197	3109	109	280313	135541
Ordinary barges	1	20		72	138992	
total	**3**	**6217**	**3109**	**181**	**419305**	**135541**
Self-propelled tanker barges	22	54511	21132	143	391232	163247
Tanker barges	0			6	4405	
total	**22**	**54511**	**21132**	**149**	**395637**	**163247**
Pusher tugs	0		0	3	0	2268
Tugs	1		129	6	0	
total	**1**		**129**	**9**		**2268**
Cruise vessels	0		0	32		24510
Excursion vessels	2		1610	13		
total	**2**		**1610**	**45**		**24510**

Source: IVR records

Demand for transport capacity

Methodology

In assessing the demand for transport, account is taken of the transport of goods on inland waterways in the national territories. It therefore includes the river part of river/sea traffic.

The traffic observed may de divided into two categories:
- national traffic, and
- international traffic.

It is measured in terms of volume transported (in tonnes or in 1000 tonnes) or in TKM (and often in millions of TKM). TKM figures are calculated as the number of kilometres covered on the inland waterways of each State.

Sources of data

Germany: Statistisches Bundesamt (Wiesbaden)
Austria: Statistik Austria (Vienna)
Belgium: Institut National Statistique (INS)
France: Voies Navigables de France (VNF)
G.D. Luxembourg: Commission de la Moselle, Port of Mertert
Netherlands: Centraal Buro Voor de Statitiek (Herlen)
Switzerland: Rheinschifffahrtsdirektion (Basle)

The overall view of transport within the States of western Europe covered is therefore obtained by using the data supplied by each national office for the territory of that State. This means that the CCNR's Secretariat has to reprocess the data so that quantities transported internationally are not counted more than once.

In order to achieve overall figures that are representative, it is essential to have data for each of the States concerned. However, if the data from one State is not available in time to allow publication of this type of study, the Secretariat will use an estimate so that publication is not delayed.

The statistics for goods transported do not include:

a) goods transported by goods vessels as "local traffic" within ports, except for local traffic in the ports of Duisbourg, Düsseldorf, Cologne and Frankfurt;

b) transport by vehicles used for fishing and dredging and for carrying out hydraulic work, although they are included when the goods being carried are considered to be "commercial goods";

c) goods intended for supplying vessels;

d) goods carried on ferries.

The methods for listing traffic vary from one State to another. This is carried out on the basis of either port transshipments or declarations at civil engineering structures, listing points and borders.

The listing of traditional Rhine traffic on the German section of the Rhine is based on the recording of transshipments in German ports. The overall statistics on waterways traffic on the Rhine compiled by the German authorities is derived from this data from the ports.

The information on French domestic traffic and Franco-Swiss traffic on the Rhine comes from France's statistics. The transport of goods carried out exclusively on the section of the Rhine downstream of the border between Germany and the Netherlands and traffic between Dutch ports on the Rhine and Belgian ports and northern France (including sea traffic on the Rhine) are listed and recorded in the Dutch statistics. These are essentially based on listings compiled at civil engineering structures and borders.

The types of goods are differentiated using the NSTR nomenclature, which is subdivided into:

Chapters (1 figure),
Groups (2 figures), and
Positions (3 figures).

On the whole, the European codes are used.

Consideration of traffic by route

To prevent the volume of goods being transported for the purposes of international trade being counted twice, care needs to be taken in considering the volumes carried on the various routes. So that volumes travelling in two or more countries are not counted twice or more, the following table should be followed; it indicates the most appropriate source to use. The indication "Others" refers to countries other than the seven taken into account geographically in this study.

	Route	Declaring country
1	France - Germany	Germany
2	France - Belgium	France
3	France - Netherlands	Netherlands
4	France - Luxemburg	France
5	France - Switzerland	France
6	France - Austria	France
7	France - others	Germany
8	Belgium - Germany	Germany
9	Belgium - Netherlands	Netherlands
10	Belgium - Luxemburg	Germany
11	Belgium - Switzerland	Germany
12	Belgium - Autria	Germany
13	Belgium – others	Germany
14	Netherlands - Luxemburg	Netherlands
15	Netherlands - Switzerland	Netherlands
16	Netherlands - Autria	Netherlands
17	Netherlands - Germany	Germany
18	Netherlands - others	Netherlands
19	Suisse - Luxemburg	Germany
20	Suisse - Autria	Germany
21	Suisse - others	Germany
22	Germany - Luxemburg	Germany
23	Germany - Autria	Germany
24	Germany - others	Germany
25	Germany - Switzerland	Germany
26	Autriche - others	by déduction
27	Luxemburg - others	Germany

Table OM6 – NATIONAL TRANSPORT OF GOODS ON INLAND WATERWAYS, BY STATE

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	million TKM
		1000 t			1000000 TKM			%	
	SWITZERLAND	Not recorded as this only concerns transport on the lakes							
0	Agricultural products								
1	Foodstuffs, animal fodder								
2	Solid mineral fuels								
3	Oil and oil-based products								
4	Ore and pig iron for iron and steel industry								
5	Iron and steel products								
6	Crude and manufactured minerals, building materials								
7	Fertilisers								
8	Chemicals								
9	Machinery, transport equipment, manufactured articles								
99	of which special transactions								
	FRANCE	**28310**	**28880**	**29121**	**4206**	**4302**	**4429**	**0,83%**	**2,95%**
0	Agricultural products	2811	3115	2699	691	757	673	**-13,35%**	**-11,10%**
1	Foodstuffs, animal fodder	555	489	460	154	135	129	**-5,93%**	**-4,44%**
2	Solid mineral fuels	1622	1595	1721	479	436	485	**7,90%**	**11,24%**
3	Oil and oil-based products	3368	3658	3715	402	415	380	**1,56%**	**-8,43%**
4	Ore and pig iron for iron and steel industry	163	276	359	39	66	90	**30,07%**	**36,36%**
5	Iron and steel products	682	548	514	141	138	132	**-6,20%**	**-4,35%**
6	Crude and manufactured minerals, building materials	17203	16767	16922	1818	1729	1844	**0,92%**	**6,65%**
7	Fertilisers	202	207	119	52	62	31	**-42,51%**	**-50,00%**
8	Chemicals	869	975	1132	213	248	302	**16,10%**	**21,77%**
9	Machinery, transport equipment, manufactured articles	835	1250	1480	217	316	363	**18,40%**	**14,87%**
99	of which special transactions	622	1045	1299	170	269	325	**24,31%**	**20,82%**
	GERMANY	**55844**	**53419**	**55209**	**11670**	**10833**	**11296**	**3,35%**	**4,28%**
0	Agricultural products	1834	2183	1595	545	614	516	**-26,96%**	**-15,95%**
1	Foodstuffs, animal fodder	3379	2933	3178	936	722	862	**8,34%**	**19,41%**
2	Solid mineral fuels	7490	7454	7953	1422	1299	1338	**6,70%**	**3,03%**
3	Oil and oil-based products	14038	13940	14684	2822	2745	2788	**5,34%**	**1,57%**
4	Ore and pig iron for iron and steel industry	3246	3128	3404	852	793	892	**8,81%**	**12,45%**
5	Iron and steel products	1411	1227	1255	494	469	529	**2,32%**	**12,95%**
6	Crude and manufactured minerals, building materials	17201	15350	15136	3071	2724	2766	**-1,39%**	**1,54%**
7	Fertilisers	1008	1014	1056	396	381	411	**4,19%**	**7,87%**
8	Chemicals	4845	4579	4979	885	829	886	**8,73%**	**6,83%**
9	Machinery, transport equipment, manufactured articles	1391	1610	1970	248	257	308	**22,31%**	**19,96%**
99	of which special transactions	1023	1327	1678	162	197	242	**26,44%**	**22,85%**

Table OM6 – NATIONAL TRANSPORT OF GOODS ON INLAND WATERWAYS, BY STATE

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	million TKM
		1000 t			1000000 TKM			%	
	NEDERLAND	**101770**	**95105**	**105553**	**10407**	**10601**	**12662**	**10,99%**	**19,44%**
0	Agricultural products	2733	2392	2873	386	372	422	**20,11%**	**13,44%**
1	Foodstuffs, animal fodder	8661	6606	7023	901	816	878	**6,31%**	**7,60%**
2	Solid mineral fuels	2173	3062	3732	355	418	578	**21,88%**	**38,28%**
3	Oil and oil-based products	17106	16287	17914	1862	1940	2138	**9,99%**	**10,21%**
4	Ore and pig iron for iron and steel industry	1543	1769	2353	208	236	400	**33,01%**	**69,49%**
5	Iron and steel products	877	958	1273	123	145	225	**32,88%**	**55,17%**
6	Crude and manufactured minerals, building materials	52876	48653	52320	4547	4716	5590	**7,54%**	**18,53%**
7	Fertilisers	1551	1429	1595	327	285	329	**11,62%**	**15,44%**
8	Chemicals	5385	4882	5309	759	683	731	**8,75%**	**7,03%**
9	Machinery, transport equipment, manufactured articles	8865	9067	11161	939	990	1371	**23,09%**	**38,48%**
99	of which special transactions	8398	8368	10072	869	902	1213	**20,36%**	**34,48%**
	BELGIUM (*)	**30473**	**31120**	**32488**	**2779**	**2831**	**2946**	**4,40%**	**4,06%**
0	Agricultural products	634	640	682	51	50	53	**6,55%**	**6,55%**
1	Foodstuffs, animal fodder	1391	1468	1644	70	74	83	**11,99%**	**11,99%**
2	Solid mineral fuels	4521	4233	4465	505	473	499	**5,47%**	**5,47%**
3	Oil and oil-based products	5548	5439	5469	455	448	451	**0,56%**	**0,56%**
4	Ore and pig iron for iron and steel industry	1715	1574	1656	206	187	197	**5,23%**	**5,23%**
5	Iron and steel products	1102	1280	1378	88	121	130	**7,63%**	**7,63%**
6	Crude and manufactured minerals, building materials	10198	10771	10940	1040	1091	1108	**1,57%**	**1,57%**
7	Fertilisers	946	1114	1163	71	86	90	**4,44%**	**4,44%**
8	Chemicals	2271	2183	2496	184	176	201	**14,33%**	**14,33%**
9	Machinery, transport equipment, manufactured articles	2147	2418	2595	109	125	134	**7,31%**	**7,31%**
99	of which special transactions	883	873	937	31	31	33	**7,31%**	**7,31%**
	AUSTRIA	**560**	**922**	**192**	**71**	**61**	**33**	**-79,18%**	**-46,13%**
0	Agricultural products	4	43	4	0	6	1	**-90,70%**	**-89,47%**
1	Foodstuffs, animal fodder	1	0	1	0	0	0		
2	Solid mineral fuels	0	0	1	0	0	0		
3	Oil and oil-based products	229	161	97	49	34	21	**-39,75%**	**-39,71%**
4	Ore and pig iron for iron and steel industry	0	1	0	0	0	0		
5	Iron and steel products	164	115	73	21	14	9	**-36,52%**	**-36,81%**
6	Crude and manufactured minerals, building materials	156	572	7	1	3	1	**-98,78%**	**-68,00%**
7	Fertilisers	6	28	8	1	4	1	**-71,43%**	**-69,44%**
8	Chemicals	0	0	0	0	0	0		
9	Machinery, transport equipment, manufactured articles	0	2	1	0	0	0	**-50,00%**	**0,00%**
99	of which special transactions	0	0	0	0	0	0		

(*) the figure given for traffic in Belgium in 2004 is an estimate made by the CCNR Secretariat

Table OM6 – NATIONAL TRANSPORT OF GOODS ON INLAND WATERWAYS, BY STATE

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	million TKM
		1000 t			1000000 TKM			%	
	LUXEMBURG (not significant)	**0**	**0**	**0**	**0**	**0**	**0**		
0	Agricultural products								
1	Foodstuffs, animal fodder								
2	Solid mineral fuels								
3	Oil and oil-based products								
4	Ore and pig iron for iron and steel industry								
5	Iron and steel products								
6	Crude and manufactured minerals, building materials								
7	Fertilisers								
8	Chemicals								
9	Machinery, transport equipment, manufactured articles								
99	of which special transactions								
	TOTAL	**216957**	**209446**	**222563**	**29133**	**28627**	**31366**	**6,26%**	**9,57%**
0	Agricultural products	8016	8373	7853	1674	1799	1665	**-6,22%**	**-7,44%**
1	Foodstuffs, animal fodder	13987	11496	12306	2061	1747	1952	**7,04%**	**11,74%**
2	Solid mineral fuels	15806	16344	17871	2761	2626	2901	**9,35%**	**10,45%**
3	Oil and oil-based products	40289	39485	41879	5589	5582	5777	**6,06%**	**3,50%**
4	Ore and pig iron for iron and steel industry	6667	6748	7772	1305	1282	1579	**15,17%**	**23,10%**
5	Iron and steel products	4236	4128	4493	866	887	1026	**8,85%**	**15,63%**
6	Crude and manufactured minerals, building materials	97634	92113	95325	10476	10263	11309	**3,49%**	**10,20%**
7	Fertilisers	3713	3792	3942	847	817	862	**3,95%**	**5,42%**
8	Chemicals	13370	12619	13916	2041	1936	2120	**10,27%**	**9,50%**
9	Machinery, transport equipment, manufactured articles	13238	14347	17207	1513	1688	2176	**19,93%**	**28,93%**
99	of which special transactions	10926	11613	13986	1232	1399	1813	**20,43%**	**29,61%**

Table OM7 – INTERNATIONAL TRANSPORT OF GOODS ON INLAND WATERWAYS, BY STATE

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	mio TKM
		1000 t			1000000 TKM			%	
	SWITZERLAND	**8356**	**7006**	**7051**	**58**	**49**	**49**	**0,64%**	**0,64%**
0	Agricultural products	360	379	351	3	3	2	**-7,39%**	**-7,39%**
1	Foodstuffs, animal fodder	395	444	422	3	3	3	**-4,95%**	**-4,95%**
2	Solid mineral fuels	117	87	174	1	1	1	**100,00%**	**100,00%**
3	Oil and oil-based products	4316	3544	3380	30	25	24	**-4,63%**	**-4,63%**
4	Ore and pig iron for iron and steel industry	156	171	165	1	1	1	**-3,51%**	**-3,51%**
5	Iron and steel products	1158	793	833	8	6	6	**5,04%**	**5,04%**
6	Crude and manufactured minerals, building materials	505	422	478	4	3	3	**13,27%**	**13,27%**
7	Fertilisers	170	162	158	1	1	1	**-2,47%**	**-2,47%**
8	Chemicals	722	787	848	5	6	6	**7,75%**	**7,75%**
9	Machinery, transport equipment, manufactured articles	457	217	242	3	2	2	**11,52%**	**11,52%**
99	of which special transactions	152	164	195	1	1	1	**18,90%**	**18,90%**
	FRANCE	**40632**	**36467**	**39834**	**4371**	**4005**	**4257**	**9,23%**	**6,29%**
0	Agricultural products	5784	5472	5923	828	766	790	**8,24%**	**3,13%**
1	Foodstuffs, animal fodder	2268	2565	2868	259	328	350	**11,81%**	**6,71%**
2	Solid mineral fuels	4362	3553	4740	257	206	280	**33,41%**	**35,92%**
3	Oil and oil-based products	6195	5700	5526	729	650	645	**-3,05%**	**-0,77%**
4	Ore and pig iron for iron and steel industry	2796	2437	2612	214	199	226	**7,18%**	**13,57%**
5	Iron and steel products	2815	2455	2661	422	372	409	**8,39%**	**9,95%**
6	Crude and manufactured minerals, building materials	11105	8970	9359	972	771	728	**4,34%**	**-5,58%**
7	Fertilisers	948	1030	1273	132	154	203	**23,59%**	**31,82%**
8	Chemicals	1912	1872	2155	254	250	293	**15,12%**	**17,20%**
9	Machinery, transport equipment, manufactured articles	2447	2413	2717	304	309	333	**12,60%**	**7,77%**
99	of which special transactions	2256	2296	2598	281	292	316	**13,15%**	**8,22%**
	GERMANY	**175894**	**166581**	**180653**	**52495**	**47322**	**52372**	**8,45%**	**10,67%**
0	Agricultural products	8242	6945	7062	4393	3503	3391	**1,68%**	**-3,20%**
1	Foodstuffs, animal fodder	12240	11778	12284	5308	4804	5130	**4,30%**	**6,79%**
2	Solid mineral fuels	24188	23294	26154	7534	6397	7326	**12,28%**	**14,52%**
3	Oil and oil-based products	25626	23238	23926	8616	7525	7752	**2,96%**	**3,02%**
4	Ore and pig iron for iron and steel industry	33010	32099	34651	5412	5165	5875	**7,95%**	**13,75%**
5	Iron and steel products	10982	10714	11473	3309	3107	3468	**7,08%**	**11,62%**
6	Crude and manufactured minerals, building materials	30037	26832	29893	7684	6740	7931	**11,41%**	**17,67%**
7	Fertilisers	5488	5077	5369	2372	2088	2298	**5,75%**	**10,06%**
8	Chemicals	11807	11154	12137	3105	2912	3221	**8,81%**	**10,61%**
9	Machinery, transport equipment, manufactured articles	14274	15450	17704	4762	5081	5980	**14,59%**	**17,69%**
99	of which special transactions	13068	14272	16444	4483	4790	5670	**15,22%**	**18,37%**

Table OM7 – INTERNATIONAL TRANSPORT OF GOODS ON INLAND WATERWAYS, BY STATE

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	mio TKM
		1000 t			1000000 TKM			%	
	NEDERLAND	**212237**	**208102**	**224314**	**30504**	**30430**	**32313**	**7,79%**	**6,19%**
0	Agricultural products	7230	7002	7571	1116	1125	1210	**8,13%**	**7,56%**
1	Foodstuffs, animal fodder	11626	11104	10643	1790	1737	1674	**-4,15%**	**-3,63%**
2	Solid mineral fuels	26336	23462	27492	3751	3452	3950	**17,18%**	**14,43%**
3	Oil and oil-based products	34470	34545	36321	4721	4900	4968	**5,14%**	**1,39%**
4	Ore and pig iron for iron and steel industry	34167	34806	37020	4561	4532	4619	**6,36%**	**1,92%**
5	Iron and steel products	7727	8492	10369	1310	1486	1777	**22,10%**	**19,58%**
6	Crude and manufactured minerals, building materials	39618	36341	38351	5651	5464	5773	**5,53%**	**5,66%**
7	Fertilisers	6325	5076	5088	1150	935	944	**0,24%**	**0,96%**
8	Chemicals	19920	19427	20115	3115	3012	3156	**3,54%**	**4,78%**
9	Machinery, transport equipment, manufactured articles	24818	27847	31344	3339	3787	4242	**12,56%**	**12,01%**
99	of which special transactions	21106	21386	20611	2722	2753	2672	**-3,62%**	**-2,94%**
	BELGIUM (*)	**104641**	**106636**	**112231**	**5369**	**5471**	**5731**	**5,25%**	**4,75%**
0	Agricultural products	4636	4853	5171	383	395	421	**6,55%**	**6,55%**
1	Foodstuffs, animal fodder	4210	4272	4784	174	187	209	**11,99%**	**11,99%**
2	Solid mineral fuels	6942	7205	7599	447	423	446	**5,47%**	**5,47%**
3	Oil and oil-based products	17850	18140	18242	610	630	634	**0,56%**	**0,56%**
4	Ore and pig iron for iron and steel industry	6878	7417	7805	727	717	754	**5,23%**	**5,23%**
5	Iron and steel products	4813	4912	5287	303	315	339	**7,63%**	**7,63%**
6	Crude and manufactured minerals, building materials	26342	26492	26908	1673	1713	1740	**1,57%**	**1,57%**
7	Fertilisers	4981	4940	5159	371	373	390	**4,44%**	**4,44%**
8	Chemicals	11109	11327	12950	370	391	447	**14,33%**	**14,33%**
9	Machinery, transport equipment, manufactured articles	16880	17078	18326	311	327	351	**7,31%**	**7,31%**
99	of which special transactions	14225	14209	15248	218	218	234	**7,31%**	**7,31%**
	AUSTRIA	**11756**	**9819**	**8882**	**2775**	**2216**	**1714**	**-9,54%**	**-22,62%**
0	Agricultural products	1332	858	692	360	230	124	**-19,35%**	**-46,31%**
1	Foodstuffs, animal fodder	1889	1610	828	573	482	198	**-48,57%**	**-58,91%**
2	Solid mineral fuels	152	69	147	36	16	33	**113,04%**	**105,70%**
3	Oil and oil-based products	2144	1846	1847	398	310	293	**0,05%**	**-5,45%**
4	Ore and pig iron for iron and steel industry	3273	2620	2827	702	548	582	**7,90%**	**6,24%**
5	Iron and steel products	1038	965	791	300	249	175	**-18,03%**	**-29,50%**
6	Crude and manufactured minerals, building materials	580	506	595	105	87	91	**17,59%**	**5,18%**
7	Fertilisers	1004	1022	958	197	197	163	**-6,26%**	**-17,12%**
8	Chemicals	98	79	76	27	21	19	**-3,80%**	**-9,05%**
9	Machinery, transport equipment, manufactured articles	246	244	121	78	76	36	**-50,41%**	**-52,89%**
99	of which special transactions	0	0	0	0	0	0		

(*) : The data about trafic in Belguim for 2004 have been estimated by the Secrétariat of the CCR

Table OM7 – INTERNATIONAL TRANSPORT OF GOODS ON INLAND WATERWAYS, BY STATE

N° NST	Country Category of goods	Volumes carried 2002	Volumes carried 2003	Volumes carried 2004	Services 2002	Services 2003	Services 2004	Difference 2004/2003 1000 t	Difference 2004/2003 mio TKM
		1000 t			1000000 TKM			%	
	LUXEMBURG	**8568**	**9690**	**11180**	**0**	**0**	**0**	**15,38%**	
0	Agricultural products	1406	1656	1853				**11,90%**	
1	Foodstuffs, animal fodder	573	760	882				**16,05%**	
2	Solid mineral fuels	2646	3028	4029				**33,06%**	
3	Oil and oil-based products	308	438	480				**9,59%**	
4	Ore and pig iron for iron and steel industry	1464	1596	1554				**-2,63%**	
5	Iron and steel products	741	871	854				**-1,95%**	
6	Crude and manufactured minerals, building materials	1007	1064	1133				**6,48%**	
7	Fertilisers	213	223	333				**49,33%**	
8	Chemicals	42	21	50				**138,10%**	
9	Machinery, transport equipment, manufactured articles	168	33	12				**-63,64%**	
99	of which special transactions								
	TOTAL	**254969**	**245065**	**261828**	**95572**	**89493**	**96437**	**6,84%**	**7,76%**
0	Agricultural products	11747	10400	11478	7082	6022	5938	**10,37%**	**-1,40%**
1	Foodstuffs, animal fodder	17058	16001	16263	8107	7541	7564	**1,64%**	**0,31%**
2	Solid mineral fuels	28149	26848	29435	12026	10494	12036	**9,64%**	**14,69%**
3	Oil and oil-based products	43821	41746	42991	15104	14040	14315	**2,98%**	**1,96%**
4	Ore and pig iron for iron and steel industry	40118	38931	41403	11617	11162	12058	**6,35%**	**8,02%**
5	Iron and steel products	14951	14558	15590	5652	5534	6174	**7,09%**	**11,56%**
6	Crude and manufactured minerals, building materials	46818	42654	46160	16088	14778	16267	**8,22%**	**10,07%**
7	Fertilisers	7722	7063	7027	4223	3748	3999	**-0,51%**	**6,69%**
8	Chemicals	17717	17207	18293	6876	6592	7142	**6,31%**	**8,35%**
9	Machinery, transport equipment, manufactured articles	26868	29657	33188	8797	9582	10943	**11,91%**	**14,21%**
99	of which special transactions	24920	26057	27144	7705	8054	8893	**4,17%**	**10,42%**

Table OM8 – TOTAL TRANSPORT OF GOODS ON INLAND WATERWAYS IN THE STATES CONCERNED

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	mio TKM
		1000 t			1000000 TKM			%	
	SWITZERLAND	**8356**	**7006**	**7051**	**58**	**49**	**49**	**0,64%**	**0,64%**
0	Agricultural products	360	379	351	3	3	2	**-7,39%**	**-7,39%**
1	Foodstuffs, animal fodder	395	444	422	3	3	3	**-4,95%**	**-4,95%**
2	Solid mineral fuels	117	87	174	1	1	1	**100,00%**	**100,00%**
3	Oil and oil-based products	4316	3544	3380	30	25	24	**-4,63%**	**-4,63%**
4	Ore and pig iron for iron and steel industry	156	171	165	1	1	1	**-3,51%**	**-3,51%**
5	Iron and steel products	1158	793	833	8	6	6	**5,04%**	**5,04%**
6	Crude and manufactured minerals, building materials	505	422	478	4	3	3	**13,27%**	**13,27%**
7	Fertilisers	170	162	158	1	1	1	**-2,47%**	**-2,47%**
8	Chemicals	722	787	848	5	6	6	**7,75%**	**7,75%**
9	Machinery, transport equipment, manufactured articles	457	217	242	3	2	2	**11,52%**	**11,52%**
99	of which special transactions	152	164	195	1	1	1	**18,90%**	**18,90%**
	FRANCE	**68942**	**65429**	**69059**	**8875**	**8647**	**9106**	**5,55%**	**5,31%**
0	Agricultural products	8595	8587	8622	1519	1524	1463	**0,41%**	**-4,00%**
1	Foodstuffs, animal fodder	2823	3054	3328	413	463	479	**8,97%**	**3,46%**
2	Solid mineral fuels	5984	5148	6461	736	643	765	**25,51%**	**18,97%**
3	Oil and oil-based products	9563	9358	9241	1131	1064	1025	**-1,25%**	**-3,67%**
4	Ore and pig iron for iron and steel industry	2959	2713	2971	253	265	316	**9,51%**	**19,25%**
5	Iron and steel products	3497	3003	3175	563	510	541	**5,73%**	**6,08%**
6	Crude and manufactured minerals, building materials	28308	25737	26281	2790	2500	2572	**2,11%**	**2,88%**
7	Fertilisers	1150	1237	1392	184	215	234	**12,53%**	**8,84%**
8	Chemicals	2781	2847	3287	467	498	626	**15,45%**	**25,70%**
9	Machinery, transport equipment, manufactured articles	3282	3745	4301	819	965	1085	**14,85%**	**12,44%**
99	of which special transactions	2878	3341	3897	451	561	681	**16,64%**	**21,39%**
	GERMANY	**231746**	**219999**	**235861**	**64170**	**58175**	**63675**	**7,21%**	**9,45%**
0	Agricultural products	10076	9128	8657	4940	4120	3905	**-5,16%**	**-5,22%**
1	Foodstuffs, animal fodder	15618	14711	15462	6245	5525	5990	**5,10%**	**8,42%**
2	Solid mineral fuels	31678	30747	34106	8955	7700	8665	**10,93%**	**12,53%**
3	Oil and oil-based products	39674	37178	38610	11440	10270	10540	**3,85%**	**2,63%**
4	Ore and pig iron for iron and steel industry	36256	35228	38055	6260	5960	6770	**8,02%**	**13,59%**
5	Iron and steel products	12393	11941	12728	3805	3580	4000	**6,60%**	**11,73%**
6	Crude and manufactured minerals, building materials	47238	42182	45029	10755	9465	10700	**6,75%**	**13,05%**
7	Fertilisers	6496	6091	6425	2770	2470	2710	**5,49%**	**9,72%**
8	Chemicals	16651	15734	17116	3990	3745	4105	**8,78%**	**9,61%**
9	Machinery, transport equipment, manufactured articles	15665	17060	19673	5010	5340	6290	**15,32%**	**17,79%**
99	of which special transactions	14091	15599	18123	4645	4985	5915	**16,17%**	**18,66%**

Table OM8 – TOTAL TRANSPORT OF GOODS ON INLAND WATERWAYS IN THE STATES CONCERNED

N° NST	Country Category of goods	Volumes carried 1000 t			Services 1000000 TKM			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t %	mio TKM %
	NEDERLAND	**314007**	**303207**	**329867**	**40911**	**41031**	**44975**	**8,79%**	**9,61%**
0	Agricultural products	**9963**	**9394**	**10444**	**1502**	**1497**	**1632**	**11,18%**	**9,02%**
1	Foodstuffs, animal fodder	**20287**	**17710**	**17666**	**2691**	**2553**	**2552**	**-0,25%**	**-0,04%**
2	Solid mineral fuels	**28509**	**26524**	**31224**	**4106**	**3870**	**4528**	**17,72%**	**17,00%**
3	Oil and oil-based products	**51576**	**50832**	**54235**	**6583**	**6840**	**7106**		**3,89%**
4	Ore and pig iron for iron and steel industry	**35710**	**36575**	**39373**	**4769**	**4768**	**5019**	**7,65%**	**5,26%**
5	Iron and steel products	**8604**	**9450**	**11642**	**1433**	**1631**	**2002**	**23,20%**	**22,75%**
6	Crude and manufactured minerals, building materials	**92494**	**84994**	**90671**	**10198**	**10180**	**11363**	**6,68%**	**11,62%**
7	Fertilisers	**7876**	**6505**	**6683**	**1477**	**1220**	**1273**	**2,74%**	**4,34%**
8	Chemicals	**25305**	**24309**	**25424**	**3874**	**3695**	**3887**	**4,59%**	**5,20%**
9	Machinery, transport equipment, manufactured articles	**33683**	**36914**	**42505**	**4278**	**4777**	**5613**	**15,15%**	**17,50%**
99	of which special transactions	**29504**	**29754**	**30683**	**3591**	**3655**	**3885**	**3,12%**	**6,29%**
	BELGIUM (*)	**135114**	**137756**	**144719**	**8148**	**8302**	**8675**	**5,05%**	**4,49%**
0	Agricultural products	**5270**	**5493**	**5853**	**434**	**445**	**474**	**6,55%**	**6,52%**
1	Foodstuffs, animal fodder	**5601**	**5740**	**6428**	**244**	**261**	**292**	**11,99%**	**11,88%**
2	Solid mineral fuels	**11463**	**11438**	**12064**	**952**	**896**	**945**	**5,47%**	**5,47%**
3	Oil and oil-based products	**23398**	**23579**	**23711**	**1065**	**1078**	**1084**	**0,56%**	**0,56%**
4	Ore and pig iron for iron and steel industry	**8593**	**8991**	**9461**	**933**	**904**	**951**	**5,23%**	**5,20%**
5	Iron and steel products	**5915**	**6192**	**6664**	**391**	**436**	**469**	**7,62%**	**7,57%**
6	Crude and manufactured minerals, building materials	**36540**	**37263**	**37848**	**2713**	**2804**	**2848**	**1,57%**	**1,57%**
7	Fertilisers	**5927**	**6054**	**6323**	**442**	**459**	**479**	**4,44%**	**4,36%**
8	Chemicals	**13380**	**13510**	**15446**	**554**	**567**	**648**	**14,33%**	**14,29%**
9	Machinery, transport equipment, manufactured articles	**19027**	**19496**	**20921**	**420**	**452**	**485**	**7,31%**	**7,30%**
99	of which special transactions	**15108**	**15082**	**16184**	**249**	**249**	**267**	**7,31%**	**7,23%**
	AUSTRIA	**12316**	**10741**	**9074**	**2845**	**2277**	**1747**	**-15,52%**	**23,28%**
0	Agricultural products	**1336**	**901**	**696**	**360**	**236**	**124**	**-22,75%**	**47,46%**
1	Foodstuffs, animal fodder	**1890**	**1610**	**829**	**573**	**482**	**198**	**-48,51%**	**58,92%**
2	Solid mineral fuels	**152**	**69**	**148**	**36**	**16**	**33**	**114,49%**	**06,25%**
3	Oil and oil-based products	**2373**	**2007**	**1944**	**446**	**344**	**314**	**-3,14%**	**-8,72%**
4	Ore and pig iron for iron and steel industry	**3273**	**2621**	**2827**	**702**	**548**	**582**	**7,86%**	**6,20%**
5	Iron and steel products	**1202**	**1080**	**864**	**320**	**263**	**185**	**-20,00%**	**29,66%**
6	Crude and manufactured minerals, building materials	**736**	**1078**	**602**	**106**	**89**	**92**	**-44,16%**	**3,37%**
7	Fertilisers	**1010**	**1050**	**966**	**197**	**201**	**164**	**-8,00%**	**18,41%**
8	Chemicals	**98**	**79**	**76**	**27**	**21**	**19**	**-3,80%**	**-9,52%**
9	Machinery, transport equipment, manufactured articles	**246**	**246**	**122**	**78**	**77**	**36**	**-50,41%**	**53,25%**
99	of which special transactions	**0**	**0**	**0**	**0**	**0**	**0**		

(*) : The data about trafic in Belguim for 2004 have been estimated by the Secrétariat of the CCR

Table OM8 – TOTAL TRANSPORT OF GOODS ON INLAND WATERWAYS IN THE STATES CONCERNED

N° NST	Country Category of goods	Volumes carried			Services			Difference 2004/2003	
		2002	2003	2004	2002	2003	2004	1000 t	mio TKM
		1000 t			1000000 TKM			%	
	LUXEMBURG (not significant)	**8568**	**9690**	**11180**	**0**	**0**	**0**	**15,38%**	
0	Agricultural products	1406	1656	1853				**11,90%**	
1	Foodstuffs, animal fodder	573	760	882				**16,05%**	
2	Solid mineral fuels	2646	3028	4029				**33,06%**	
3	Oil and oil-based products	308	438	480				**9,59%**	
4	Ore and pig iron for iron and steel industry	1464	1596	1554				**-2,63%**	
5	Iron and steel products	741	871	854				**-1,95%**	
6	Crude and manufactured minerals, building materials	1007	1064	1133				**6,48%**	
7	Fertilisers	213	223	333				**49,33%**	
8	Chemicals	42	21	50				**138,10%**	
9	Machinery, transport equipment, manufactured articles	168	33	12				**-63,64%**	
99	of which special transactions								
	TOTAL	**471996**	**454575**	**484436**	**125007**	**118481**	**128227**	**6,57%**	**8,23%**
0	Agricultural products	19764	18773	19331	8758	7825	7600	**2,97%**	**-2,87%**
1	Foodstuffs, animal fodder	31045	27502	28573	10169	9287	9514	**3,89%**	**2,44%**
2	Solid mineral fuels	43955	43193	47306	14786	13126	14937	**9,52%**	**13,80%**
3	Oil and oil-based products	84110	81231	84870	20695	19621	20093	**4,48%**	**2,40%**
4	Ore and pig iron for iron and steel industry	46789	45679	49186	12918	12446	13639	**7,68%**	**9,58%**
5	Iron and steel products	19240	18743	20096	6520	6426	7203	**7,22%**	**12,10%**
6	Crude and manufactured minerals, building materials	144452	134767	141485	26566	25041	27578	**4,98%**	**10,13%**
7	Fertilisers	11447	10855	10982	5071	4566	4861	**1,17%**	**6,46%**
8	Chemicals	31087	29826	32209	8917	8532	9291	**7,99%**	**8,90%**
9	Machinery, transport equipment, manufactured articles	40107	44006	50398	10608	11613	13511	**14,53%**	**16,35%**
99	of which special transactions	35846	37670	41130	8937	9451	10749	**9,19%**	**13,74%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
		1000 t			%
	France - Germany	**8073**	**6995**	**7048**	**0,76%**
0	Agricultural products	**848**	**802**	**853**	**6,36%**
1	Foodstuffs, animal fodder	**806**	**1106**	**1120**	**1,27%**
2	Solid mineral fuels	**158**	**78**	**75**	**-3,85%**
3	Oil and oil-based products	**938**	**977**	**932**	**-4,61%**
4	Ore and pig iron for iron and steel industry	**718**	**527**	**546**	**3,61%**
5	Iron and steel products	**475**	**433**	**398**	**-8,08%**
6	Crude and manufactured minerals, building materials	**3431**	**2558**	**2521**	**-1,45%**
7	Fertilisers	**240**	**250**	**284**	**13,60%**
8	Chemicals	**423**	**253**	**305**	**20,55%**
9	Machinery, transport equipment, manufactured articles	**36**	**11**	**14**	**27,27%**
99	of which special transactions	**3**	**4**	**6**	**50,00%**
	France - Belgium	**7769**	**7474**	**9846**	**31,74%**
0	Agricultural products	**976**	**1091**	**1390**	**27,41%**
1	Foodstuffs, animal fodder	**490**	**534**	**742**	**38,95%**
2	Solid mineral fuels	**1362**	**942**	**1505**	**59,77%**
3	Oil and oil-based products	**468**	**601**	**470**	**-21,80%**
4	Ore and pig iron for iron and steel industry	**623**	**614**	**848**	**38,11%**
5	Iron and steel products	**804**	**764**	**1176**	**53,93%**
6	Crude and manufactured minerals, building materials	**1509**	**1537**	**1847**	**20,17%**
7	Fertilisers	**287**	**330**	**425**	**28,79%**
8	Chemicals	**424**	**307**	**322**	**4,89%**
9	Machinery, transport equipment, manufactured articles	**826**	**754**	**1121**	**48,67%**
99	of which special transactions	**802**	**743**	**1092**	**46,97%**
	France - Netherlands	**10162**	**9674**	**10601**	**9,58%**
0	Agricultural products	**2602**	**1980**	**2175**	**9,85%**
1	Foodstuffs, animal fodder	**451**	**562**	**541**	**-3,74%**
2	Solid mineral fuels	**2667**	**2253**	**2576**	**14,34%**
3	Oil and oil-based products	**798**	**720**	**774**	**7,50%**
4	Ore and pig iron for iron and steel industry	**772**	**851**	**812**	**-4,58%**
5	Iron and steel products	**275**	**273**	**272**	**-0,37%**
6	Crude and manufactured minerals, building materials	**1554**	**1863**	**2079**	**11,59%**
7	Fertilisers	**318**	**307**	**372**	**21,17%**
8	Chemicals	**497**	**588**	**689**	**17,18%**
9	Machinery, transport equipment, manufactured articles	**228**	**277**	**311**	**12,27%**
99	of which special transactions	**122**	**176**	**217**	**23,30%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
			1000 t		%
	France - Luxemburg	**194**	**260**	**220**	**-15,38%**
0	Agricultural products	**2**	**0**	**0**	
1	Foodstuffs, animal fodder	**1**	**1**	**1**	
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**2**	**2**	**6**	**200,00%**
5	Iron and steel products	**8**	**7**	**2**	**-71,43%**
6	Crude and manufactured minerals, building materials	**180**	**250**	**210**	**-16,00%**
7	Fertilisers	**1**	**0**	**1**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**0**	**0**	**0**	
99	of which special transactions	**0**	**0**	**0**	
	France - Switzerland	**860**	**871**	**968**	**11,14%**
0	Agricultural products	**33**	**49**	**75**	**53,06%**
1	Foodstuffs, animal fodder	**3**	**4**	**6**	**50,00%**
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**143**	**223**	**155**	**-30,49%**
4	Ore and pig iron for iron and steel industry	**2**	**0**	**0**	
5	Iron and steel products	**1**	**5**	**14**	**180,00%**
6	Crude and manufactured minerals, building materials	**670**	**581**	**716**	**23,24%**
7	Fertilisers	**1**	**3**	**0**	
8	Chemicals	**3**	**1**	**2**	
9	Machinery, transport equipment, manufactured articles	**4**	**5**	**0**	
99	of which special transactions	**4**	**5**	**5**	
	France - Austria	**22**	**26**	**9**	**-65,38%**
0	Agricultural products	**0**	**11**	**1**	**-90,91%**
1	Foodstuffs, animal fodder	**0**	**1**	**0**	
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**0**	**0**	**0**	
5	Iron and steel products	**13**	**0**	**8**	
6	Crude and manufactured minerals, building materials	**0**	**0**	**0**	
7	Fertilisers	**9**	**1**	**0**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**0**	**13**	**0**	
99	of which special transactions	**0**	**13**	**0**	

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
			1000 t		%
	France - others	**71**	**65**	**80**	**23,08%**
0	Agricultural products	**1**	**0**	**36**	
1	Foodstuffs, animal fodder	**0**	**5**	**4**	**-20,00%**
2	Solid mineral fuels	**0**	**1**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**4**	**0**	**11**	
5	Iron and steel products	**53**	**57**	**13**	**-77,19%**
6	Crude and manufactured minerals, building materials	**0**	**0**	**0**	
7	Fertilisers	**12**	**0**	**13**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**1**	**2**	**3**	**50,00%**
99	of which special transactions	**0**	**0**	**0**	
	Belgium - Germany	**26312**	**25965**	**27303**	**5,15%**
0	Agricultural products	**1115**	**894**	**908**	**1,57%**
1	Foodstuffs, animal fodder	**876**	**786**	**804**	**2,29%**
2	Solid mineral fuels	**1571**	**1479**	**1860**	**25,76%**
3	Oil and oil-based products	**5047**	**5049**	**4416**	**-12,54%**
4	Ore and pig iron for iron and steel industry	**784**	**822**	**1119**	**36,13%**
5	Iron and steel products	**2631**	**3296**	**3054**	**-7,34%**
6	Crude and manufactured minerals, building materials	**4490**	**3936**	**4746**	**20,58%**
7	Fertilisers	**2107**	**1600**	**1509**	**-5,69%**
8	Chemicals	**3447**	**3050**	**3220**	**5,57%**
9	Machinery, transport equipment, manufactured articles	**4244**	**5053**	**5667**	**12,15%**
99	of which special transactions	**3994**	**4809**	**5461**	**13,56%**
	Belgium - Netherlands	**55995**	**57323**	**60247**	**5,10%**
0	Agricultural products	**904**	**1327**	**1781**	**34,21%**
1	Foodstuffs, animal fodder	**2626**	**2198**	**1886**	**-14,19%**
2	Solid mineral fuels	**3121**	**3082**	**3689**	**19,70%**
3	Oil and oil-based products	**12425**	**13404**	**14544**	**8,50%**
4	Ore and pig iron for iron and steel industry	**4542**	**4784**	**3985**	**-16,70%**
5	Iron and steel products	**986**	**1441**	**1541**	**6,94%**
6	Crude and manufactured minerals, building materials	**14810**	**13206**	**13441**	**1,78%**
7	Fertilisers	**1202**	**966**	**797**	**-17,49%**
8	Chemicals	**4991**	**5184**	**5348**	**3,16%**
9	Machinery, transport equipment, manufactured articles	**10388**	**11731**	**13235**	**12,82%**
99	of which special transactions	**9847**	**9470**	**8542**	**-9,80%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
		1000 t			%
	Belgium - Luxemburg	**528**	**633**	**651**	**2,84%**
0	Agricultural products	**0**	**0**	**0**	
1	Foodstuffs, animal fodder	**0**	**0**	**0**	
2	Solid mineral fuels	**0**	**0**	**5**	
3	Oil and oil-based products	**361**	**311**	**344**	**10,61%**
4	Ore and pig iron for iron and steel industry	**41**	**116**	**152**	**31,03%**
5	Iron and steel products	**17**	**74**	**50**	**-32,43%**
6	Crude and manufactured minerals, building materials	**9**	**52**	**12**	**-76,92%**
7	Fertilisers	**74**	**80**	**88**	**10,00%**
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**26**	**0**	**0**	
99	of which special transactions	**26**	**0**	**0**	
	Belgium - Switzerland	**4988**	**4480**	**4222**	**-5,76%**
0	Agricultural products	**250**	**186**	**228**	**22,58%**
1	Foodstuffs, animal fodder	**287**	**197**	**174**	**-11,68%**
2	Solid mineral fuels	**27**	**54**	**25**	**-53,70%**
3	Oil and oil-based products	**1168**	**1426**	**914**	**-35,90%**
4	Ore and pig iron for iron and steel industry	**20**	**2**	**2**	**0,00%**
5	Iron and steel products	**671**	**269**	**484**	**79,93%**
6	Crude and manufactured minerals, building materials	**201**	**99**	**159**	**60,61%**
7	Fertilisers	**125**	**93**	**112**	**20,43%**
8	Chemicals	**9**	**14**	**9**	**-35,71%**
9	Machinery, transport equipment, manufactured articles	**2230**	**2140**	**2115**	**-1,17%**
99	of which special transactions	**2230**	**2140**	**2115**	**-1,17%**
	Belgium - Austria	**483**	**466**	**484**	**3,86%**
0	Agricultural products	**96**	**71**	**4**	**-94,37%**
1	Foodstuffs, animal fodder	**89**	**22**	**17**	**-22,73%**
2	Solid mineral fuels	**10**	**0**	**0**	
3	Oil and oil-based products	**15**	**1**	**11**	
4	Ore and pig iron for iron and steel industry	**8**	**4**	**0**	
5	Iron and steel products	**165**	**268**	**373**	**39,18%**
6	Crude and manufactured minerals, building materials	**21**	**22**	**13**	**-40,91%**
7	Fertilisers	**31**	**33**	**30**	**-9,09%**
8	Chemicals	**8**	**4**	**6**	**50,00%**
9	Machinery, transport equipment, manufactured articles	**40**	**41**	**30**	**-26,83%**
99	of which special transactions	**34**	**34**	**27**	**-20,59%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
			1000 t		%
	Belgium - others	**821**	**384**	**370**	**-3,65%**
0	Agricultural products	**153**	**24**	**6**	**-75,00%**
1	Foodstuffs, animal fodder	**222**	**119**	**59**	**-50,42%**
2	Solid mineral fuels	**64**	**20**	**22**	**10,00%**
3	Oil and oil-based products	**23**	**3**	**0**	**-100,00%**
4	Ore and pig iron for iron and steel industry	**45**	**15**	**22**	**46,67%**
5	Iron and steel products	**249**	**151**	**220**	**45,70%**
6	Crude and manufactured minerals, building materials	**16**	**7**	**8**	**14,29%**
7	Fertilisers	**25**	**11**	**12**	**9,09%**
8	Chemicals	**8**	**3**	**0**	**-100,00%**
9	Machinery, transport equipment, manufactured articles	**16**	**31**	**21**	**-32,26%**
99	of which special transactions	**7**	**15**	**17**	**13,33%**
	Netherlands - Luxemburg	**386**	**265**	**423**	**59,62%**
0	Agricultural products	**8**	**0**	**0**	
1	Foodstuffs, animal fodder	**0**	**0**	**1**	
2	Solid mineral fuels	**30**	**27**	**0**	
3	Oil and oil-based products	**130**	**122**	**12**	**-90,16%**
4	Ore and pig iron for iron and steel industry	**9**	**3**	**190**	
5	Iron and steel products	**32**	**34**	**84**	**147,06%**
6	Crude and manufactured minerals, building materials	**90**	**36**	**31**	**-13,89%**
7	Fertilisers	**55**	**39**	**42**	**7,69%**
8	Chemicals	**0**	**0**	**32**	
9	Machinery, transport equipment, manufactured articles	**32**	**4**	**31**	
99	of which special transactions	**0**	**0**	**3**	
	Netherlands - Switzerland	**8761**	**7835**	**7473**	**-4,62%**
0	Agricultural products	**413**	**335**	**261**	**-22,09%**
1	Foodstuffs, animal fodder	**624**	**868**	**906**	**4,38%**
2	Solid mineral fuels	**251**	**232**	**359**	**54,74%**
3	Oil and oil-based products	**5414**	**3987**	**3617**	**-9,28%**
4	Ore and pig iron for iron and steel industry	**36**	**29**	**85**	**193,10%**
5	Iron and steel products	**886**	**741**	**661**	**-10,80%**
6	Crude and manufactured minerals, building materials	**249**	**267**	**234**	**-12,36%**
7	Fertilisers	**106**	**122**	**120**	**-1,64%**
8	Chemicals	**72**	**87**	**62**	**-28,74%**
9	Machinery, transport equipment, manufactured articles	**710**	**1167**	**1168**	**0,09%**
99	of which special transactions	**702**	**1160**	**1168**	**0,69%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
			1000 t		%
	Netherlands - Austria	**3180**	**2486**	**3191**	**28,36%**
0	Agricultural products	**214**	**151**	**25**	**-83,44%**
1	Foodstuffs, animal fodder	**403**	**415**	**413**	**-0,48%**
2	Solid mineral fuels	**67**	**6**	**3**	**-50,00%**
3	Oil and oil-based products	**202**	**68**	**121**	**77,94%**
4	Ore and pig iron for iron and steel industry	**1775**	**1389**	**1726**	**24,26%**
5	Iron and steel products	**76**	**75**	**106**	**41,33%**
6	Crude and manufactured minerals, building materials	**233**	**281**	**549**	**95,37%**
7	Fertilisers	**30**	**24**	**101**	**320,83%**
8	Chemicals	**10**	**3**	**6**	**100,00%**
9	Machinery, transport equipment, manufactured articles	**170**	**74**	**141**	**90,54%**
99	of which special transactions	**164**	**73**	**141**	**93,15%**
	Netherlands - Germany	**105462**	**102750**	**111644**	**8,66%**
0	Agricultural products	**2230**	**2148**	**1963**	**-8,61%**
1	Foodstuffs, animal fodder	**6727**	**6615**	**6764**	**2,25%**
2	Solid mineral fuels	**17848**	**17589**	**19053**	**8,32%**
3	Oil and oil-based products	**13164**	**11931**	**13228**	**10,87%**
4	Ore and pig iron for iron and steel industry	**28522**	**27911**	**30008**	**7,51%**
5	Iron and steel products	**2991**	**3351**	**3609**	**7,70%**
6	Crude and manufactured minerals, building materials	**18063**	**17037**	**18854**	**10,67%**
7	Fertilisers	**1570**	**1547**	**1719**	**11,12%**
8	Chemicals	**7479**	**7339**	**8006**	**9,09%**
9	Machinery, transport equipment, manufactured articles	**6868**	**7282**	**8440**	**15,90%**
99	of which special transactions	**6456**	**6765**	**7897**	**16,73%**
	Netherlands - others	**978**	**1046**	**996**	**-4,78%**
0	Agricultural products	**65**	**55**	**152**	**176,36%**
1	Foodstuffs, animal fodder	**630**	**412**	**461**	**11,89%**
2	Solid mineral fuels	**16**	**16**	**24**	**50,00%**
3	Oil and oil-based products	**12**	**90**	**52**	**-42,22%**
4	Ore and pig iron for iron and steel industry	**58**	**17**	**33**	**94,12%**
5	Iron and steel products	**33**	**60**	**89**	**48,33%**
6	Crude and manufactured minerals, building materials	**12**	**84**	**77**	**-8,33%**
7	Fertilisers	**26**	**45**	**43**	**-4,44%**
8	Chemicals	**11**	**32**	**28**	**-12,50%**
9	Machinery, transport equipment, manufactured articles	**115**	**235**	**37**	**-84,26%**
99	of which special transactions	**107**	**226**	**30**	**-99,49%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
		1000 t			%
	Switzerland - Luxemburg	**0**	**0**	**0**	
0	Agricultural products	**0**	**0**	**0**	
1	Foodstuffs, animal fodder	**0**	**0**	**0**	
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**0**	**0**	**0**	
5	Iron and steel products	**0**	**0**	**0**	
6	Crude and manufactured minerals, building materials	**0**	**0**	**0**	
7	Fertilisers	**0**	**0**	**0**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**0**	**0**	**0**	
99	of which special transactions	**0**	**0**	**0**	
	Switzerland - Austria	**0**	**0**	**0**	
0	Agricultural products	**0**	**0**	**0**	
1	Foodstuffs, animal fodder	**0**	**0**	**0**	
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**0**	**0**	**0**	
5	Iron and steel products	**0**	**0**	**0**	
6	Crude and manufactured minerals, building materials	**0**	**0**	**0**	
7	Fertilisers	**0**	**0**	**0**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**0**	**0**	**0**	
99	of which special transactions	**0**	**0**	**0**	
	Switzerland - others	**0**	**0**	**0**	
0	Agricultural products	**0**	**0**	**0**	
1	Foodstuffs, animal fodder	**0**	**0**	**0**	
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**0**	**0**	**0**	
5	Iron and steel products	**0**	**0**	**0**	
6	Crude and manufactured minerals, building materials	**0**	**0**	**0**	
7	Fertilisers	**0**	**0**	**0**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**0**	**0**	**0**	
99	of which special transactions	**0**	**0**	**0**	

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
		1000 t			%
	Germany - Luxembourg	**845**	**630**	**564**	**-10,48%**
0	Agricultural products	**1**	**0**	**1**	
1	Foodstuffs, animal fodder	**5**	**0**	**0**	
2	Solid mineral fuels	**51**	**58**	**0**	
3	Oil and oil-based products	**318**	**268**	**247**	**-7,84%**
4	Ore and pig iron for iron and steel industry	**16**	**8**	**13**	**62,50%**
5	Iron and steel products	**432**	**281**	**291**	**3,56%**
6	Crude and manufactured minerals, building materials	**8**	**7**	**7**	**0,00%**
7	Fertilisers	**12**	**6**	**3**	**-50,00%**
8	Chemicals	**2**	**2**	**2**	**0,00%**
9	Machinery, transport equipment, manufactured articles	**0**	**0**	**0**	
99	of which special transactions	**0**	**0**	**0**	
	Germany - Austria	**1035**	**1401**	**1472**	**5,07%**
0	Agricultural products	**242**	**212**	**385**	**81,60%**
1	Foodstuffs, animal fodder	**120**	**157**	**190**	**21,02%**
2	Solid mineral fuels	**3**	**1**	**2**	
3	Oil and oil-based products	**32**	**80**	**66**	**-17,50%**
4	Ore and pig iron for iron and steel industry	**96**	**300**	**260**	**-13,33%**
5	Iron and steel products	**23**	**68**	**40**	**-41,18%**
6	Crude and manufactured minerals, building materials	**108**	**122**	**135**	**10,66%**
7	Fertilisers	**400**	**445**	**382**	**-14,16%**
8	Chemicals	**0**	**2**	**5**	**150,00%**
9	Machinery, transport equipment, manufactured articles	**11**	**14**	**7**	**-50,00%**
99	of which special transactions	**5**	**4**	**5**	**25,00%**
	Germany - Switzerland	**1724**	**1231**	**1516**	**23,15%**
0	Agricultural products	**28**	**14**	**18**	**28,57%**
1	Foodstuffs, animal fodder	**30**	**26**	**18**	**-30,77%**
2	Solid mineral fuels	**12**	**2**	**3**	**50,00%**
3	Oil and oil-based products	**930**	**539**	**854**	**58,44%**
4	Ore and pig iron for iron and steel industry	**154**	**154**	**129**	**-16,23%**
5	Iron and steel products	**279**	**190**	**181**	**-4,74%**
6	Crude and manufactured minerals, building materials	**100**	**133**	**129**	**-3,01%**
7	Fertilisers	**24**	**25**	**33**	**32,00%**
8	Chemicals	**113**	**91**	**91**	**0,00%**
9	Machinery, transport equipment, manufactured articles	**54**	**57**	**60**	**5,26%**
99	of which special transactions	**10**	**10**	**11**	**10,00%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
		1000 t			%
	Germany - Switzerland	**9169**	**7316**	**5671**	**-22,48%**
0	Agricultural products	**788**	**625**	**334**	**-46,56%**
1	Foodstuffs, animal fodder	**1391**	**962**	**890**	**-7,48%**
2	Solid mineral fuels	**819**	**947**	**86**	**-90,92%**
3	Oil and oil-based products	**339**	**248**	**288**	**16,13%**
4	Ore and pig iron for iron and steel industry	**341**	**370**	**113**	**-69,46%**
5	Iron and steel products	**3123**	**2222**	**2419**	**8,87%**
6	Crude and manufactured minerals, building materials	**847**	**495**	**275**	**-44,44%**
7	Fertilisers	**536**	**616**	**465**	**-24,51%**
8	Chemicals	**141**	**177**	**79**	**-55,37%**
9	Machinery, transport equipment, manufactured articles	**844**	**654**	**722**	**10,40%**
99	of which special transactions	**364**	**277**	**333**	**20,22%**
	Luxemburg - others	**170**	**90**	**67**	**-25,56%**
0	Agricultural products	**0**	**0**	**0**	
1	Foodstuffs, animal fodder	**0**	**0**	**0**	
2	Solid mineral fuels	**0**	**0**	**0**	
3	Oil and oil-based products	**0**	**0**	**0**	
4	Ore and pig iron for iron and steel industry	**161**	**86**	**67**	**-22,09%**
5	Iron and steel products	**9**	**4**	**0**	
6	Crude and manufactured minerals, building materials	**0**	**0**	**0**	
7	Fertilisers	**0**	**0**	**0**	
8	Chemicals	**0**	**0**	**0**	
9	Machinery, transport equipment, manufactured articles	**0**	**0**	**0**	
99	of which special transactions	**0**	**0**	**0**	
	Austria - others	**7052**	**5464**	**6842**	**25,22%**
0	Agricultural products	**779**	**425**	**918**	**116,00%**
1	Foodstuffs, animal fodder	**1277**	**1016**	**1270**	**25,00%**
2	Solid mineral fuels	**72**	**62**	**148**	**138,71%**
3	Oil and oil-based products	**1894**	**1698**	**1946**	**14,61%**
4	Ore and pig iron for iron and steel industry	**1393**	**927**	**1287**	**38,83%**
5	Iron and steel products	**772**	**551**	**518**	**-5,99%**
6	Crude and manufactured minerals, building materials	**217**	**81**	**117**	**44,44%**
7	Fertilisers	**543**	**520**	**489**	**-5,96%**
8	Chemicals	**79**	**70**	**81**	**15,71%**
9	Machinery, transport equipment, manufactured articles	**26**	**114**	**68**	**-40,35%**
99	of which special transactions	**43**	**133**	**74**	**-44,36%**

Table OM9 – EXCHANGES OF GOODS BETWEEN COUNTRIES ON INLAND WATERWAYS, BY STATE

N° NST	Relations Category of goods	Volumes carried 2002	2003	2004	Difference 2004/2003
		1000 t			%
	Total	**255040**	**245130**	**261908**	**6,84%**
0	Agricultural products	**11748**	**10400**	**11514**	**10,71%**
1	Foodstuffs, animal fodder	**17058**	**16006**	**16267**	**1,63%**
2	Solid mineral fuels	**28149**	**26849**	**29435**	**9,63%**
3	Oil and oil-based products	**43821**	**41746**	**42991**	**2,98%**
4	Ore and pig iron for iron and steel industry	**40122**	**38931**	**41414**	**6,38%**
5	Iron and steel products	**15004**	**14615**	**15603**	**6,76%**
6	Crude and manufactured minerals, building materials	**46818**	**42654**	**46160**	**8,22%**
7	Fertilisers	**7734**	**7063**	**7040**	**-0,33%**
8	Chemicals	**17717**	**17207**	**18293**	**6,31%**
9	Machinery, transport equipment, manufactured articles	**26869**	**29659**	**33191**	**11,91%**
99	of which special transactions	**24920**	**26057**	**27144**	**4,17%**

Container traffic on the main routes
(in TEUs)

1) Rhine route – evolution of transhipments in the main Rhine ports

Rhine traffic	Total	Incoming			Outgoing		
		Total	empty	loaded	Total	empty	loaded
Lower Rhine							
01	393750	182950	90663	92287	210800	48767	162033
02	444783	211157	102666	108491	233626	49578	184048
03	537779	260870	127330	133540	276909	70132	206777
04	613685	295794	145695	150099	317891	75169	242722
Evolution (2004 / 2003)	**14,11**	**13,39**	**14,42**	**12,40**	**14,80**	**7,18**	**17,38**
Middle Rhine							
01	592150	295895	162095	133800	296255	36947	259308
02	649625	316482	179607	136875	333143	38998	294145
03	696486	339560	185248	154312	356926	40303	316623
04	862395	426193	242824	183369	436202	45346	390856
Evolution (2004 / 2003)	**23,82**	**25,51**	**31,08**	**18,83**	**22,21**	**12,51**	**23,45**
Upper Rhine							
01	210966	108340	69670	38670	102626	20730	81896
02	227935	115112	78382	36730	112823	19994	92829
03	246451	120911	78878	42033	125540	21533	104007
04	292628	138218	93240	44978	154410	21815	132595
Evolution (2004 / 2003)	**18,74**	**14,31**	**18,21**	**7,01**	**23,00**	**1,31**	**27,49**
Total 01	1196866	587185	322428	264757	609681	106444	503237
Total 02	1322343	642751	360655	282096	679592	108570	571022
Total 03	1480716	721341	391456	329885	759375	131968	627407
Total 04	1768708	860205	481759	378446	908503	142330	766173
Evolution (2004 / 2003)	**19,45**	**19,25**	**23,07**	**14,72**	**19,64**	**7,85**	**22,12**

2) Delta region and north – south traffic

Traffic in the Delta	Total
Belgium / Netherlands	
03	801460
04	823135
Evolution (2004 / 2003)	**2,70**
France / Netherlands	
03	14753
04	16953
Evolution (2004 / 2003)	**14,91**
Total 03	816213
Total 04	840088
Evolution (2004 / 2003)	**2,93**

3) National container traffic, in TEUs

Country		Total
Netherlands		
	01	651885
	02	670189
	03	694324
	04	873399
	Evolution (2004 / 2003)	**25,79%**
Germany		
	01	111577
	02	123567
	03	145150
	04	171812
	Evolution (2004 / 2003)	**18,37%**
France		
(Rhône basin)	**01**	10530
	02	21387
	03	32644
	04	47000
	Evolution (2004 / 2003)	**43,98%**
(Seine basin)	**01**	38446
	02	37500
	03	67137
	04	82620
	Evolution (2004 / 2003)	**23,06%**
(Northern canals)	**01**	48221
	02	35752
	03	43788
	04	58146
	Evolution (2004 / 2003)	**32,79%**

Micro-economic data

Self-propelled barges – transport of dry goods

Tonnage class	400 +/- 300 t 100-700 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	22	17	9
Average tonnage	566	561	615
Average year of construction	1957	1957	1959
Operational hours per year (ave.)	3604	3599	3500
Average value of vessel	€ 196 515	€ 194 156	€ 217 660
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	51,65%	8,12%	-9,07%
Insurance	2,60%	-1,20%	12,11%
Allocations to amortisation	9,09%	-1,18%	12,76%
Repairs and maintenance	6,89%	5,23%	7,76%
Other costs	7,72%	3,59%	8,42%
Financial charges	6,80%	-3,30%	-14,23%
Total fixed costs per year	**84,75%**	**5,22%**	**-3,88%**
Fuel	13,58%	1,08%	-6,00%
Other variable costs	1,66%	-0,68%	7,20%
Total variable costs per year	**15,25%**	**0,90%**	**-4,62%**
Total costs	**100,00 %**	**4,54%**	**-3,99%**

Tonnage class	1100 +/- 400 t 700-1500 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	90	98	72
Average tonnage	1061	1069	1068
Average year of construction	1960	1961	1962,25
Operational hours per year (ave.)	3718	3690	3701
Average value of vessel	€ 510 276	€ 519 876	€ 523 851
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	34,96%	3,27%	7,73%
Insurance	3,92%	1,88%	0,76%
Allocations to amortisation	13,49%	1,39%	0,38%
Repairs and maintenance	5,41%	6,07%	3,80%
Other costs	6,51%	4,62%	3,29%
Financial charges	10,29%	-0,29%	-22,91%
Total fixed costs per year	**74,57%**	**2,62%**	**0,82%**
Fuel	23,60%	-5,73%	4,60%
Other variable costs	1,83%	0,97%	-0,07%
Total variable costs per year	**25,43%**	**-5,26%**	**4,25%**
Total costs	**100,00 %**	**0,55%**	**1,67%**

Tonnage class	2000 +/- 500 t 1500-2500 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	46	55	45
Average tonnage	1873	1872	1849
Average year of construction	1980	1980	1981
Operational hours per year (ave.)	3847	3854	3787
Average value of vessel	€ 1 171 785	€ 1 172 718	€ 1 164 990
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	31,38%	8,63%	0,96%
Insurance	5,75%	0,08%	-0,66%
Allocations to amortisation	16,16%	0,20%	-2,07%
Repairs and maintenance	5,82%	-31,71%	3,00%
Other costs	6,33%	4,03%	2,38%
Financial charges	15,15%	-2,05%	-24,00%
Total fixed costs per year	**80,59%**	**0,21%**	**-4,51%**
Fuel	16,87%	-11,29%	-4,86%
Other variable costs	2,54%	-0,08%	-2,04%
Total variable costs per year	**19,41%**	**-9,93%**	**-4,48%**
Total costs	**100,00 %**	**-1,87%**	**-4,50%**

Tonnage class	3000 +/- 500 t 2500-3500 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	21	23	22
Average tonnage	2820	2827	2825
Average year of construction	1987	1987	1988
Operational hours per year (ave.)	4229	4252	4287
Average value of vessel	€ 2 054 362	€ 2 059 093	€ 2 063 436
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	27,58%	8,50%	7,68%
Insurance	6,59%	0,23%	0,21%
Allocations to amortisation	16,58%	0,40%	-1,47%
Repairs and maintenance	4,36%	5,78%	3,80%
Other costs	5,76%	4,25%	3,30%
Financial charges	17,35%	-1,90%	-23,33%
Total fixed costs per year	**78,22%**	**3,05%**	**-2,65%**
Fuel	18,60%	5,64%	-3,41%
Other variable costs	3,18%	0,37%	-0,11%
Total variable costs per year	**21,78%**	**4,86%**	**-2,94%**
Total costs	**100,00 %**	**3,44%**	**-2,71%**

Self-propelled barges – transport by tanker

Tonnage class	400 +/- 300 t 100 - 700 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	2	2	2
Average tonnage	478	478	478
Average year of construction	1965	1965	1965
Operational hours per year (ave.)	3500	3500	3500
Average value of vessel	€ 222 668	€ 222 668	€ 222 668
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	46,96%	6,79%	4,84%
Insurance	3,51%	0,00%	0,00%
Allocations to amortisation	9,05%	0,00%	0,00%
Repairs and maintenance	5,50%	5,59%	3,86%
Other costs	10,74%	4,05%	3,36%
Financial charges	6,79%	-2,13%	-23,49%
Total fixed costs per year	**82,54%**	**4,45%**	**1,37%**
Fuel	15,59%	70,82%	7,79%
Other variable costs	1,87%	0,00%	0,00%
Total variable costs per year	**17,46%**	**59,93%**	**7,04%**
Total costs	**100,00%**	**11,78%**	**2,44%**

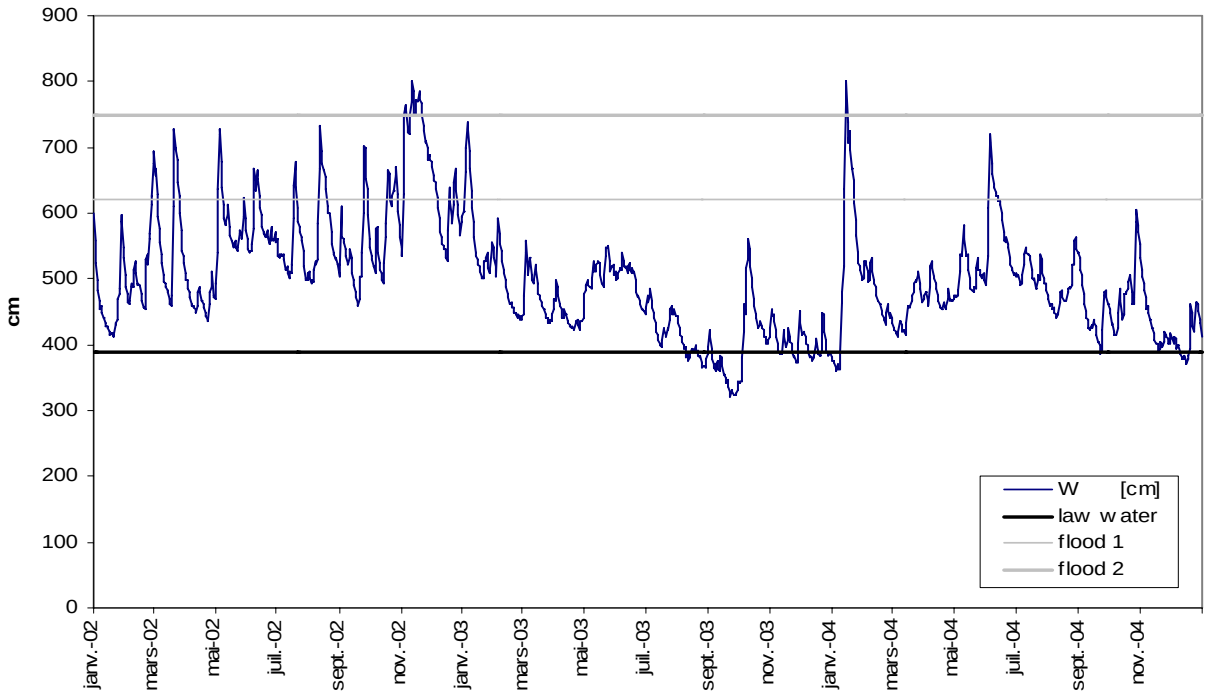
Tonnage class	1100 +/- 400 t 700-1500 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	12	12	10
Average tonnage	1498	1498	1239
Average year of construction	1966	1966	1966
Operational hours per year (ave.)	5250	5250	5350
Average value of vessel	€ 696 146	€ 696 146	€ 729 047
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	57,31%	5,32%	5,79%
Insurance	3,83%	0,00%	4,73%
Allocations to amortisation	9,88/	0,00%	4,73%
Repairs and maintenance	4,23%	5,59%	6,97%
Other costs	7,13%	4,05%	6,06%
Financial charges	7,39%	-2,13%	-19,88%
Total fixed costs per year	**89,75%**	**3,72%**	**3,46%**
Fuel	8,70%	-11,66%	-0,47%
Other variable costs	1,55%	0,00%	3,17%
Total variable costs per year	**10,25%**	**-10,04%**	**0,09%**
Total costs	**100,00%**	**2,17%**	**3,13%**

Tonnage class	2000 +/- 500 t 1500-2500 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	8	10	13
Average tonnage	1819	1811	1808
Average year of construction	1983	1981	1987
Operational hours per year (ave.)	5625	5700	5500
Average value of vessel	€ 1 408 420	€ 1 368 339	€ 1 506 277
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	47,85%	10,42%	-3,47%
Insurance	5,36%	-2,85%	10,08%
Allocations to amortisation	10,98%	-0,87%	-5,32%
Repairs and maintenance	4,26%	5,17%	3,68%
Other costs	6,90%	3,68%	3,19%
Financial charges	10,33%	-4,91%	-15,78%
Total fixed costs per year	**85,68%**	**5,22%**	**-3,54%**
Fuel	12,73%	-18,89%	12,47%
Other variable costs	1,59%	-0,41%	-0,19%
Total variable costs per year	**14,32%**	**-17,01%**	**10,92%**
Total costs	**100,00 %**	**1,73%**	**-1,69%**

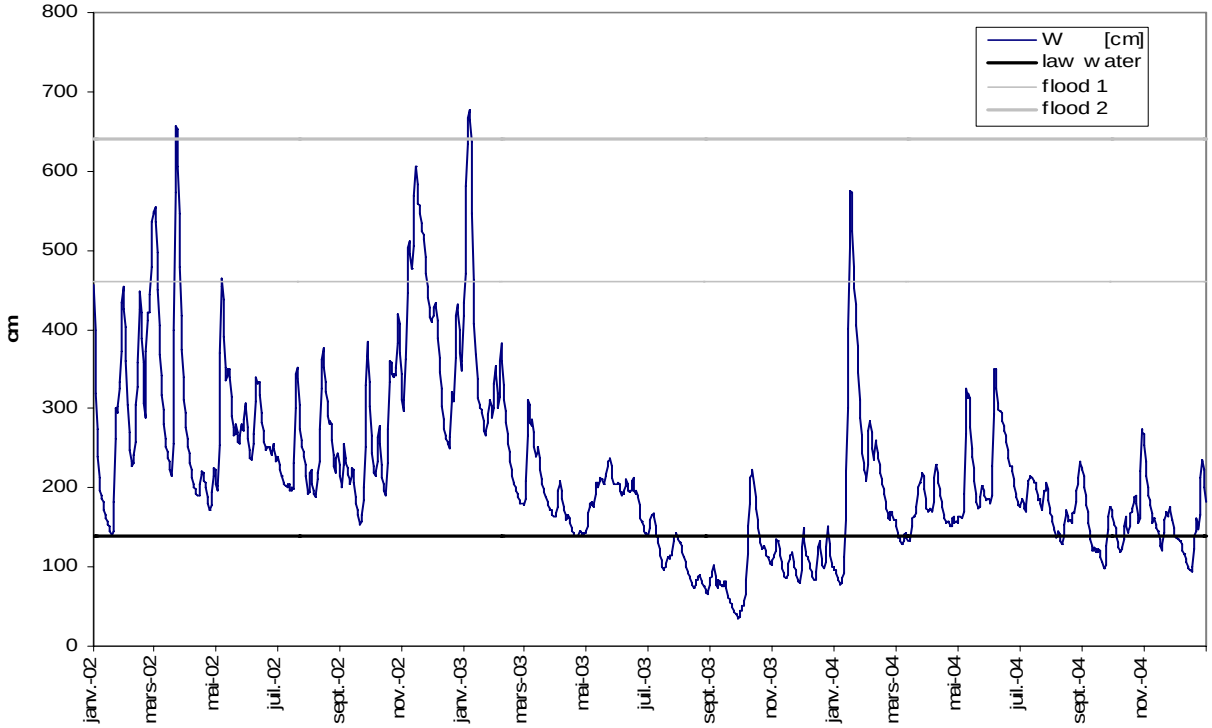
Tonnage class	3000 +/- 500 t 2500-3500 tons		
Sample observed	**2001**	**2002**	**2003**
Number of vessels	2	3	5
Average tonnage	3035	2973	2830
Average year of construction	1995	1988	1997
Operational hours per year (ave.)	6000	6000	6000
Average value of vessel	€ 3 068 941	€ 2 769 563	€ 2 944 040
Cost headings	***Proportion of costs***	***Evolution of costs 2002/2001***	***Evolution of costs 2003/2002***
Labour costs	42,92%	6,79%	4,84%
Insurance	7,35%	-9,76%	6,30%
Allocations to amortisation	11,89%	5,67%	-13,84%
Repairs and maintenance	4,51%	3,53%	-0,93%
Other costs	7,07%	2,13%	-1,13%
Financial charges	14,23%	-11,68%	-18,68%
Total fixed costs per year	**87,99%**	**1,21%**	**-2,32%**
Fuel	10,31%	-7,30%	-7,40%
Other variable costs	1,71%	-2,00%	-4,73%
Total variable costs per year	**12,01%**	**-6,57%**	**-7,01%**
Total costs	**100,00 %**	**0,21%**	**-2,88%**

Hydraulicité

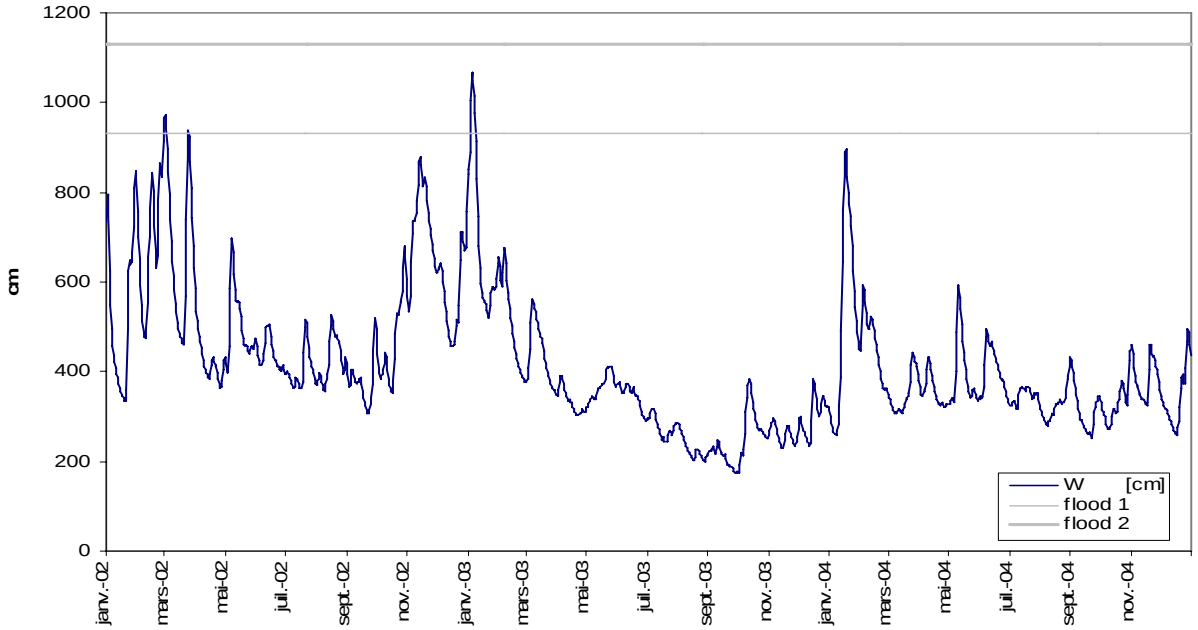
Water levels at Maxau in 2002, 2003 et 2004



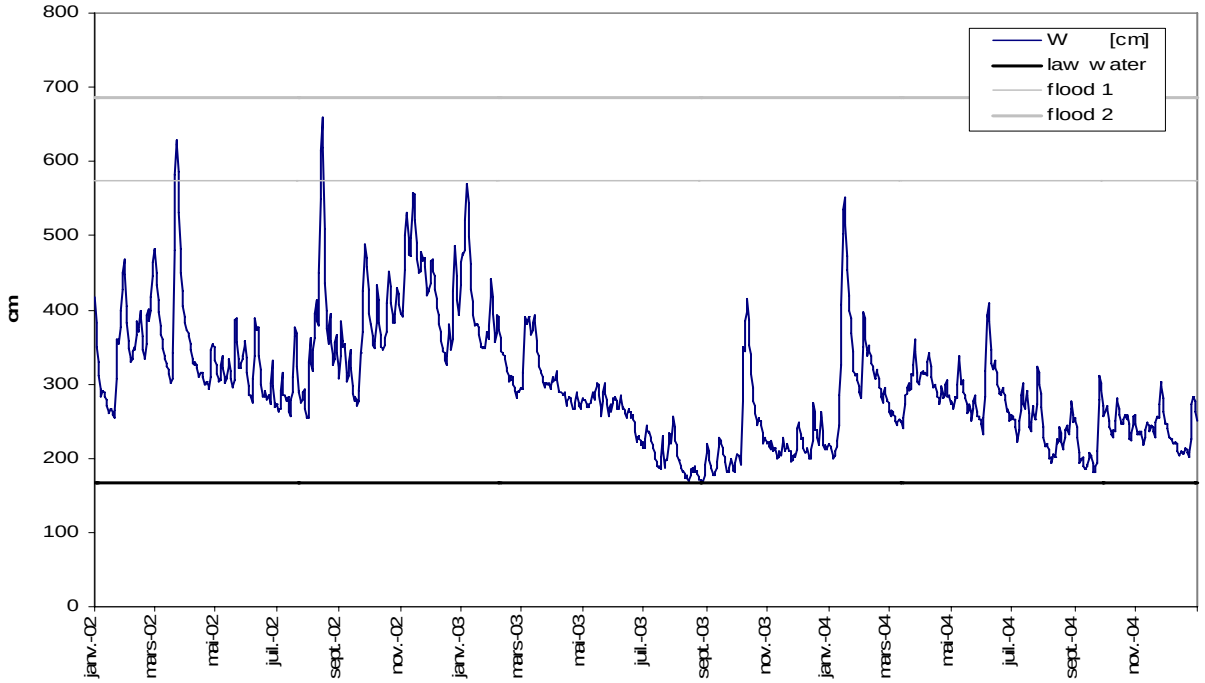
Water levels at Kaub in 2002,2003 et 2004



Water levels at Ruhrort in 2002, 2003 et 2004



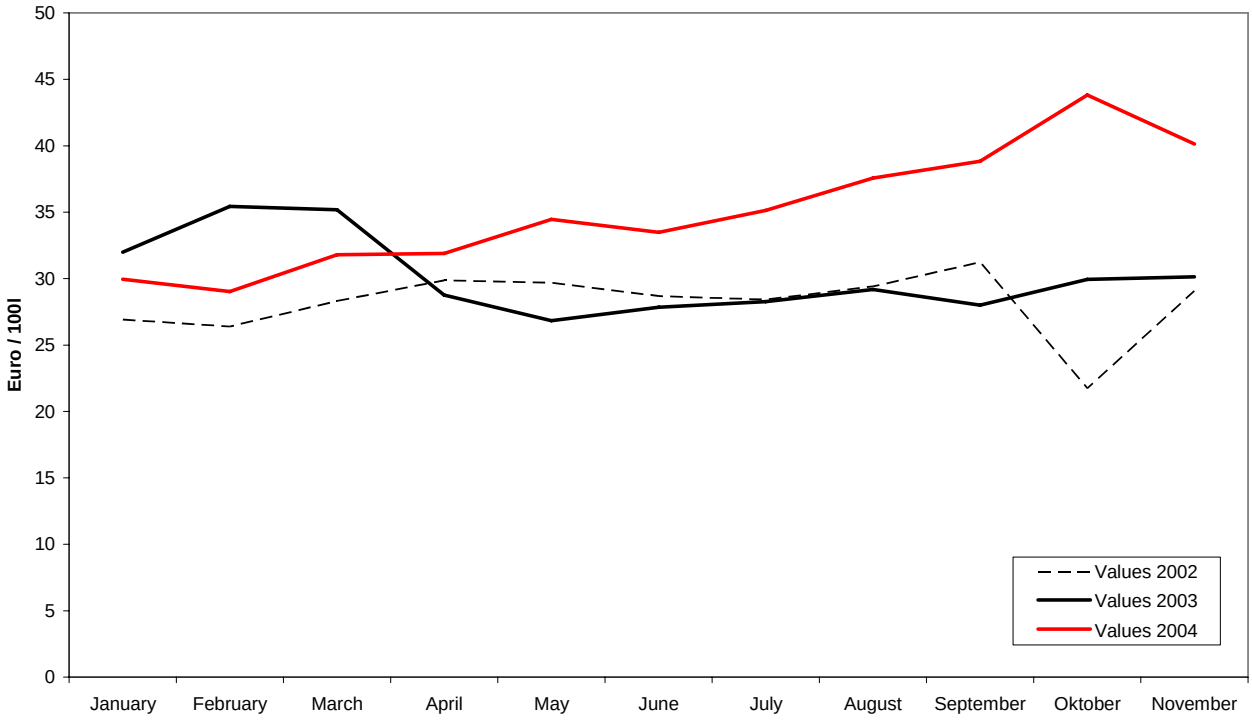
Water levels at Hofkirchen in 2002, 2003, 2004



Reference levels

	Maxau (Rhine)	Kaub (Rhine)	Ruhrort (Rhine)	Hofkirchen (Danube)
Low water	390	140		166
Flood 1	620	460	930	575
Flood 2	750	640	1130	687

Evolution of price of fuel oil



Inland waterways transport network in the States concerned
(in km)

As a guide; situation in 1993.
Source: UN/ECE

Country	Regional network	International network	Total
Germany	1465	4826	6291
Austria	7	351	358
Belgium	677	836	1513
France	3988	1829	5817
Luxemburg	0	37	37
Netherland	2648	2398	5046
Switzerland	0	21	21