MARKET OBSERVATION

FOR EUROPEAN INLAND NAVIGATION

2005 - II

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Foreword

Whereas the main purpose of the initial publication in the observation of the market for inland waterway transport in Europe was to lay down the guiding principles for the methodology to be used and look back over the previous three years in assessing the economic situation of inland waterway transport, this second publication reflects more the vocation of the market observation project to monitor prevailing conditions. On the whole, this publication will be less detailed than its predecessor and its successor, since at the time it was compiled complete data on the fleets and the transport of goods in the course of 2005 was not yet available. The full information on offer and demand in 2005 will therefore be presented in the publication scheduled for the end of the first half of 2006.

In this edition, we shall therefore – on the basis of available information – cover the evolution of the offer of transport and demand in the immediate past and provide an analysis of the microeconomic data for 2004. The data for offer and demand refers to the first nine months of 2005, or the entire year whenever possible. The geographic coverage remains limited to the Rhine states plus Belgium and Austria.

The purpose of the microeconomic analysis based on 2004 is not only to evaluate the financial year in question, but also to attempt to glimpse at this stage how operation conditions may have evolved in 2005 and the prospects for the operation of vessels in 2006. The analysis for 2004 is based on a sample that is twice as large as that used for 2003. Unfortunately, this sample is still restricted to vessels operating in the Netherlands. For this year, as for the interpretation of freight, the support of the professional organisations, whose representatives work on the market on a daily basis, is indispensable.

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Contents

General introduction

As part of the market observation project, the purpose of this second publication is to supplement the initial publication by providing updated data and, more particularly, indications of the microeconomic aspects of 2004.

As the year opens we are able to state that the level of activity in Europe and more particularly the level of exchanges with south-east Asia remain steady. Without this global demand - which happily is set to continue for a few years yet - but merely using the figures for rate of growth and the potential for development in this part of the world, the demand for transport in Europe, particularly inland waterway transport into and out of sea ports, would be very different. This applies particularly to the transport of goods related with the iron and steel industry in any way and to the transport of containers.

At the present time it is important for inland waterway transport to show that it is capable of meeting this demand, in order to gain a larger market share, particularly in the container transport sector.

Problems connected with below-average water conditions on the Rhine lasting for extensive periods of time also serve as a reminder that, despite all the efforts made in terms of infrastructure, inland waterway transport nevertheless remains dependent on the weather to some extent. This weak point of inland waterway transport is damaging to its image in terms of reliability.

As a result, this element should be taken into account when decisions are being made on investments and also in technical terms when vessels are being designed. Although large vessels allow economies of scale when conditions are good, they are considerably disadvantaged when water conditions are not normal, when they are only able to operate with reduced capacity and lower productivity.

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Chapter 1 – Analysis of demand for transport

A. General evolution of the economy

At the time of drafting this commentary in early March 2006, the only figures available on the evolution of GNPs in the European states from both OECD and Eurostat are estimates, but they nevertheless make it possible to identify a slowing down of GNP growth in Europe, both within the euro zone and within the 25-member Europe. These growth rates were +1.3% in 2005 (compared with +2.1% in 2004) for the euro zone and +1.6% in 2005 (compared with +2.4% in 2004) for the 25-member Europe.

Overall, a clear slowing down of growth rates was noticeable in the last quarter of 2005.

Regarding the main commercial partners, we can see that the GNPs of Japan and the United States advanced substantially in 2005, and this tendency was even more accentuated in the fourth quarter.

These elements seem to indicate that the demand for transport in Europe basically remains supported by exports and imports. The table below shows that the increase rate of provided services is generally higher for national transport than for international transport. This situation can be explained by the strong development of good transportation on waterways which, until recently, were not much used. However, this increase concerns much smaller volumes than those transported on the international level.

B. Evolution of inland waterway transport in the various states

(in TKM million)

(Summary table)

Country	Type transport	Jan. – Sept. 2004	Jan. – Sept. 2005	Evolution in %
Germany				
	of which national	8258,30	9192,5	11,31 %
	of which internationaal	39163,00	41677,70	6,42 %
	Total	**47421,30**	**50870,20**	**7,27 %**
Austria				
	of which national	27,40	29,00	5,84 %
	of which internationaal	1405,60	1247,80	-11,23 %
	Total	**1433,00**	**1276,80**	**-10,90 %**
Belgium				
	of which national	2277,00		
	of which internationaal	4004,00		
	Total	**6281,00**		
France				
	of which national	2958,00	3485,00	17,82 %
	of which internationaal	2307,00	2475,00	7,28 %
	Total	**5265,00**	**5960,00**	**13,20 %**
Hungary				
	of which national	3,00	4,10	36,67 %
	of which internationaal	1407,30	1659,60	17,93 %
	Total	**1410,30**	**1663,70**	**17,97 %**

Country	Type transport	Jan. – Sept. 2004	Jan. – Sept. 2005	Evolution in %
Luxemburg				
	of which national	-		
	of which internationaal	-		
	Total	**-**		
Nederlands				
	of which national	6590,00		
	of which internationaal	21486,00		
	Total	**28076,00**		
Poland				
	of which national	454,80	459,20	
	of which internationaal			
	Total	**454,80**	**459,20**	**0,97 %**
Czech Republic				
	of which national	16,30	29,00	77,91 %
	of which internationaal	16,50	19,40	17,58 %
	Total	**32,80**	**48,40**	**47,56 %**
Slovakia				
	of which national	0,40	3,00	650,00 %
	of which internationaal	535,90	598,50	11,68 %
	Total	**536,30**	**601,50**	**12,16 %**
Switzerland				
	of which national	34,10	36,30	6,45 %
	of which internationaal	0,80	1,10	37,50 %
	Total	**34,90**	**37,40**	**7,16 %**
Total only if data for both years iss known		**56588,40**	**60917,20**	**7,65%**

This data indicates a clear increase in TKM on inland waterways in Europe in the course of the first nine months of 2005. At present, although definitive data is not yet available for the final quarter in 2005, we are all aware of the fact that water conditions remained low for a long period during this time, halting the increase in TKM towards the end of the year.

Sufficiently complete data is unfortunately not yet available at present to allow a comparison with the progress recorded by other modes of transport. It will therefore not be possible to provide such a comparison until the next publication.

A more detailed analysis of the evolution of the goods transported on the main European inland waterways, and more particularly on the Rhine, will be set out in the following section.

C. Evolution of inland waterway transport by zone and by category of goods

Unfortunately, the data available at the present time only allows a detailed evaluation by type of goods for the first three quarters of 2005 and only for transports in Germany. The German waterways being situated in the centre of the European waterway network, the evolution of transport in this area reflects the main trends for Western Europe. This explains our decision, for the present edition, to base our studies

on this geographical area regarding the short-term evolutions of transported volumes and the services provided to the various industrial sectors which use inland navigation for transportation. Some information covering the whole year is already available for France. A number of elements also exist for the Flemish inland waterways. The evolution of transhipments in Benelux sea ports is an additional element for the analysis of demand for transport capacity on the part of the main industrial sectors concerned.

a) Activity in Benelux sea ports

In 2005, transhipments in sea ports continued to progress, with figures of +2.9% for Antwerp, +5% for Rotterdam and +2.3% for Amsterdam. The most progress was of course registered for transhipments of containers, with figures of +13%, +12% and +25% (in TEU) for the same three ports. Transhipments of oil products also increased substantially, particularly in Rotterdam (+27%), which is a global hub for such products. Transhipments of bulk goods evolved unevenly, although the overall volumes increased. This trend should continue in 2006, supported by global demand and the level of exports, and will continue to provide inland waterway transport with a demand for transport capacity that the industry will need to use to the best possible advantage.

Although specific data is not currently available on the evolution of transport by inland waterway, the sustained level of activity in sea ports and the evolution noticeable in northern France and Flanders and on the Rhine lead us to suppose that in the Netherlands and Belgium as a whole the volumes transported by inland waterway have progressed, particularly for containers.

b) On the French network

The progress in volumes transported amounted overall to 2.6% (7.4% in TKM). The greatest progress was recorded for agricultural products and fertilisers, with figures of +10.9% and +9.70%. Progress attaining 42.5% in volumes of agricultural products could be observed on the Saône and the Rhône, following the setting up of a platform for exporting products of this type.

Transport connected with the construction sector also continued to progress on French inland waterways.

Container transport also increased in volume by 8.3%. The increase in volumes transported could have been higher but for the limiting effect of low water on both the Rhine and the Moselle. The prospects for 2006 allow a degree of optimism for inland waterway transport in France, particularly with regard to the current modernisation of the network, operation, and the mobilisation of all the players in the inland waterways sector.

c) On the network of Flanders

Although it is impossible to obtain meaningful data about waterborne transport in Belgium at the time of publication, some information for 2006 is however available regarding the evolution of transport in Flanders. Container transport is particularly dynamic on this network from and to the seaports. In general terms, container transport shows an increase of about 13%, if we consider the throughput on barges in the see harbours. We can also notice that the volume of containerized goods going to the seaports grows faster than the volume coming from those seaports. This shows that, in this region, inland navigation is more used for export than for import.

d) On the network in the Netherlands

Monitoring of the volumes crossing the border between Germany and the Netherlands indicates progress of 3.10%, according to German statistical sources. For containers, the figure is over 10%. For traffic mainly into and out of the sea ports of Rotterdam, Amsterdam and Antwerp, the evolution is comparable to that observable in the Rhine delta.

e) On inland waterways in Germany

In the first nine months of 2005, the volumes transported by inland waterways in Germany progressed by more than 3%; services progressed by 7% compared with the same period the previous year. It should be borne in mind that the volumes transported on the Rhine represent something like 85% of the total volume transported in Germany. The overall progress recorded for transport is above all a reflection of the economic development in Europe sustained by demand for transport capacity from the countries of south-east Asia. As a result, the sectors where rates of progress have been highest have been the iron and steel, chemicals and container sectors. The same has applied to the transport of oil-based products.

In the last quarter of 2005, this progress was checked mainly on the Rhine and the Moselle by water conditions that remained insufficient for a long period, thereby limiting the available operational capacity.

1) Agricultural products

Clear progress was achieved in the transport of agricultural products and foodstuffs and animal feed on all the European inland waterway networks normally involved in this type of transport, with +40% in Germany. This mainly involved the transport of cereals from the previous harvest, which produced above-average quantities. The transport of fertiliser fell back by approximately 1% of the volumes transported over all the inland waterways in Germany.

2) Coal and coal-based products

Progress in the transport of coal and coal-based products slowed down but nevertheless recorded growth exceeding 2% by volume on the inland waterways network in Germany. This progress is due to the sustained position of the iron and steel industry and growing consumption of steam coal in Germany because of the consistently high price of oil in the first half of 2005. The transport of coke, which made substantial progress, generated the increase in the volume transported in this sector. Stagnation in demand for coal was noticeable at the start of 2006.

3) Oil-based products

Volumes of oil-based products transported progressed by almost 6% compared with the same period the previous year, although demand for transport capacity was rather weak at that time. The level of activity in this market may be explained firstly by a situation that has lasted for more than a year in which consumers are maintaining their stocks at very low levels in the hope of purchasing opportunities, and therefore only make purchases that are strictly necessary. The demand for transport capacity increased slightly in the autumn, with purchases of supplies for the winter. From mid-November onwards, the Rhine was running at such low levels that some sections of the river could no longer be used by double-hulled tankers. This naturally had the effect of limiting this type of transport during the closing months of 2005 and the start of 2006.

4) *Iron and steel products*

The transport of iron and steel products progressed by almost 6.5% on the German network over the first nine months of 2005, mainly due to an increase in imports of certain semi-finished goods. The transport of ores and other raw materials, however, decreased by almost 5% over the whole western European network, because this sector of industry is calling for a "consolidation" of its activity and this has been reflected by a temporarily slightly lower growth rate for global demand for steel. Despite this temporary situation, the level of activity remains very high in this sector, and global demand for steel should again increase further in 2006. This bodes well for the maintenance of demand for transport capacity from this sector at a level at least equal to that observed over the period under consideration.

5) *Construction materials*

Despite an upturn in the building sector in Germany, the level of transport of construction materials on the German inland waterways network has remained virtually stagnant. On the Rhine, detailed examination of the data shows a decrease in the order of 1.8% for the transport of sand and gravel. This is due to the continuation of the structural tendency to abandon extraction sites in the upper Rhine in favour of sites near the North Sea. Transport of cement and limestone decreased by about 3.5%. Only sulphur-based products showed progress, at +3.5%.

6) *Container transport*

Transport of products in containers progressed by something like 10% on the traditional Rhine and 9% over the German network as a whole. Empty containers progressed by about 8.2%, and loaded containers by almost 9.5%. In the sea ports, activity in this sector continued to progress as already described. Because of the water conditions allowing no more than the partial loading of vessels – sometimes no more than 20% of their normal capacity – there was a shortage of transport capacity on the Rhine throughout the autumn. This situation also led to a shortage of empty containers on the market. In view of the evolution of the economic activity globally, sustained by demand from China and south-east Asia, demand for transport capacity by inland waterway will remain high in 2006, although the industry needs to equip itself to meet that demand.

7) *Chemicals*

In this sector, volumes transported also progressed by more than 8% on German inland waterways, supported by current global growth in this industrial sector. The chemical sector is cyclical, however, and this is why growth in this sector slowed down temporarily in 2005. The global growth rate in this sector was no more than 1.6% in 2005, compared with 2.6% in 2004. For 2006, a growth rate of 2.3% is expected, by which we may hope to see a continuation in the favourable trend in demand for transport capacity on the inland waterways from this industrial sector in 2006.

Table 1 : Transport of goods on the german waterway network

Category of goods	January – September 2005		
	volumes	services	containers
	in 1000 t	in Mio. TKM	in TEU
0 Agricultural products	6125	2722	
1 Foodstuffs, animal fodder	11301	4281	
2 Solid mineral fuels	25441	6510	
3 Oil and oil-based products	28249	7738	
4 Ore and pig iron for iron and steel industry	28579	5033	
5 Iron and steel products	9582	3033	
6 Crude and manufactured minerals, building materials	34407	8294	
7 Fertilisers	4799	2023	
8 Chemicals	12777	3044	
9 Machinery, transport equipment, manufactured articles	14770	4728	
99of which special transactions	13608	4445	944226
total	**176030**	**47405**	**944226**

Category of goods	January – September 2004		
	volumes	services	containers
	in 1000 t	in Mio. TKM	in TEU
0 Agricultural products	8589	4143	
1 Foodstuffs, animal fodder	11409	4634	
2 Solid mineral fuels	26010	6917	
3 Oil and oil-based products	29899	8433	
4 Ore and pig iron for iron and steel industry	27226	4978	
5 Iron and steel products	10201	3147	
6 Crude and manufactured minerals, building materials	34328	8246	
7 Fertilisers	4743	2052	
8 Chemicals	13830	3268	
9 Machinery, transport equipment, manufactured articles	16248	5050	
99of which special transactions	15029	4750	1031392
total	**182484**	**50868**	**1031392**

Category of goods	Evolution 2005 / 2004 (January – September)		
	volumes	services	containers
	in 1000 t	in Mio. TKM	in TEU
0 Agricultural products	40,22%	52,18%	
1 Foodstuffs, animal fodder	0,95%	8,24%	
2 Solid mineral fuels	2,23%	6,26%	
3 Oil and oil-based products	5,84%	8,98%	
4 Ore and pig iron for iron and steel industry	-4,73%	-1,11%	
5 Iron and steel products	6,46%	3,79%	
6 Crude and manufactured minerals, building materials	-0,23%	-0,57%	
7 Fertilisers	-1,17%	1,43%	
8 Chemicals	8,25%	7,36%	
9 Machinery, transport equipment, manufactured articles	10,01%	6,82%	
99of which special transactions	10,45%	6,86%	9,23%
total	**3,67%**	**7,31%**	**9,23%**

Table 2 : Transport of goods which crossed the german-dutch border
(Quelle Statistisches Bundesamt)

Category of goods	January– September 2005		
	volumes	services	containers
	in 1000 t	in Mio. TKM	in TEU
0 Agricultural products	5041	1497	
1 Foodstuffs, animal fodder	6578	1785	
2 Solid mineral fuels	19303	4307	
3 Oil and oil-based products	16634	5276	
4 Ore and pig iron for iron and steel industry	23721	2847	
5 Iron and steel products	7773	1410	
6 Crude and manufactured minerals, building materials	19810	4400	
7 Fertilisers	2698	748	
8 Chemicals	9208	2252	
9 Machinery, transport equipment, manufactured articles	14378	4598	
99of which special transactions	13597	4427	1437220
total	**125144**	**29121**	**1437220**

Category of goods	January – September 2004		
	volumes	services	containers
	in 1000 t	in Mio. TKM	in TEU
0 Agricultural products	3528	1010	
1 Foodstuffs, animal fodder	6573	1725	
2 Solid mineral fuels	18725	3910	
3 Oil and oil-based products	15799	4886	
4 Ore and pig iron for iron and steel industry	24905	2922	
5 Iron and steel products	7380	1418	
6 Crude and manufactured minerals, building materials	20237	4633	
7 Fertilisers	2767	814	
8 Chemicals	8546	2083	
9 Machinery, transport equipment, manufactured articles	12923	4303	
99of which special transactions	12201	4151	1303487
total	**121382**	**27704**	**1303487**

Category of goods	Evolution 2005 / 2004 (January– September)		
	volumes	services	containers
	in 1000 t	in Mio. TKM	in TEU
0 Agricultural products	42,91%	48,17%	
1 Foodstuffs, animal fodder	0,08%	3,53%	
2 Solid mineral fuels	3,09%	10,14%	
3 Oil and oil-based products	5,29%	8,00%	
4 Ore and pig iron for iron and steel industry	-4,76%	-2,58%	
5 Iron and steel products	5,32%	-0,56%	
6 Crude and manufactured minerals, building materials	-2,11%	-5,03%	
7 Fertilisers	-2,50%	-8,10%	
8 Chemicals	7,75%	8,09%	
9 Machinery, transport equipment, manufactured articles	11,26%	6,86%	
99of which special transactions	11,44%	6,66%	10,26%
total	**3,10%**	**5,11%**	**10,26%**

New constructions at the 31.12.2005

New barges on the market

(Data at the 31.12.2005)

Type of vessel	2002 Units	2002 Tonnage	2002 kW	2003 Units	2003 Tonnage	2003 kW	2004 Units	2004 Tonnage	2004 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**
		Fahrgäste			Fahrgäste			Fahrgäste	
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 Units	2005 Tonnage	2005 kW	total 2002 - 2005 Units	total 2002 - 2005 Tonnage	total 2002 - 2005 kW
Ordinary self-propelled barges	10	27491		117	301607	132432
Ordinary barges	4	2781		75	141753	0
total	**14**	**30272**	**0**	**192**	**443360**	**132432**
Self-propelled tanker barges	34	90606		155	427327	142115
Tanker barges	3			9	4405	0
total	**37**	**90606**	**0**	**164**	**431732**	**142115**
Pusher tugs	0		0	3	0	2268
Tugs	1		129	6	0	12255
total	**1**		**129**	**9**		**14523**
		Fahrgäste				
Cruise vessels	2		0	34		24510
Excursion vessels	4	550	1904	15	550	8966
total	**6**		**1904**	**49**		**33476**

Source: IVR reccords

Chapter 2 – Analysis of offer of transport

In this publication, the evolution in the offer of transport capacity can only be approached on the basis of new capacity put on the market in 2005 and the evolution in the pace and nature of new vessels coming onto the market. A table of figures describing the situation is included in the appendices to this publication.

The figures show that while the pace of new vessels coming onto the market seems to have slowed down for vessels transporting dry goods, there is no certainty that this trend also applies to tanker transport. This would nevertheless be salutary and desirable and would reflect more realism in making investment decisions specifically in this sector.

The new vessels coming onto the market are usually large in size and operate round the clock. This means that the new capacity has a high productivity level, which clearly amplifies its effect on available transport capacity, at least when the water conditions allow capacity loading.

Moreover, since the end of the restructuring policy, capacity on the market has increased by approximately 4.8% for the transport of dry goods and by approximately 23% for tanker transport.

At the same time, although demand for transport capacity has increased roughly in the same proportion as for the transport of dry goods, it is more or less stagnant for tanker transport.

It should also be noted that, at the same time, although no figure can be placed at the moment on the number of vessels withdrawn from the market, it may be estimated, on the basis of the massive scrapping carried out over a ten-year period and the complete lack of incentive for scrapping at present, that the figure will be negligible.

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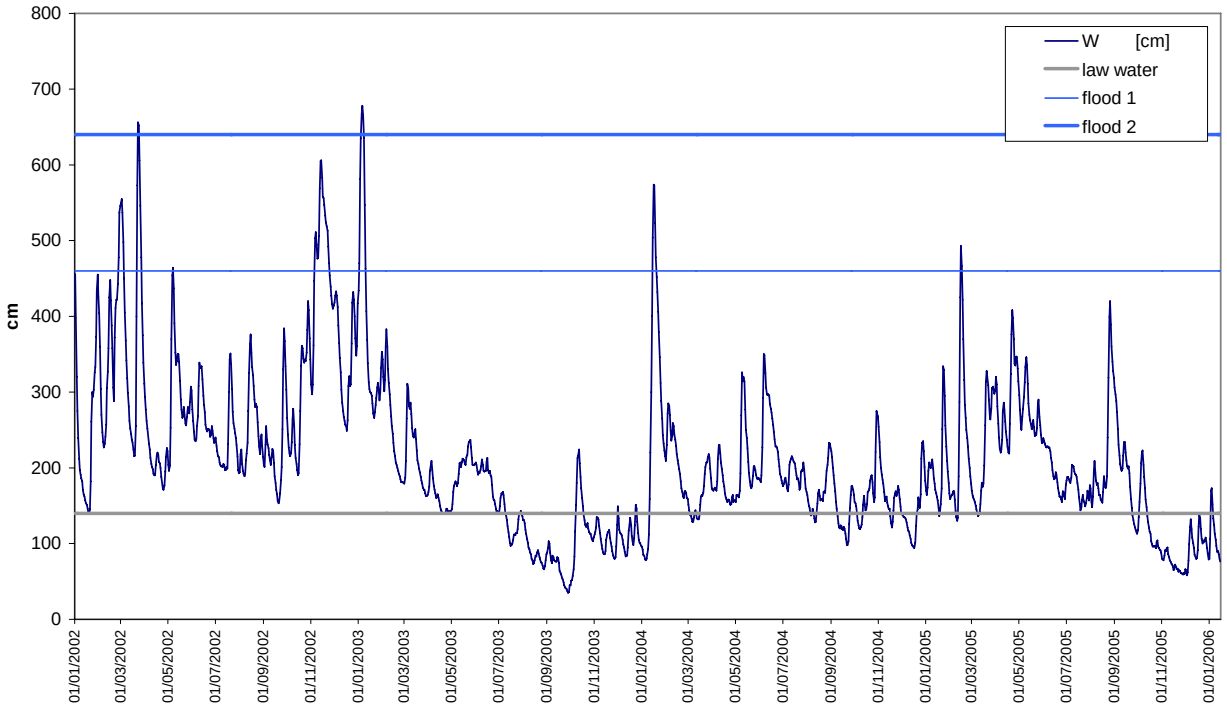
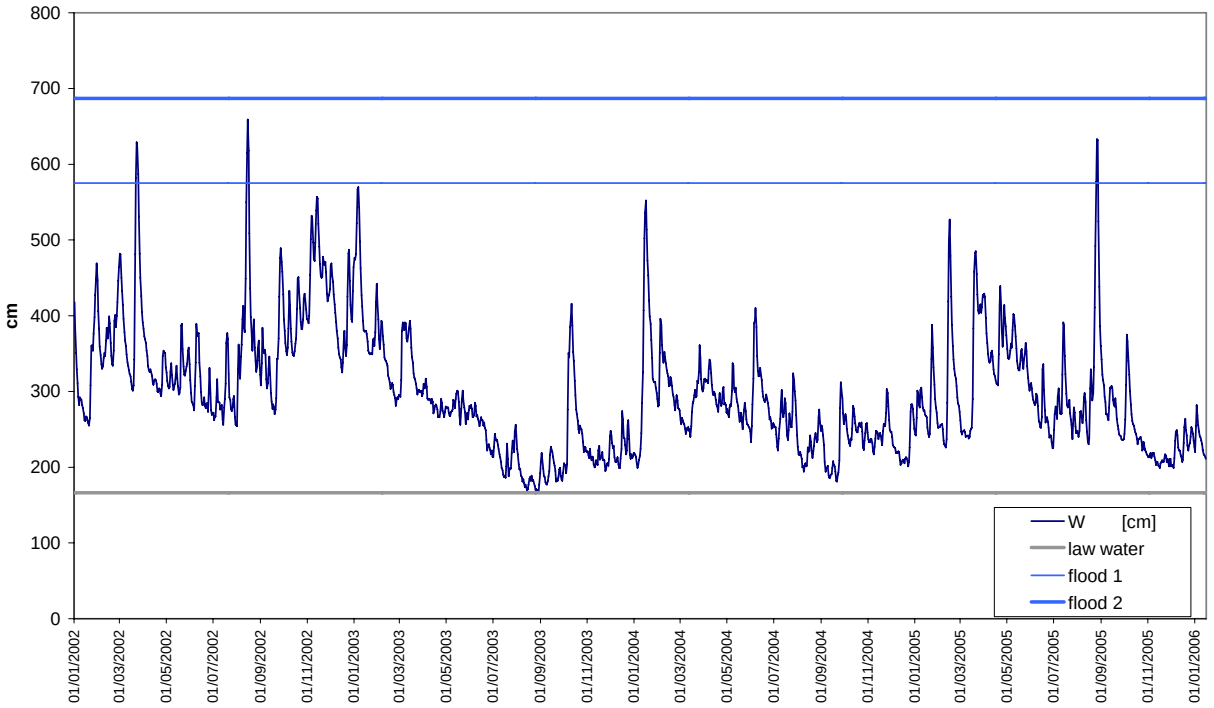
Waterlevel at Kaub



Waterlevel at Hofkirchen



Chapter 3 – Navigation conditions

Water conditions

There was a water shortage, affecting the Rhine more particularly, during the autumn of 2005. The situation, which initially had the effect of boosting freight on the Rhine market, gradually deteriorated as weeks went by without rain. The negative effect on the volumes transported in the fourth quarter extended over a number of months. It was only at the end of the year that the arrival of precipitation brought a slight improvement to the situation, which nevertheless remained tense until the end of January 2006. The effects of snow thawing in the Alps and in lower-lying areas did not become noticeable until the spring. Furthermore, the heavy falls of snow observed in February and March have caused flooding in the last few weeks.

Observation of the graphs on water conditions indicates that the low water situation visible in autumn 2005 was to some extent reminiscent of the summer of 2003, in terms of both scale and duration. These repeated periods of low water should encourage us to think about the technical aspects of both infrastructure and vessel design.

In terms of operation, there is a clear advantage for small vessels, the only vessels able to operate in good conditions with freight levels that are worthwhile for the operator because of the temporary rarefaction of operational transport capacity. Conversely, should this type of situation be repeated, it would have a negative impact on the average productivity of large vessels, particularly those with a double hull, and this will have to be taken into account when making decisions on investment in new transport capacity.

Ice

Because temperatures remained very low, there were restrictions as a result of ice on the Main-Danube Canal at the end of January and the beginning of February 2006. It is also estimated that more than 300 vessels were immobilised on the upper Danube during this period because of ice on the Main-Danube canal. Similarly, the Elbe and the northern canals were out of use for several days during this period.

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Chapter 4 – Microeconomic analysis

Evaluation of the microeconomic situation during 2004

The evaluation of the microeconomic situation of the inland waterway transport sector in Europe may be based on a number of indicators:

1) Level of freight in relation to the services provided and water conditions

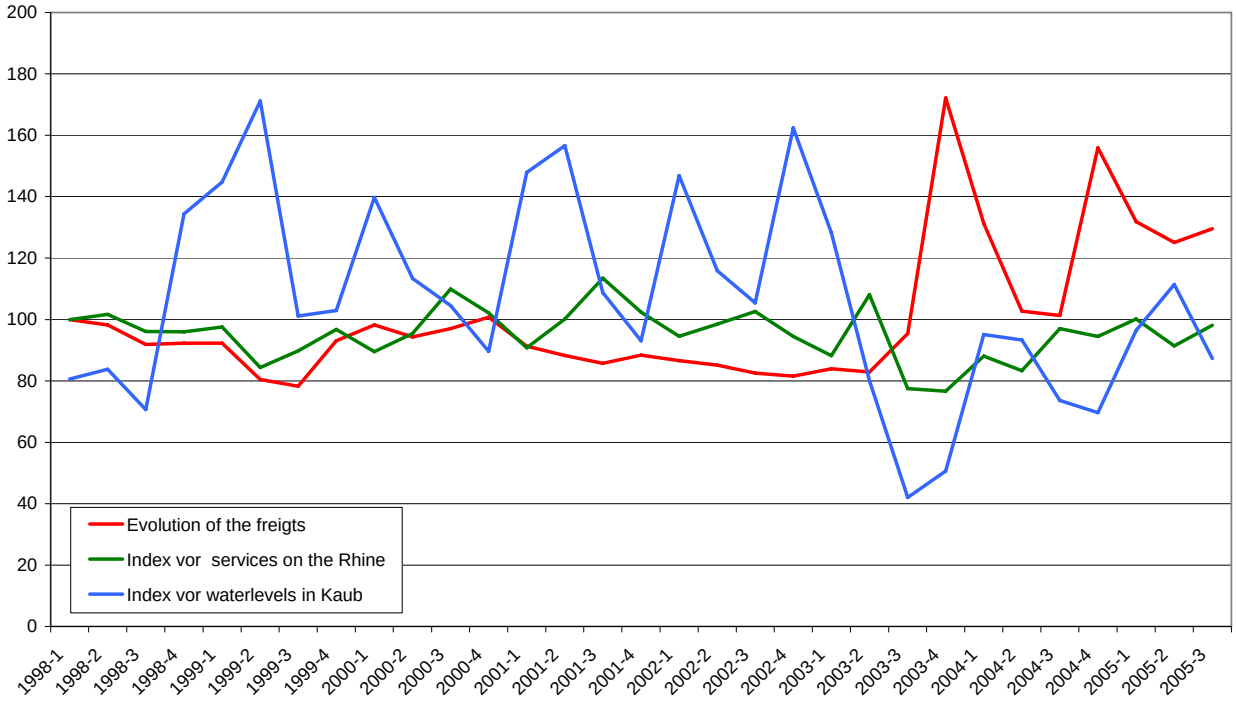
Evolution of freight

For the transport of dry goods, freight has evolved at an average level, with variations closely connected with water conditions, demand being substantial in most sectors. We may observe that the lowest level of freight was reached towards the end of April 2005, and that since then the trend has been upward, as can be seen from the graphs below. It should nevertheless be noted that these freight levels include supplements for low water and the effect of diesel fuel clauses. We are therefore able to see that these peaks have only been achieved during low water conditions, with charges burdened by the price of fuel. It is therefore necessary to exert prudence in interpreting the effect of these freight levels on the companies' productivity since, particularly for large vessels, these levels go hand in hand with often very partial loading of the vessels. Consequently, only the smallest vessels were able to gain any advantage from this situation. While in most cases freight is fixed by means of annual contracts, the evolution of rates from day to day nevertheless remains a decisive feature in determining fixed freight in contracts.

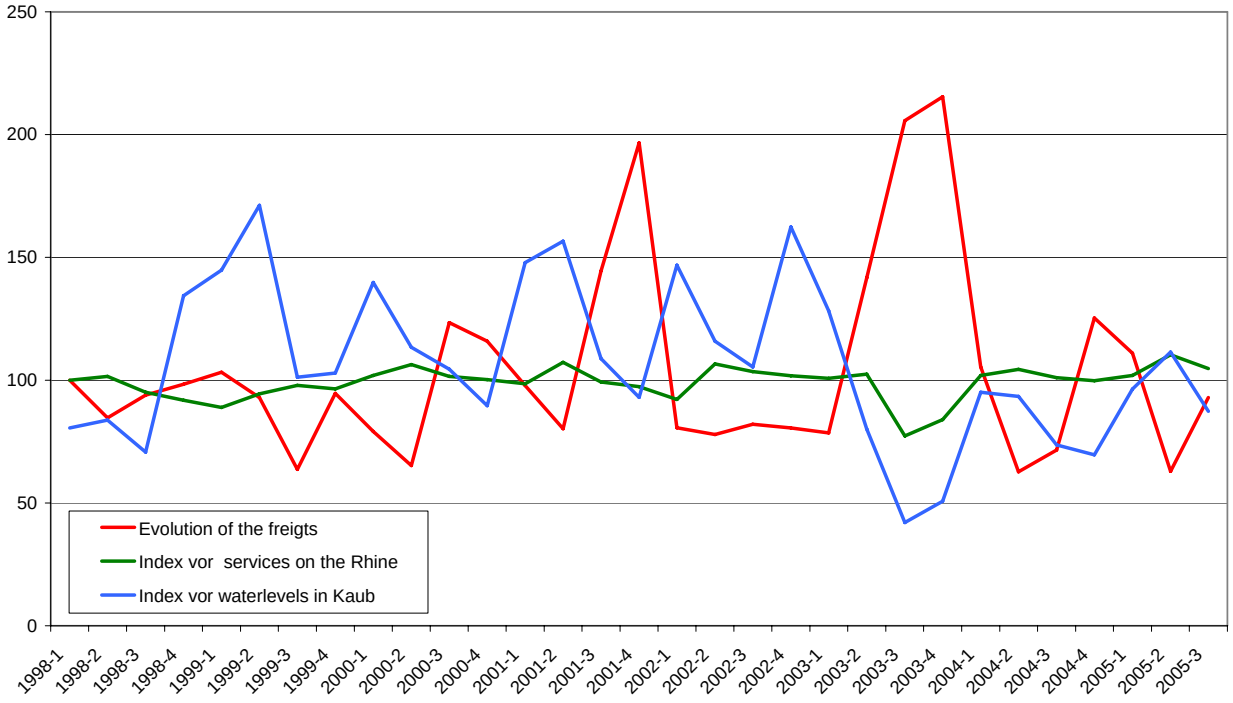
For tanker transport, although there was a tendency in the first half of 2004 for the freight level to drop, the arrival of autumn and its seasonal supplies, and more particularly the lack of capacity as a result of the water conditions, produced a substantial increase in the level, which traditionally fluctuates considerably in this sector.

The two graphs below show quite clearly that very often the increase in freight is accompanied by a reduction in the provision of services, again often due to water conditions not permitting optimum loading of vessels. Thus an increase in freight does not necessarily mean greater productivity for the vessel's operator. To provide a more exact measurement of the situation in terms of spot productivity at any given moment, it is necessary to correlate the services provided and the average level of freight transported.

Dry cargo market on the Rhine



Liquid cargo market on the Rhine



2) Evolution of turnover in 2004

For the transport of dry goods, turnover has progressed by between 2 and 5%, depending on the category of vessel. This is due above all to the level of freight sustained by the demand for transport capacity in the context of water conditions permitting progress to be made in services provided compared with 2003, a year marked by the prolonged shortage of water, particularly in the Rhine and the Moselle.

For transport by tanker, turnover for vessels in all categories below 2 500 tonnes fell by between 3 and 6%. It has not been possible to make a reliable calculation for larger vessels, since some are very new and the data for 2003 for some of the vessels in the sample does not cover a full year, which distorts the evolution rates for turnover and expenditure headings.

It may nevertheless be noted that water conditions in 2004 made it possible to make greater use of large vessels, thereby reducing both the number of cargoes carried and the volume carried by smaller, single-hulled vessels.

3) Analysis of the evolution of various expenditure headings

The evolution of the economic situation of vessel operators is analysed on the basis of monitoring the cost margin observed in the various categories of vessel per tonne of capacity, for the purpose of ready comparison.

a) Personnel charges

Personnel charges have been re-valued at a flat rate in line with inflation. As described above, they are calculated at a flat rate and in reality for vessels operated as an individual business limited generally to the actual profit made after the payment of social contributions. In reality, this amount is often lower than the figure produced by the flat-rate calculation.

In view of the differences in the way personnel charges and revenue are entered in accounts depending on the size of the vessel and the operating mode, it was decided to use the cost margin before the inclusion of personnel charges, as these cover a number of different items, including wages paid to employees and social contributions. From observation of the amounts actually indicated in accounts we may conclude that, particularly for small vessels, often only social contributions are included in the accounts. When it is the owner who operates the vessel on an individual basis, his remuneration is the profit remaining after all other expenses have been deducted. This amount must cover his subsistence and finance his investments. For large vessels, the theoretical amount of personnel charges is much closer to reality.

If we operate on the basis of a theoretical remuneration calculated according to the minimum crew numbers required by the regulations, the result obtained is not in keeping with what actually happens. In most cases, the result for the financial year calculated on this basis would indicate substantial, recurrent losses that would jeopardise the survival of the undertaking.

The number of hours actually worked theoretically increases with the size of the vessel, ranging from 14 hours per day for the smallest to 24 hours per day for the largest, for both dry goods and tanker transport. In the sample observed, this progression is not particularly uniform. This is because the information is gathered from statements made by the skipper, and observation of the data available for the

sample indicates that some of the statements are not particularly accurate. Correcting these statements re-establishes the linear nature of the progression.

The evolution of the margin before deducting personnel charges from 2003 to 2004 indicates a number of disparities according to the category of vessel; this is explained by the varying impact of the evolution of certain items of these charges.

b) Insurance

For the smallest vessels, insurance premiums increased by 2% on average, which corresponds to compensation for inflation. For larger vessels, the progression of this expenditure heading is closer to 4%, partly because of this compensation for inflation on the rates charged and partly because of the average 2% progression in the insured value of the vessels.

c) Allocations to amortisation

The expenditure heading for allocations to amortisation progresses in line with the investments that have been made. The progression of these costs is therefore relatively linear in relation to the size of the vessel, the most recent and the best maintained usually being the largest. That is why this expenditure heading progresses very little for small, older vessels, for which only refitting would increase the allocations to amortisation, and only slightly more for medium-sized vessels for which this type of investment is more likely. Allocations to amortisation increased the most between 2003 and 2004 for the categories with the largest vessels (with up to +1.5% and +2.7% for the transport of dry goods), since new vessels coming onto the market are in these categories.

d) Repairs and maintenance

These costs have increased for all categories of vessel by between 3 and 4%, so that it is not possible to draw conclusions concerning the specific features of the various categories of vessel. This relatively homogenous increase appears to be the result of an increase in the prices charged for repairs.

e) Other costs

This expenditure heading has progressed by 4% for all categories of vessel. The progression is greater for the transport of dry goods than for tanker transport, particularly in the case of the smallest vessels. These costs mainly refer to the administrative cost of running the vessel. The impact of this progression on the margin is greater for small vessels than for large vessels because of the variable importance of this heading among fixed costs as a result of the economies of scale achieved.

f) Interest charges

Financial charges fell by between 3 and 5% according to the type and category of vessel and depending on the level and residual duration of borrowing in this category. This evolution can be explained by the downward trend in credit rates on the market.

g) Evolution in the fuel heading

Reflecting the fluctuations in the market for crude oil, the price of fuel has continued to rise, slowly to begin with during the first quarter of 2004, then at a faster rate during the following months. Thus on average the price of fuel increased by almost 40% between the start and the end of 2004. Although the price of diesel fuel began to fall slightly in October 2004, this was only temporary, and the price continued to rise throughout 2005.

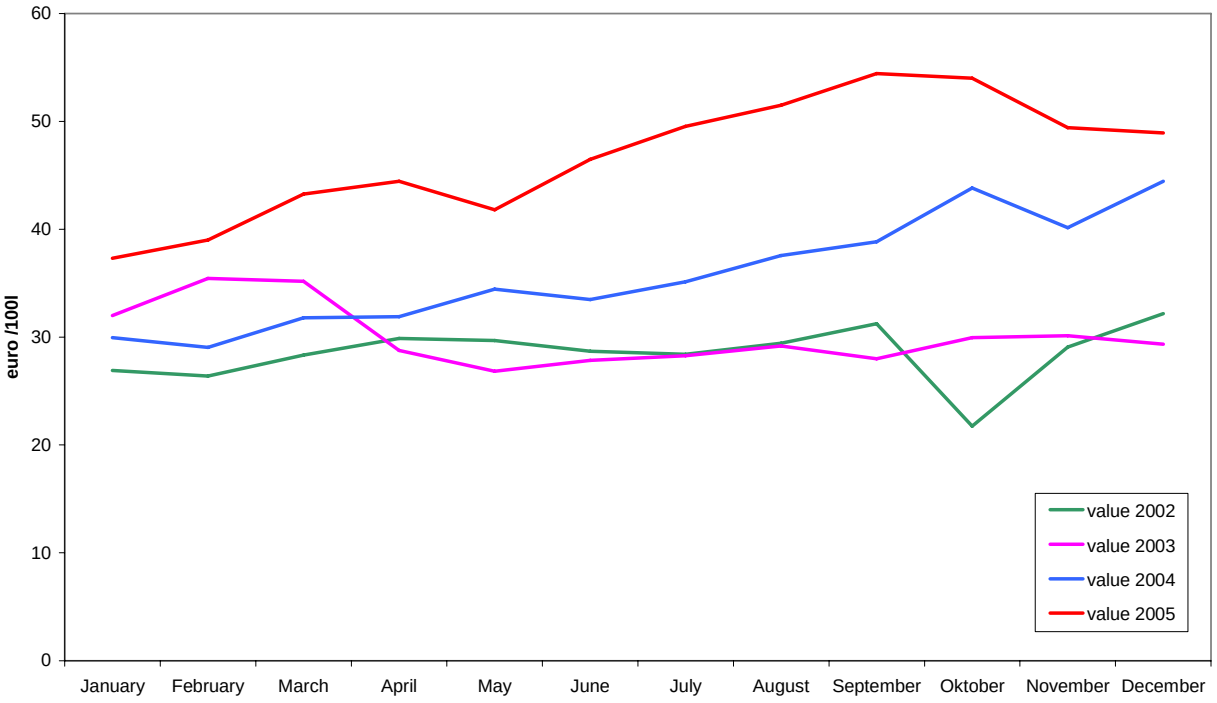
Given the situation of the world oil market, this increase is likely to continue and as a result this expenditure item will be the one that has the greatest effect on the profitability of operating the vessels, as fuel clauses far from compensate for the full increase in this item of expenditure.

Observed more closely, we see that in 2004 is was the largest vessels, and particularly self-propelled tanker barges, which in this tonnage category are usually double-hulled, that were most affected. While this heading increased by more than 60% between 2003 and 2004, the proportion of expenditure represented by this heading increased from 12.7% to 18.6%.

For small vessels, the increase was only between 15 and 20%.

For the transport of dry goods, the impact on this expenditure heading was less marked, with the rate of progression standing at 11% for the smallest vessels and 19% for the largest.

Evolution of the diesel fuel price



Average annual price

Year	2002	2003	2004	2005
Price of 100 litres, in euros	28.50	30.07	35.88	46.67

On the basis of the information available, even though this does not include the figures for 2005, we may expect an even greater increase in this expenditure heading in 2005. The average price of diesel fuel over the year in 2005 was actually 30% higher than in 2004.

Nor is there any prospect of a reduction in fuel costs in 2006, in view of the structurally upward movement of oil prices on the world market. In the long term, this expenditure heading should therefore continue its structural increase, despite short-term fluctuations.

i) Other variable costs

There has been little increase in this expenditure heading; the overall figure is about 1%.

Microeconomic approach :

Dry cargo motorbarges 2003-2004

Tonnage class	400 +/- 300 t 100-700 t	Evolution
	2004	2004 / 2003 (%)
Average year of construction	1960	
Average operational labour hours / year	3625	
Average calender days / year	284	
Average hours / calender day	max. 14 h.	
Average ship value	185169	0
	Proportion of costs in %	**(%)**
Labour costs	54	2
Insurance	2	2
Allocations to amortisation	8	0
Repairs and maintenance	7	4
Other costs	8	6
Financial charges	5	-5
Total fixed costs per year	**84**	**2**
Fuel	15	11
Other variable costs	2	1
Total variable costs per year	**16**	**6**
Total costs	**100**	**3**
Total revenue		**5**

Tonnage class	1100 +/- 400 t 700-1500 t	Evolution
	2004	2004 / 2003 (%)
Average year of construction	1963	
Average operational labour hours / year	3591	
Average calender days / year	284	
Average hours / calender day	max. 14 h.	
Average ship value	524467	1
	Proportion of costs in %	**(%)**
Labour costs	43	2
Insurance	4	2
Allocations to amortisation	13	1
Repairs and maintenance	5	4
Other costs	7	5
Financial charges	9	-5
Total fixed costs per year	**81**	**2**
Fuel	17	15
Other variable costs	2	1
Total variable costs per year	**19**	**13**
Total costs	**100**	**4**
Total revenue		**2**

Tonnage class	2000 +/- 500 t 1500-2500 t	Evolution
	2004	**2004 / 2003 (%)**
Average year of construction	1980	
Average operational labour hours / year	4547	
Average calender days / year	293	
Average hours / calender day	= < 16 h.	
Average ship value	1205928	1
	Proportion of costs in %	**(%)**
Labour costs	41	2
Insurance	5	3
Allocations to amortisation	14	1
Repairs and maintenance	4	3
Other costs	6	4
Financial charges	12	-4
Total fixed costs per year	**82**	**1**
Fuel	15	12
Other variable costs	2	2
Total variable costs per year	**18**	**11**
Total costs	**100**	**3**
Total revenue		**4**

Tonnage class	3000 +/- 500 t 2500-3500 t	Evolution
	2004	**2004 / 2003 (%)**
Average year of construction	1990	
Average operational labour hours / year	4362	
Average calender days / year	310	
Average hours / calender day	> 16 h.	
Average ship value	2034164	2
	Proportion of costs in %	**(%)**
Labour costs	43	2
Insurance	5	4
Allocations to amortisation	13	2
Repairs and maintenance	4	3
Other costs	5	4
Financial charges	12	-3
Total fixed costs per year	**81**	**2**
Fuel	16	19
Other variable costs	3	3
Total variable costs per year	**19**	**16**
Total costs	**100**	**4**
Total revenue		**2**

Motortankers 2003-2004

Tonnage class	400 +/- 300 t 100-700 t	Evolution
	2004	2004 / 2003 (%)
Average year of construction	1964	
Average operational labour hours / year	3500	
Average calender days / year	284	
Average hours / calender day	max. 14 h.	
Average ship value	247096	0
	Proportion of costs in %	**(%)**
Labour costs	47	2
Insurance	4	2
Allocations to amortisation	9	0
Repairs and maintenance	6	4
Other costs	12	4
Financial charges	7	-5
Total fixed costs per year	**84**	**2**
Fuel	14	22
Other variable costs	2	1
Total variable costs per year	**16**	**19**
Total costs	**100**	**4**
Total revenue		**-3**

Tonnage class	1100 +/- 400 t 700-1500 t	Evolution
	2004	2004 / 2003 (%)
Average year of construction	1970	
Average operational labour hours / year	5969	
Average calender days / year	314	
Average hours / calender day	+ 16 h.	
Average ship value	796597	1
	Proportion of costs in %	**(%)**
Labour costs	50	2
Insurance	5	2
Allocations to amortisation	11	1
Repairs and maintenance	5	4
Other costs	9	4
Financial charges	8	-4
Total fixed costs per year	**87**	**2**
Fuel	11	19
Other variable costs	2	10
Total variable costs per year	**13**	**18**
Total costs	**100**	**4**
Total revenue		**-6**

Tonnage class	2000 +/- 500 t 1500-2500 t	Evolution 2004 / 2003 (%)
	2004	
Average year of construction	1968	
Average operational labour hours / year	4880	
Average calender days / year	320	
Average hours / calender day	about 24 h.	
Average ship value	802302	2
	Proportion of costs in %	**(%)**
Labour costs	49	2
Insurance	4	3
Allocations to amortisation	10	2
Repairs and maintenance	4	3
Other costs	8	4
Financial charges	7	-3
Total fixed costs per year	**83**	**2**
Fuel	16	16
Other variable costs	2	2
Total variable costs per year	**17**	**15**
Total costs	**100**	**5**
Total revenue		**-4**

Tonnage class	3000 +/- 500 t 2500-3500 t	Evolution 2004 / 2003 (%)
	2004	
Average year of construction	1998	
Average operational labour hours / year	5529	
Average calender days / year	314	
Average hours / calender day	About 24 h.	
Average ship value	2666288	3
	Proportion of costs in %	**(%)**
Labour costs	39	
Insurance	7	
Allocations to amortisation	10	
Repairs and maintenance	4	
Other costs	7	
Financial charges	13	
Total fixed costs per year	**80**	**(*)**
Fuel	19	
Other variable costs	2	
Total variable costs per year	**20**	
Total costs	**100**	
Total revenue		

(*) : It has not been possible to make a reliable calculation for larger vessels, since some are very new and the data for 2003 for some of the vessels in the sample does not cover a full year, which distorts the evolution rates for turnover and expenditure headings.

Conclusions and forecasts

In terms of demand for transport capacity, it has been possible to observe over the first three quarters of 2005 an increase in the order of 7% (in TKM) in the transport of goods on the German network, and particularly on the Rhine. The rate of progress has been much higher on the other inland waterways of Europe, such as in the north of France and in Belgium.

The evolution in demand for transport capacity is a clear reflection of the level of economic activity in western Europe, which continues to be supported by global demand. Activity in the sea ports indicates that the level of international trade is continuing to develop, thereby providing a constantly increasing demand for transport capacity on the inland waterways of Europe. The inland waterways transport system needs to be in a position to respond to this demand effectively, without losing any of its market share.

Although complete figures are still not available for the last three months of 2005, it would be true to say that the exceptionally low water conditions over an exceptionally long period during the quarter considerably limited inland waterway transport services in Europe, particularly on the Rhine and the Moselle. Because of the evolution of water conditions since the start of 2006, particularly in March with the thaw of the winter's abundant snow, there is little fear of a water shortage in the first half of 2006.

In terms of operation, the lasting period of low water conditions in the autumn of 2005 naturally caused an increase in the number of cargoes, in view of the shortage of operational capacity on the market. Although the situation was damaging for large vessels, particularly double-hulled vessels that were temporarily unable to operate, it provided smaller vessels with sustained demand for transport under freight conditions that were very favourable for the vessel operators.

The situation we saw last autumn was in some respects similar to the situation in the summer of 2003. These repeated occurrences of low water conditions show the value of having suitable smaller vessels in the fleet rather than just the large vessels currently entering the market for reasons of economy of scale.

The transport of containerised goods continued to develop on the Rhine during the first half of 2005, but at a slightly lower rate than in the previous year. We have been able to observe over the past few years that the rate of progress is substantially higher in northern France and in Belgium, on networks where this type of transport is now being developed, as they have not been in existence as long as the Rhine network. Container transport also remained at a high level in the sea ports, where the problems of congestion in terms of interface between seagoing vessels and inland waterway transport vessels have been eased as a result of the combined efforts of ports in terms of infrastructure and personnel numbers and inland waterway transport in terms of its operation. Activity in this sector was also limited by the low water conditions at the end of 2005.

The rate of commissioning new vessels has slowed down for dry goods vessels, but has remained high for tanker vessels. The quantity of new high-productivity transport capacity that has been accumulating since the end of the "old for new" rule is again creating the conditions for the emergence of structural over-capacity for tanker transport, in view of the lack of medium-term prospects for growth in the demand for transport in the sectors concerned and the fact that at the same time few older vessels are leaving the market at present.

In terms of the operation of the vessels, there can be no doubt that the substantial increase in the price of oil, and hence of diesel fuel, in 2004 and 2005 has affected the profitability of vessel operators despite their “diesel oil clauses”, which have only partially compensated for the increase. Structurally, this upward trend is likely to continue, given the evolution of the global oil market. Because of this evolution, the fuel heading occupied a much larger proportion of operating costs.

Turnover achieved in the transport of dry goods progressed in 2004 because of the combination of an increase in services with a freight level generally higher than in previous years. The increase in turnover of between 2 and 5%, depending on the category, should nevertheless be viewed in tandem with the 4 to 21% drop in the cost margin. Only vessels in the 1 500- to 2 500-tonne category were able to improve their margin slightly under these operating conditions. This deterioration of the cost margin is basically due to the serious increase in the price of diesel fuel.

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