

OBSERVATION OF TRANSPORT MARKETS

ANALYSIS AND FORECASTS 1989



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ANALYSIS AND FORECASTS REPORT

INTRODUCTORY NOTE

In the 1988 Analysis and Forecast Report, indirect use was made of the results of a study by PROGNOS (Switzerland) to justify the growth rate of road haulage. At that time, the results of the PROGNOS work (a multi-client study) were still confidential, but the principal results have since been released. In this report brief comments are made on the PROGNOS methodology and main results for 4 modes (road, rail, inland waterway and sea) between 16 countries (EUR 12 + Austria, Switzerland, Norway and Sweden); these are for 1984 (base year) with forecasts for 1990 and 2000 (two scenarios for 2000: 2000A and 2000B).

These main results will then be compared with another study carried out by Datagraphics (United Kingdom) exclusively for the Commission and also with the observed evolution of the market from 1984 to 1988.

The last two Analysis and Forecasts Reports (1987 and 1988) have concentrated exclusively on international intra-Community road transport and the role of the Community Quota which has been growing rapidly in recent years. The Council will shortly be examining the Commission proposal for increases in the number of Community Quota authorisations for 1990, 1991 and 1992. In this report, a projection is made of the expected use of such authorisations through to 1992 and the share of the total "Hire and Reward" market held by the Community Quota is estimated.

Another topical issue is road cabotage, the possibility for hauliers registered in one Member State to make domestic movements in another Member State. This issue will be examined for the first time and an estimate made of the possible impact of cabotage in 1990/91.



SUMMARY

Chapter 1 examines observed trends in the goods transport market, 1984-1988 with those forecast by PROGNOS for 1984-1990-2000. For international intra-EUR tonnages, observed annual growth rates have been 6.5% for road, -0.8 % for rail and 1.0 % for inland waterways. PROGNOS forecasts were 4.7 %, 1.6 % and -0.3 % for the same three modes respectively for 1984-1990 and 3.3 % (2.8 %), 1.5 % (3.4 %) and 0.7 % (0.4 %) for 1990-2000 according to two scenarios, 2000 A (liberalisation scenario) and 2000 B (ecology scenario) - the 2000 B forecasts are shown in brackets. Present evidence thus suggests a faster shift towards road and away from rail than forecast by PROGNOS.

For domestic traffic the results are even more striking since PROGNOS forecast a 10% growth of road traffic, 1984-2000, while a 20 % increase, 1984-1988 has already been observed.

In <u>Chapter 2</u> the activities of carriers from different member states are compared for road, rail and inland waterways on the basis of tonne-kilometres in 1987 for both international intra-EUR-12 and domestic traffic; the modal shares are 56.6 %, 16.7 % and 26.7 % respectively for international intra-EUR-12 traffic and 80.9 %, 15.5 % and 3.6 % respectively for domestic traffic.

For road haulage a separate investigation between "hire and reward" and "own account" reveals a 10 % share for "own account" for international intra-EUR-12 traffic (based on "bilateral" movements only) and a 31 % share for "own account" for domestic traffic.

The economic impact of the Council's recent decision on road cabotage is assessed in <u>Chapter 3</u>. Assuming that the use of a cabotage authorisation will not exceed 100,000 tonne-kilometres a month (about 70 % of the average usage of a Community Quota authorisation in 1988), the total use of the 15,000 2-monthly authorisations is unlikely to exceed 3 milliard tonne-kilometres (about 0.6 % of the combined domestic markets of 12 Member States) in the first year of operation, mid 1990-mid 1991.

Finally in <u>Chapter 4</u>, the economic impact of the Commissions's recent proposal for Community Quota authorisations (a cumulative 40 % increase for 1990, 1991 and 1992) is assessed. The share, in tonne-kilometres held by Community Quota authorisations in international intra-EUR "hire and reward" market has increased rapidly in recent years (10.4 % in 1984, 13.5 % in 1985, 15.2 % in 1986, 18.4 % in 1987 and (estimated) 21.4 % in 1988). The penetration of the Community Quota is forecast to reach 28 % in 1989, 34 % in 1990, 40 % in 1991 and 47 % in 1992.

In 1988, the share held by Community Quota authorisations varied from 15-16 % for French and Dutch hauliers to over 45 % for Luxembourg (75%), Irish (66%), Danish (57%) and Portuguese (48%) hauliers. The differences between these shares is expected to fall slightly under the Commission's proposal, but is still expected to vary from around 40% (for French and Dutch hauliers) to around 90% (for Luxembourg and Irish hauliers) in 1992.

Chapter 1

Recent trends in intra-Community goods transport and forecasts to year 2000

1.1. Prognos Study, Introduction

In 1988, Prognos completed a multi-client study in which the Commission was one of the clients. While Prognos issued a press release giving very summary figures, copies of the full report can only be purchased from Prognos. The full report, which is available in French and German, comprises 6 volumes:

Volume 1 : Energy and environment

Volume 2 : Technical and organisational requirements for goods transport

Volume 3 : Demographic and economic development Volume 4 : Scenarios for european goods transport

Volume 5 : Development of goods transport volume

Collection of Tables: Trade and transport by group of goods.

in this Report emphasis will be placed on the results from Volume 5.

The Prognos study covers 16 countries, EUR-12 + Austria, Switzerland, Norway and Sweden but throughout the analysis Beigium and Luxembourg are combined. The study is mainly concerned with transport between these 16 countries i.e. national transport is only briefly covered. The study treats 4 separate modes, road, rail, inland waterways and sea as well as combined transport.

The base year of the study is 1984 and forecasts are made for 1990 and 2000; for 2000, two alternative scenarios are examined 2000A and 2000B.

1.2. Prognos study, methodology

Trade forecasts for 1990 and 2000 are made on the basis of a detailed examination of OECD trade data, both values and tonnages, from 1978 to 1986 for each of 10 commodity groups (the 10 chapters of the NST).

Transport forecasts, for all modes combined, are made by applying the forecast growth rates for trade tonnages to the observed 1984 transport tonnages, for all modes combined.

The forecast for transport by sea is made on the 'simple' hypothesis that the share of sea for a particular commodity group on a particular relation remains unchanged from 1984. Under this assumption, the forecasts for transport by sea are necessarily the same under scenario 2000A and 2000B.

Due to the absence of adequate time series on the modal split between the three inland modes, road, rail and inland waterways, PROGNOS base their modal split model on data from 1970-1986 from Germany. This enables PROGNOS to derive a trend model, which when combined with the observed modal split for each relation and each commodity group in 1984 enables the required forecasts to be made for 1990.

For 2000, a more complex approach has to be adopted since two scenarios, 2000A (liberalisation scenario) and 2000B (ecology scenario), are examined. Again, Prognos use German data which demonstrates different elasticities for different commodity groups to produce deviations from the trend lines. It is very difficult to summarise the Prognos reasoning here, and readers are referred to section 5.3 of volume 5 of the full report (pages 56-72, French text) for further details.

Forecasts are also made for combined transport (containers + piggy-back transport) and for national transport using somewhat simpler methods.

It should be noted that in the modal split analysis all data is treated on a country, not region, basis and that there is no assignment of traffic to a network.

1.3. Prognos study, international tonnages

Unless otherwise indicated, all results from the PROGNOS study in this chapter refer to all 16 countries; no results will be presented here broken down by commodity group — for these, readers must refer to the full report.

Table 1.1. gives the tonnages for each of the four modes for the base year (1984) and forecast years (1990, 2000A and 2000B). As explained in 1.2., the tonnages for "sea" and "all modes" are the same in 2000A and 2000B. While one could expect the tonnages for "all modes" to be slightly higher under 2000A, Prognos have stated that they do not think that the effects of the creation of the internal Market (which includes a more "liberal" transport market) will provide such an immediate boost as the 5% reported in the CECCHINI report. Further, PROGNOS have indicated that they consider the main objective of the study was to examine the modal split, not the absolute tonnage levels.

TABLE 1.1.

TABLE 1.1.							
<u>International tonnages by mode</u> (mio tonnes)							
	Road	Rail	inland Waterways	Sea	all 4 modes		
1984	228.7	97.9	203.4	278.6	808.7		
1990	301.1	107.4	199.6	328.1	936.4		
2000A	417.1	124.3	213.2	374.4	1129.2		
2000B	397.9	149.4	207.3	374.4	1129.2		
Growth Fac	<u>tors</u> (19	84=100)					
1990	131.7	109.7	98.1	117.8	115.8		
2000A	182.4	127.0	104.8	134.4	139.6		
2000B	174.0	152.6	101.9	134.4	139.6		
Annual Gro	win kaies	Ĺ					
1984-1990	4.7%	1.6%	- 0.3%	2.8%	2.5%		
1990-2000A		1.5%	+ 0.7%	1.3%	1.9%		
1990-2000B		3.4%	+ 0.4%	1.3%	1.9%		

The results show that road transport is expected to grow faster than all other modes except in the case 1990-2000B where rail grows slightly faster. Inland waterways is expected to remain almost unchanged. Overall growth rate for all 4 modes, including sea is expected to be 2.5% from 1984 to 1990 and just under 2% from 1990 to 2000 (A or B).

1.4. Comparison of Prognos forecasts for international tonnages with those from Datagraphics

In another study principally concerned with overcapacity in the inland waterway sector, Datagraphics (a UK consultancy) produced for the Commission medium term forecasts for road, rail and inland waterways for 1992 using a modified version of the Commission's TASC-system. This system uses an approach based on the assignment of detailed region to region flows to a network and is thus rather different from the Prognos approach. The study also used 1984 as the base year and covered 14 countries (EUR-12 + Austria + Switzerland) which were divided into 108 regions. The overall results from the Datagraphics study were

Table 1.2.

International tonnages by mode					
Annual Growth Rates Road Rail Inland Ail 3 mode: Waterways					
1984–1992	4.8%	1.4%	1.0%	2.8%	

It can be seen that, despite a quite different approach, the overall Datagraphics results are very similar to those of Prognos for the period 1984-1990 (Table 1.1.).

1.5. Comparison of Prognos forecasts for international tonnages with observed trends, 1984-1988

The observed trends for 1984-1987 have been published in the 1987 Annual Report of EUROPATRANSPORT, 1988 figures will appear in the 1988 Annual Report which is in preparation; the figures, which relate to international tonnages between EUR-12, are given in Table 1.3. below.

Table 1.3

Internationa	Litonnages	by mode	(mio tonnes)	
	Road	Rail	inland Waterways	All 3 modes
1984	197.9	71.5	190.5	459.9
1985	207.8	72.8	186.8	467.4
1986	217.5	65.3	191.9	474.7
1987	231.3	64.4	186.0	481.9
1988 (prov)	254.3	69.1	198.6	522.0
Growth Facto	116.9	90.1	97.6 104.3	104.8 113.5
1988 (prov) Annual Growt	128.5 h <u>Rates</u>	90.0	104.3	
1984-1987	+ 5.3%	-3.4%	- 0.8%	+ 1.6%
1984-1988 (p	•		+ 1.0%	+ 3.2%

The Prognos forecasts thus appear likely to be exceeded for road (due principally to the exceptional increase in GDP in 1988 and 1989) while the Prognos rail forecast for 1990 appears optimistic; inland waterways are doing a little better than the Prognos forecast for 1990.

1.6. Prognos Study, Domestic traffic by mode

As mentioned in 1.2. Prognos also made forecasts (using a somewhat simpler methodology) for domestic traffic in each of the 16 countries. However, in this case forecasts were only made for the year 2000 and just for the three inland modes (i.e. excluding sea). Forecasts were made for both tonnes and tonne-kilometres, but only tonne-kilometres will be considered here, as local road transport over-dominates the modal split if it is expressed in tonnes.

Table 1.4

Domestic traffic by mode (milliard tonne-kilometres)					
	Road	Rail	inland Waterways	Total	
1984 2000	556.4 612.5	128.5 117.0	28.1 23.6	713.0 753.1	
Growth Fac	tors (1984 =	100)			
2000	110.1	91.1	84.0	105.6	
Annual Growth Rates					
1984–2000	0.6%	- 0.6%	- 1.1%	0.3%	

1.7. Comparison of Prognos forecasts for domestic traffic with observed trends, 1984-1988

Details of the observed trends of domestic tonne-kilometres for 1984-1987 together with provisional figures for 1988 will be presented in the 1988 Annual Report of EUROPATRANSPORT; the summary figures, which relate to EUR-10 for 1984 to 1986 and EUR-12 for 1986 onwards, are given in Table 1.5 below.

Table 1.5

	<u></u>		
Domestic traffic b	<u>y mode</u> (milli	iard tonne-l	(liometres)
	Road	Rail	inland Waterways*
1984 EUR-10 1985 EUR-10 1986 EUR-10 1986 EUR-12 1987 EUR-12 1988 EUR-12 (prov)	571	100.8 104.4 <u>100.9</u> 110.8 109.3	27.6 25.5 <u>26.5</u> 26.5 25.7
Growth Factors (19 1987 1988 (prov)		98.7	93.1
Annual Growth Rate 1984-1987 1984-1988 (prov)	<u>\$</u> 4.2% 4.6 %	- 0.4%	- 2.4%

The Prognos forecasts of a 10% increase for domestic transport for road (1984-2000) has already been well surpassed; the Prognos forecasts for domestic rall and inland waterways seem to be in line with current trends.

^{*} EUR-5 (D, F, NL, B, L)

1.8. Observed trends of total intra-Community traffic, 1984-1988

To examine total intra-Community traffic (domestic + international intra-Community) it is desirable, for the same reasons as given in 1.6, to work in tonne-kilometres. The tonne-kilometres for domestic traffic have already been given in 1.7; those for international intra-Community traffic are given below (note the figures for road relate to data on 'bilateral' journeys by Community hauliers (from the road statistics directive, 78/546) + 'cross-trade' journeys by hauliers with Community Quota authorisations (from statistics provided under Regulation 3164/76).

Table 1.6.

	International intra-Community traffic by mode (milliard tonne-kilometres)							
	Road	Rail	Inland Waterways *					
1984 EUR-10 1985 EUR-10	85 88	36.6 37.4	64.3 61.9					
1986 EUR-10 1986 EUR-12		34.3 36.9	<u>65.6</u> 65.6					
1987 EUR-12 1988 EUR-12 (pro	l 125 v) 141	36.9	63.5					
Growth Factors (1 1984 – 100)							
1987 1988 (prov)	117.4 132.4	93.7	98.8					
Annual Growth Rates								
1984-1987 1984-1988 (prov)	+ 5.5% + 7.2%	- 2.2%	- 0.4%					

^{*} EUR-5 (D, F, NL, B, L)

As can be seen from Table 1.6, the growth rates in tonne-kilometres are slightly higher than for tonnages (as given in Table 1.3).

Adding the results from Tables 1.5 and 1.6, the total intra-Community traffic figures are shown in Table 1.7.

Table 1.7

Total intra-Comm kliometres)	unity tra	affic by	mode (milliard	tonne-
	Road	Rail	iniand Waterways	
1984 EUR-10	512	137.4	91.9	
1985 EUR-10	522	141.8	87.4	
1986 EUR-10	546	135.2	92.1	
1986 EUR-12	651	147.7	92.1	
1987 EUR-12	696	146.2	89.2	
1988 EUR-12 (prov) 746			
Growth Factors (1	984=100)			
1987	114.0	97.4	97.1	
1988 (prov)	122.2	21.7.		
Annual Growth Rat	es			
1984-1987 1984-1988 (prov)	+ 4.5% + 5.1%	- 0.9%	- 1.0%	

It should be noted that the tonne-kilometres given in Table 1.7 do not correspond to the total use of the Community network since "extra-Community" and "through-Community" movements are excluded. In the case of rail and inland waterways, the statistical directives do provide this information, so that the total use of the Community network (in 1987) is 167.8 and 96.3 milliard tonne-kilometres for rail and inland waterways respectively; the corresponding information for road cannot be derived from the road statistical directive.

1.9. Conclusions

Most forecasters have predicted a growth rate of road transport of about 5% through to the early 1990's. This is consistent with actual experience since 1984, except for 1988 when a much higher growth occured (linked to the exceptional GDP growth in that year); in 1989 growth of road traffic can again be expected to be above average, but can be expected to fall to around 5% as GDP growth shows.

Nearly all forecasters are optimistic for rail, but experience since 1984 has fluctuated with no decided upwards or downwards trend.

For inland waterways there has also been no decided trend; the predictions of forecasters have varied from small negative growth (Prognos) to small positive growth (Datagraphics).

In general, it can thus be said that road has increased its share of the market more than the forecasters expected.

Chapter 2

Market shares of carriers from different Member States in intra-Community goods movements, 1987

2.1. Introduction

In chapter 1 an overall examination was made of recent experience and forecasts of intra-Community transport for each of 3 modes, road, rail and inland waterways. Further analysis can be pursued in a number of ways, by type of commodity, by traffic relation or by Member State of carrier.

Since the remaining chapters of this Report are concerned with the competition between different carriers in the road haulage sector, this chapter will broadly examine the structure of competition between carriers for each of 3 modes; analysis will be restricted to 1987, the last year for which complete data is available.

As the analysis in subsequent chapters is based in tonne-kilometres, analysis in this chapter will be on the same basis.

2.2. Market shares of carriers from different Member States in International intra-Community movements, 1987

In table 2.1. are set out the tonne-kilometres performed by carriers from each Member State in international intra-Community movements in 1987. The present institutional arrangements of the railways, where each national railway company is responsible for movements within its own national frontiers, is quite different from the situation of road and inland waterways carriers where a carrier is responsible from the point of loading to the point of unloading. Hence care must be exercised in making comparisons between different modes.

Table 2.1. shows that NL carriers have over 25% of the International intra-EUR-12 market followed by D with 22% and F with 16%; 4 Member States, L, IRL, GR and P have at most 1% each.

The situation is quite different for different modes. In road haulage, D, F and NL have similar shares (about 17%) while I, B and E all have shares over 10%; L, IRL, GR and P each have less than 2%. For rail, because of the institutional arrangements, there is a close link between the "size" of the Member State and the share of the market: thus F with almost 35% and D with 26% "dominate" the market followed by I (16%) and B (12%); L, UK, IRL, DK, GR and P have at most 1% of the market.

For inland waterways, only 5 Member States are concerned, NL has 52% of the market followed by D (31%), B (12%).

Table 2.1. also shows that non-Community carriers (mostly Swiss) make intra-Community movements on the inland waterways; road movements by non-Community carriers are not available (through the sources used here), while for rail such movements are evidently impossible.

International intra-EUR-12 movements by mode and by Member State of carrier, 1987 (milliard tonne-kilometres)

Member State of carrier	Road	Rail	inland Waterways	Total
D	20,7	9,7	18,1	48,5
F ·	20,5	12,7	2,6	35,8
!	13,3	5,9		19,2
NL	22,9	1,7	31,0	55,6
В	15,5	4,4	7,3	27,2
L	1,2	0,4	0,1	1,7
UK	6,9	0,2		7,1
IRL	0,9			0,9
DK	4,7	0,3		5,0
GR	2,0	0,0		2,0
Ε	14,7	1,3		16,0
Р	2,1	0,2		2,3
TOTAL EUR-12	125,5	36,9	59,2	221,6
Others	N		4,3	N
All	N	36,9	63,5	N

Note: For rail, the tonne-kilometres are those parts of international intra EUR-12 movements on the national territority; for road and inland waterways, the tonne-kilometres are those of the whole journey by carriers from the Member State concerned.

N = Not available

An alternative way of examining the figures in Table 2.1. Is by calculating the modal shares for carriers from each Member State, this is done in Table 2.2. This table shows that inland waterways has a modal share exceeding 10% in only 3 Member States, NL (56%), D (37%) and B (27%), while in F and L the share is only 6-7%.

High shares for raliways also occur in the same geographical part of the Community (F, 36%; L, 23%; D, 20%; B,16%; but not NL, 3%) and I (31%). In the "peripheral" parts of the Community (UK, IRL, DK, GR, E, P), road dominates with over 90%.

These results help to explain Member States basic attitudes in transport policy.

Modal spilt for International Intra EUR-12 movements by Member State of carrier, 1987 (based on tonne-kilometres)

Member State of carrier	Road	Rall	Inland Waterways	Total
D	43	20	37	100
F	57	36	7	100
i	69	31		100
NL .	41	3	56	100
В	57	16	27	100
Ī Ì	71	23	6	100
ŪK	97	3		100
IRL	100			100
DK	94	6		100
GR	100	0		100
E	92	8		100
P	91	9		100
EUR-12	56.6	16.7	26.7	100

2.3. Market shares of "own account" and "hire and reward" hauliers in international intra-Community road movements, 1987

As the analysis in Chapter 4 of this report is concerned with "hire and reward" in the international intra-Community road haulage sector, it is appropriate to consider a subdivision of the results for road in Table 2.1. into "own account" and "hire and reward". This is set out in Table 2.3. where it will be noted that only the "hire and reward" figures are divided into bilateral and cross-trade. This follows because (partial) information on cross-trade movements for "hire and reward" hauliers is available from the Community Quota Statistics (Regulation EEC/3164/76) - see Section 1.8. The percentage shares in Table 2.3. relate to bilateral movements only as this is the only "fair" comparison.

The following remarks are to be noted on the figures in Table 2.3. I and L have provided no Directive data in 1987 and the figures shown have been estimated from the 1986 Directive data (in the case of I, by applying the growth of "trade tonnages by road to other Member States"; in the case of L, by making a reasoned estimate based on the Community Quota Statistics which account for a substantial part of total "hire and reward" traffic—neither of these two methods permitted separate estimates for hire and reward and own account, so that the percentage share of hire and reward has been taken as that observed in 1986). The Directive data for P is a provisional figure. The cross-trade figure for B is believed to be too high, (see 4.5), but is used in the absence of any other information.

The figures in Table 2.3. show the strength of "own account" in B (and L) whereas for I, GR, E and P it is virtually negligible; in fact 38% of Community "own account" is performed by B carriers, as much as the next two highest ranked Member States (D and F) together. The "hire and reward" figures will be discussed more extensively in chapter 4.

<u>International intra EUR-12 road movements by own account/hire and reward and by Member State of carrier, 1987</u> (million tonne-kilometres)

TABLE 2.3.

Member State of carrier	Own Account Bilateral	% Own Account (Bilaterals only)	Hire and Bilateral	Reward Cross-Trad	Total e
D F I NL B L UK IRL DK GR E P	2260 2247 307 1638 4517 150 154 80 428 0 95	10.9% 11.4% 2.2% 7.7% 33.2% 20.3% 2.3% 10.3% 9.3% 0 % 0.6%	18379 17483 12997 19712 9108 580 6615 710 4140 2006 14576 2090	89 800 35 1587 1880 484 93 99 134 2 38 15	18468 18283 13032 21299 10988 1064 6708 809 4274 2008 14614 2105
Total EUR-12	11876	9.9%	108396	5256	113652

2.4. Market shares of carriers from different Member States in domestic movements, 1987

Section 2.4. corresponds to Section 2.2., but deals with domestic movements instead of international intra-Community movements; Table 2.4. sets out the tonne-kilometres performed by carriers from each Member State for each of 3 modes in 1987. As "cabotage" is not (yet) allowed for road (or rail), the domestic movements shown are those by carriers from the Member State concerned. This is not true for inland waterways where cabotage is allowed in some cases; the tonne-kilometres (in milliard) performed in domestic movements on each national network were (in 1987) D, 12.8; F,3.9; I, 0.2; NL, 7.4; B, 1.7; L, 0.0.

Table 2.4. shows that the tonne-kilometres on domestic movements are much more closely related to GDP, so that the total domestic market of D, F, I, UK and E are respectively 5, 4, 4 and 3 times as large as NL (compare Table 2.1 where NL is the largest carrier for international intra-EUR-12 movements).

Domestic movements by mode and by Member State of carriers, 1987 (milliard tonne-kilometres)

Member State of carrier	Road	Rail	inland Waterways	Total
D	104,9	34,5	11 5	150.0
F	88,3	34,3	11,5	150,9
•	117,4	8,0	3,8	126,3
, NL	19,9	-	0,2	125,6
B	11,0	1,0	8,2	29,1
Ĺ	0,3	2,4	1,7	15,1
ÜK		0,1	0,0	0,4
IRL	109,9	17,2		127,1
DK	4,0	0,6		4,6
GR	8,8	0,5		9,3
1	13,1	0,2		13,3
. E P	84,8	9,2		94,0
Ρ	8,6	1,2		9,8
Total EUR-12	570,9	109,3	25,3	705,5
Others			0,4	0,4
Total	570,9	109,3	25,7	705,9

Road, which accounts for over 80% of domestic tonne-kilometres exhibits similar characteristics to the "total" (for the 3 modes) described above. For rail, both D and F account for almost 33% of all domestic rail markets, while UK accounts for almost half of the remainder (contrast international intra EUR-12, where UK is almost negligible - prior to the Channel Tunnel). For inland waterways D domestic traffic accounts for almost 50% and NL domestic traffic for almost 33%.

The modal splits for carriers from each Member State are set out in Table 2.5. The results are not dissimilar to those in Table 2.3. for international intra EUR-12 traffic except that inland waterways plays a much smaller part.

Modal split for domestic movements by Member State of carrier, 1987 (based on tonne-kilometres)

TABLE 2.5.

Member State of carrier	Road	Rail	Inland Waterways	Total
D F	69 70	23 27	8 3	100 100
i NL	94 68	6 4	0 28	100 100
В	73	16	11	100 100
L UK	75 86	25 14	Militar System	100
IRL DK	87 95	13 5	Malac Allen	100 100
GR	98	2	Link mind	100 100
E P	90 88	10 12	alan dan	100
EUR-12	80.9	15.5	3.6	100

2.5. Market shares of "own account" and "hire and reward" hauliers in domestic road movements, 1987

To examine the problem of cabotage in Chapter 3 of this Report, it is necessary to sub-divide domestic road haulage sector into "hire and reward" and "own account".

The following remarks are to be noted on the figures in Table 2.6. I and L have provided no directive data in 1987 and the figures shown have been estimated from the 1986 Directive data (in the case of I by adding in local traffic — not reported to SOEC but given in the I Ministry of Transport's publication "Conto Nazionale dei Trasporti 1986" and then applying the growth of total road traffic in I — as reported to ECMT; in the case of L, the general increase in the Community was applied; neither of these two methods permitted separate estimates for hire and reward and own account, so that the percentage share of hire and reward has been taken as that observed in 1986).

The figures in Table 2.6. show the strength of own account in the "smaller" countries, B, L, IRL and P; this is not surprising given that the average distance of own account trips is generally shorter, own account will tend to be more important in "smaller" countries.

Domestic road movements by own account/hire and reward and by Member State of carrier, 1987 (million tonne-kilometres)

Member State of carrier	Own Account	Hire and Reward	% Hire and Reward
D	45101	59779	57%
F	34914	53345	60%
	22739	94705	81%
NL	6531	13404	67%
В	5672	5286	48%
L [214	36	14%
UK	32234	77665	71%
IRL	2376	1610	40%
DK	2268	6540	74%
GR	4440	8624	66%
E	14926	69825	82%
P	6174	2462	29%
EUR-12	177589	393281	68.9%

2.6. Market shares of carriers from different Member States in intra EUR-12 movements, 1987

Combining the results from Section 2.2. on international intra-EUR-12 movements with Section 2.4. on domestic movements, the total picture for intra EUR-12 movements in 1987 can be obtained as shown in Table 2.7. (the overall figures have already been given in Table 1.7).

intra <u>EUR-12</u> movements by mode and by <u>Member State of carrier</u>, <u>1987</u> (<u>milliard tonne-kilometres</u>).

Member State of carrier	Road	Rail	Inland Waterways	Total
D F I NL B L UK I RL DK GR E P	125,6 108,8 130,7 42,8 26,5 1,5 116,8 4,9 13,5 15,1 99,5 10,7	44,2 46,9 13,9 2,7 6,8 0,5 17,4 0,6 0,8 0,2 10,5 1,4	29,6 6,4 0,2 39,2 9,0 0,1 	199,4 162,1 144,8 84,7 42,3 2,1 134,2 5,5 14,3 15,3 110,0 12,1
Total EUR-12 Others	696,4 N	146,2	84,5 4,7	927,1 N
All	N	146,2	89,2	N

Chapter 3

Road Cabotage

3.1. Introduction

Cabotage, that is the carrying out of domestic movements in a Member State different from the Member State of registration of the vehicle, is not currently permitted in road haulage by any "host" Member State. The question has been given increasing attention since the ruling of the Court of Justice of 22 May 1985 in Case 13/83 which was followed by the Commission's proposal for the introduction of cabotage in "hire and reward" road haulage (1). After extensive discussion, the Council has finally adopted a limited experiment in cabotage which would permit 15,000 2-monthly cabotage authorisations in the period mid 1990-mid 1991 with an increase of 10% per annum thereafter (or a greater increase if domestic markets increased by more than 10%). For simplicity, the period mid 1990-mid 1991 will be referred to as 1990/91 in the rest of this chapter. The cabotage authorisations have been divided between the Member States pro-rata to the number of Community Quota authorisations in 1989, so that the number given to each Member State Is D, 2073; F, 1767; I, 1767; NL, 1842; B, 1302; L, 606; UK, 1107; IRL, 585; DK, 1263; GR, 573; E, 1350; P, 765.

Despite the absence of experience in the use of cabotage authorisations, it is of interest to forecast the expected economic impact of such authorisations.

3.2. Trends in the domestic "hire and reward" road markets in the Member States. 1984-1988

In chapter 1 (Table 1.5.) were set out the recent trends of domestic road transport ("hire and reward" + "own account") for the Community (EUR-10 1984 to 1986, EUR-12 1986 to 1988 (provisional)), while in Chapter 2 (Table 2.6.), a breakdown between "hire and reward" and "own account" was given for each of the EUR-12 domestic markets in 1987.

(1) (OJ C 349 of 31.12.85, p.26)

In Table 3.1., the trends of the "hire and reward" markets (in million tonne-kilometres) are given for each of the domestic markets in the Community for 1984 to 1988. The percentage changes from year to year are given in Table 3.2. As can be seen from Table 3.2., there have been considerable increases in Community domestic "hire and reward" markets in recent years, 3.3% in 1985, 5.4% in 1986, 8.0% in 1987 and (based on 7 Member States representing over 90% of the Community domestic markets) 8.6% in 1988.

TABLE 3.1 Domestic t-km by "hire and reward" hauliers (in millions)

Member State					
of haulier	1984	1985	1986	1987	1988
D	55355	56180	58432	59779	63096
F	44632	45880	48603	53345	61077
l l	82149e	84928e	89727	94705e	98550e
NL	11762	12171	12650	13404	
В	4923	4736	5078	5286	
L	28e	22	34	36e	
UK	63243	67155	69246	77665	88673
IRL	1436	1272	1613	1610	1664
DK	5531	6039	6535	6540	
GR	7089	6879	8740	8624	
E			61295	69825	74532e
Р			2345e	2462	2790
EUR-10	276148	285262	300658		
EUR-12			364298	393280	
D+F+I+UK+IRL	+E+P			359391	390382

TABLE 3.2 Increases in domestic "hire and reward" road haulage (in tonne-kilometres)

			(111 1011116	5-KNOHIEHES)
Member State				
of haulier	1984/85	1985/86	1986/87	1987/88
D	+1.5%	+4.0%	+2.3%	+5.5%
F	+2.8%	+5.9%	+9.8%	+14.5%
1	3.4%e	5.7%e	5.5%e	4.1%e
NL	+3.5%	+3.9%	+6.0%	
В	-3.8%	+7.2%	+4.1%	
L	-21.7%e	+54.5%	4.6%e	
UK	+6.2%	+3.1%	+12.2%	+14.2%
IRL	-11.4%	+26.8%	-0.2%	+3.4%
DK	+9.2%	+8.2%	+0.1%	
GR	-3.0%	+27.1%	-1.3%	
E			+13.9%	+6.7%
Р			5.0%e	+13.3%
EUR-10	+3.3%	+5.4%		
EUR-12			+8.0%	
D+F+I+UK+IRL	+E+P		+8.6%	

E and I estimates based on ECMT time series data (t-km on national network - includes domestic parts of international journeys + own account).

3.3. Expected use of cabotage authorisations

As there is currently no experience in cabotage, it is not possible to give very precise estimates of the likely usage of a cabotage authorisation. However it seems most unlikely that the use of cabotage authorisations would be as high as Community Quota authorisations (0.294 million tonne-kilometres per 2-months in 1988). It is therefore proposed, in this chapter, to assume an average use of 0.2 million tonne-kilometres per 2-months performed under cabotage authorisations and this is considered to be the maximum likely value. Early experience with Community Quota authorisations indicates that this maximum value would only be achieved after several years when the necessary commercial contacts had been made and thus the initial average use, in 1990/91, can be expected to be much lower.

3.4. Economic impact of cabotage

In section 3.2., it was seen that the combined size of the 12 Member State domestic markets for "hire and reward" was 393 milliard tonne-kilometres in 1987 and is estimated to be about 427 (milliard tonne-kilometres) in 1988. By 1990/91, the first year in which cabotage is authorised, the combined size of 12 Member State domestic markets can be expected to be close to 500 milliard tonne-kilometres.

On the basis of 15,000 2-monthly authorisations, the estimated maximum use (given the likely maximum average use given in 3.3.) will be 3 milliard tonne-kilometres or a maximum of 0.6% of the 12 combined domestic markets.

The maximum of 0.6 % given in the previous paragraph does assume that each domestic market would be equally penetrated to the (maximum) level of 0.6 %. It is to be expected that some domestic markets will, for geographical and other reasons, attract more cabotage movements than others.

indeed, it is D and F who are the most concerned with the unrestricted use of cabotage. As the size of the D and F markets are both about 1/7 of the combined domestic markets, it can easily be seen that the concentration of all cabotage movements in D (or F) would produce a (maximum) penetration level of 4% (= 0.6% / 1/7) (on the assumptions of average use made in this Chapter) and probably a somewhat lower level than this.

Actually, because of concern about concentration, the Council has asked the Commission to investigate if the concentration of cabotage in a Member State exceeds 30 %. This "trigger" point for such an investigation would thus correspond to a (maximum) penetration level of 1.2% (30% x 4%) of the domestic market in D (or F) and probably a somewhat lower level than this.

3.5. Conclusions

In view of the large size of the combined domestic road haulage markets in the Community and the rapid expansion in recent years, there should be little difficulty in these markets absorbing a limited experiment in cabotage, especially considering the safeguard measures taken to prevent the concentration of cabotage occurring on the territory of one particular Member State.

Chapter 4

Community Quotas, 1984 - 1992

4.1. Introduction

As requested by the Council, the Commission has recently presented a new proposal for the number of Community Quota authorisations for 1990, 1991 and 1992; the proposal is for a linear increase of 40% per annum to be applied to the 1989 quotas (as given in Regulation 1841/88/EEC).

In the 1988 Analysis and Forecasts Report a projection was made of the use of Community Quota authorisations through to 1989 although the method developed could give projections through to 1992 (see introduction of Annex A, ibid).

While it has always been assumed that the average use of Community Quota authorisations would sooner or later fall if substantial increases (of the order of 40%) were given each year (see again Annex A, ibid), the fall has occurred more sharply than expected and it has been necessary to adapt the methodology on the evidence of the most recent data.

Community Quota authorisations relate to EUR-10 up to 1985 and to EUR-12 thereafter. To avoid the difficulty of examining time series partly on EUR-10 and partly on EUR-12 basis (which was extensively examined in the 1988 Analysis and Forecasts Report), it was initially considered to only treat the Community Quotas from 1986 onwards in this Report. This view was finally abandoned for two reasons. Firstly, all other series in this Report start from 1984 and, secondly, 1984 was the last year before the number of Community Quota authorisations started to increase dramatically.

4.2. Number of Community Quota authorisations, 1984 - 1992

The average number of Community Quota authorisations valid in each Member State is set out in Table 4.1. The figures for 1990, 1991 and 1992 correspond to the Commission's recent proposal; for the purposes of this Report it is assumed that the additional authorisations for 1990 are available for the whole year although the Council has not yet taken a decision on the 1990 Quotas.

TABLE 4.1 Average number of Community Quota authorisations valid in different years

	1984	1985	1986	1987	1988	1989	1990	1991	1992
D	727	914	1112	1588.0	2164.5	3324	4654	6516	9123
F	656	801	957	1363.0	1844.5	2826	3957	5540	7756
i	567	721	883	1301.0	1832.7	2831	3964	5550	7770
NL	626	785	955	1422.0	1923.5	2946	4125	5775	8085
В	434	570	707	952.0	1339.0	2084	2918	4086	5721
L	111	179	245	354.5	597.0	971	1360	1904	2666
UK	436	551	673	831.0	1146.0	1771	2480	3472	4861
IRL	88	147	204	299.5	545.5	940	1316	1843	2581
DK	305	469	625	834.0	1273.5	2022	2831	3964	5550
GR	88	131	170	261.5	528.2	922	1291	1808	2532
E			673	921.5	1375.7	2161	3026	4237	
P			233	362.5	711.7	1223	1713		5932
TOTAL	4038	5268	7437	10490.5	15281.7	24021		2399	3359
			. 107	10-130.3	10201.7	24021	33635	47094	65936

4.3. Use of Community Quota authorisations, 1984 - 1988

Data on the use of Community Quota authorisations (in tonne-kilometres) for (1983), 1984 - 1987 were presented in Table 2.1. of the 1988 Analysis and Forecasts Report (May 1988). The 1987 figures for a number of Member States were estimates based on partial year data. The series is extended in Table 4.2. of this Report up to 1988. The 1987 figures for 6 Member States (F, I, UK, IRL, DK and P) have been revised (the revised figures were also published in the 1987 Annual Report (November 1988)).

The 1988 figures, while they contain no estimates, are also (formally) marked provisional, as a full editing check on the data submitted by Member States has not yet been completed. These 1988 provisional figures, together with figures for earlier years have been submitted to the Council by the Commission in its accompanying Report to the proposal for the quotas for 1990, 1991 and 1992.

TABLE 4.2 1000 tonne-kilometres achieved under Community Quota authorisations by Member State of haulier

	1984	1985	1986	1987	1988
D	1 639 959	2 125 040	2 721 717	3 104 326	3 875 541p
F	854 360	1 489 135	1 852 512	2 849 823	3 724 116p
	1 165 069	1 491 291	1 902 493	2 587 398	3 281 375p
NL	1 194 467	1 478 508	1 907 856	2 752 895	3 493 800p
В	809 672	1 083 789	1 474 105	2 308 958	2 485 874p
L	176 307	293 591	444 505	609 625	956 768p
UK	636 771	770 412	1 031 732	1 223 653	1 595 415p
IRL	121 298	203 826	279 894	392 667	571 191p
DK	1 021 695	1 255 054	1 776 270	2 053 042	2 577 450p
GR	100 630	159 620	216 610	221 609	437 127p
E			1 549 278	2 116 215	2 886 351p
Р			379 785	643 711	1 073 931p
TOTAL	7 720 228	10 350 266	15 536 757	20 863 922	26 958 939p

4.4. Average use of Community Quota authorisations, 1984 - 1988

Table 4.3. sets out the average use of Community Quota authorisations (in thousand tonne-kilometres) from 1984 to 1988, the results being obtained by dividing the results in Table 4.2. by those in Table 4.1.

Whereas average use of Community Quota authorisations had been rising slowly up to 1985 and received a sudden jump in 1986 with the adhesion of E and P — due to the possibility of longer journeys — a decline is now clearly evident. Some care must be taken in interpreting the figures in Table 4.3. (and the corresponding figures in Table 4.2.) for certain Member States, notably:

- (i) F; the figure for 1984 is not comparable with that for 1985 and subsequently
- (ii) B; the figure for 1987 seems very high and is linked to the exceptional cross-trades reported in that year (see 4.5.).

TABLE 4.3 Average (1000 tonne-kilometres) per authorisation by Member State of haulier

г	1984	1985	1986	1987	1988
	2 256	2 325	2 448	1 955	1 791p
D	1 302	1 859	1 936	2 091	2 019p
F	2 055	2 068	2 155	1 989	1 790p
	1 908	1 883	1 998	1 936	1 816p
NL	1 866	1 901	2 085	2 425	1 857p
В		1 640	1 814	1 720	1 603p
L	1 588	1 398	1 533	1 473	1 392p
UK	1 460	1 387	1 372	1 311	1 047p
IRL	1 378	2 676	2 842	2 462	2 024p
DK	3 350	1 218	1 274	847	828p
GR	1 144	1210	2 302	2 296	2 098p
E			1 630	1 776	1 509p
Р	1.010	1 965	2 089	1 989	1 764p
TOTAL	1 912	1 900	2 000		

4.5. <u>Cross-trading under Community Quota authorisations</u>, 1984-1988

The objective of the Community Quota authorisations was not only to permit hauliers to make "bilateral" journeys to any other Member State with just the one authorisation but, perhaps more importantly, also to make "cross-trade" journeys between 2 other Member States.

Tables 4.4., 4.5. and 4.6. set out, respectively, the tonne-kilometres performed in cross-trading, the average tonne-kilometres in cross-trading per authorisation and the share of cross-trading in all Community Quota tonne-kilometres by hauliers from each Member State from 1984 to 1988 (1984 to 1986 figures were published in the 1988 Analysis and Forecast Report and the 1987 figures in the 1987 Annual Report).

The exceptionally high B figure for 1987 is thought to be an "error", it appears that B hauliers taking semi-trailers from I to the Belgian ports to be shipped unaccompanied to the UK were treated as having a UK destination because the I authorities were insisting that the B hauliers had a Community Quota authorisation rather than a bilateral (B/I) authorisation. In 1988 the cross-trades for B hauliers returned to a more "normal" level.

If the exceptional B figure for 1987 were to be replaced by a more "normal" 60% share for cross-trading then the overall share of cross-trading in 1987 would fall below 23%. The share of cross-trading in total tonne-kilometres under Community Quota authorisations has thus remained extremely steady (21 to 22%) despite the trebling of the number of authorisations from 1984 to 1988.

TABLE 4.4 1000 tonne-kilometres achieved in cross-trading by Member State of haulier

Г	1984	1985	1986	1987	1988
	62 944	59 772	105 919	89 024	125 087p
D	158 438	255 782	616 256	799 607	1 152 928p
F	2 404	2 676	40 056	35 248	48 199p
	726 077	885 794	1 163 518	1 586 957	1 919 179p
NL	439 316	576 947	876 773	1 879 489	1 315 130p
В	- - -	209 119	338 042	483 931	772 586p
L	111 769 59 798	76 632	87 950	93 342	135 259p
UK		44 490	53 307	98 886	121 896p
IRL	31 250	77 187	90 217	133 902	194 837p
DK	51 105	0	0	2 485	4 408p
GR	0	U	25 255	37 720	54 506p
E			3 552	15 417	31 330p
P	4 040 401	2 188 399	3 400 845	5 256 008	5 875 345p
TOTAL	1 643 101	2 100 333	3 400 040		

TABLE 4.5 Average (1000 tonne-kilometres) in cross-trading per authorisation by Member State of haulier

ı	1984	1985	1986	1987	1988
		65	95	56	58p
D	87		644	587	625p
F	242	319	45	27	26p
[1	4	4		1 116	998p
NL	1 160	1 128	1 218		982p
В	1 012	1 012	1 240	1 974	, ,
1 7	1 007	1 168	1 380	1 365	1 294p
υĸ	137	139	131	112	118p
1	355	303	261	330	223p
IRL	168	165	144	161	153p
DK	l .	0	0	10	8p
GR	0	· ·	38	41	40p
E			15	43	44p
P		445	457	501	384p
TOTAL	407	415	437	301	

TABLE 4.6 Share (in %) of cross-trading in total tonne-kilometres under Community Quota achieved by Member State of haulier

ī	1984	1985	1986	1987	1988
	3.8%	2.8%	3.9%	2.9%	3.2%p
D	= : -	17.2%	33.3%	28.1%	31.0%p
F	18.5%	0.2%	2.1%	1.4%	1.5%p
1	0.2%		61.0%	57.6%	54.9%p
NL	60.8%	59.9%	59.5%	81.4%	52.9%p
В	54.3%	53.2%	76.0%	79.4%	80.7%p
L	63.4%	71.2%		7.6%	8.5%p
UK	9.4%	9.9%	8.5%	25.2%	21.3%p
IRL	25.8%	21.8%	19.0%		7.6%p
DK	5.0%	6.2%	5.1%	6.5%	•
GR	0.0%	0.0%	0.0%	1.1%	1.0%p
E			1.6%	1.8%	1.9%p
P			0.9%	2.4%	2.9%p
	21.3%	21.1%	21.9%	25.2%	21.8%p
TOTAL	1 21.078				

35

4.6. Share of Community Quota In total "Hire and Reward" International Intra-Community road haulage, 1984-1988

Table 2.3. included the "hire and reward" bilateral and cross-trade tonne-kilometres (in millions) for 1987. Table 4.7. gives the bilateral tonne-kilometres for 1984 to 1988 (the figures for 1988 are only available for 6 Member States at the time of preparation of this Report - Member States have 1 year to deliver the data to the Statistical Office of the European Communities). The UK figures for 1987 and 1988 are not comparable with earlier figures due to revision of survey method.

Combining these figures with the cross-trades performed under Community Quota authorisations (Table 4.4.) gives the "total" "hire and reward" international intra-Community tonne-kilometres performed by hauliers from each Member State; the results are given in Table 4.8.

TABLE 4.7 Tonne-kilometres achieved by "Hire & Reward" hauliers from each Member State on bilateral international intra-Community traffic (x mio t-km)

	1984	1985	1986 10	1986 12	1987	1988
D	14 792	15 628	15 979	17 696	18 379	20 410
F	12 922	13 234	13 785	15 444	17 483	21 454
1	13 625	13 162	12 089	13 599	12 997	21 404
NL	14 518	15 672	17 107	17 536	19 712	
В	6 936	7 364	7 808	8 201	9 108	
Ĺ	323	354	544	546	580	
UK	3 168	2 990	3 568	3 963	6 615	7.000
IRL	451	533	693	725	710	7 030
DK	3 529	3 498	3 775	3 981	4 140	749
GR	2 516	2 265	1 966	1 973		
Ε			. 300	13 099	2 006	4.4 500
P				1 747	14 576	14 592
TOTAL	72 780	74 700	77 314	98 510	2 090 108 396	2 229

TABLE 4.8 Tonne-kilometres achieved by "Hire & Reward" hauliers from each Member State on total (= bilateral + cross-trade) international intra-Community traffic (x mio t-km)

	1984	1985	1986 10	1986 12	1987	198
D	14 855	15 688	16 078	17 802	18 468	20 53
F	13 080	13 490	14 035	16 060	18 283	
1	13 627	13 165	12 125	13 639	13 032	22 607
NL	15 244	16 558	18 198	18 700		
В	7 375	7 941	8 589	9 078	21 299	
L	435	563	846	884	10 987	
UK	3 228	3 067	3 650		1 064	
IRL	482	577	739	4 051	6 708	7 165
DK	3 580	3 575	3 853	778	809	871
GR	2 516	2 265		4 071	4 274	
E	-0:0	£ 203	1 966	1 973	2 008	
P				13 124	14 614	14 647
TOTAL	74 423	70.000		1 751	2 105	2 260
IOIAL	74 423	76 888	80 079	101 911	113 652	

Dividing the tonne-kilometres performed under Community Quota authorisations (Table 4.2) by the total "Hire and Reward" international intra-Community tonne-kilometres (Table 4.8) gives the share held by Community Quotas; this is given in Table 4.9.

TABLE 4.9 Share of Community Quota in total "Hire and Reward" international intra-Community traffic (in t-km)

	1984	1985	1986	1987	1988
D	11.0%	13.5%	15.3%	16.8%	18.9%
F	6.5%	11.0%	11.5%	15.6%	16.5%
ı	8.5%	11.3%	13.9%	19.9%	
NL	7.8%	8.9%	10.2%	12.9%	
В	11.0%	13.6%	16.2%	21.0%	
Ĺ	40.6%	52.1%	50.3%	57.3%	
ŪK	19.7%	25.1%	25.5%	18.2%	22.3%
IRL	25.2%	35.3%	36.0%	48.5%	65.6%
DK	28.5%	35.1%	43.6%	48.0%	
GR	4.0%	7.0%	11.0%	11.0%	
E			11.8%	14.5%	19.7%
P			21.7%	30.6%	47.5%
TOTAL	10.4%	13.5%	15.2%	18.4%	

4.7. <u>Projection of total "Hire and Reward" international intra-Community tonne-kilometres, 1988-1992</u>

As was shown in Section 4.6. (and Table 4.8.) data on "total" tonne-kilometres is only available for 6 Member States for 1988; it is therefore necessary to estimate the data for the remaining 6 Member States before making the projection through to 1992.

Given an average increase of 11.6% for the 6 member states for which the 1988 data was known, together with provisional information for the first 9 months for NL hauliers and for all hauliers to and from DK, it was decided to assume, for 1988:

- 5 % Increase for DK
- 10 % increase for I, NL, B and GR
- 20 % increase for L

(the larger increase for L was taken because of the observed "explosion" of the use of Community Quota authorisations in L).

For the projection, it has been assumed that, in line with GDP forecasts, the rate of growth will slow to 7% in 1989 and 5% in each of 1990, 1991 and 1992.

This is very closely in line with the overall assumptions made in the 1988 Analysis and Forecasts Report except for the higher rate in 1989. Examination of the observed growth rates for hauliers from different Member States form 1984 (or 1986 in the case of E and P) to 1987 (or 1988 if available) showed a quite different pattern from that used in the 1988 Report (see Annex C, ibid) which was based on the work of PROGNOS; indeed F hauliers who were expected to have one of the lowest growth rates have done spectacularly well whereas E hauliers who were expected to have one of the highest growth rates have had only modest growth (provisionally, close to 0% growth in 1988). In view of this "conflicting" evidence it has been considered more appropriate (and more neutral) to assume the same growth rates for hauliers from each Member State for 1989 to 1992 (except for L where 'double' rates, 14% for 1989 and 10% thereafter have been taken).

The projection, with the assumptions set out above, is given in Table 4.10.

TABLE 4.10 Projections of total "Hire and Reward" t-km intra EUR-12

	(including cross	s-trades)				
M.S. of haulier	1987	1988 a	1989 b	1990 c	1991 d	1992 €
D	18 468	20 535	21 972	23 071	24 225	25 436
F	18 283	22 607	24 189	25 399	26 669	28 002
ı	13 032	14 335	15 339	16 106	16 911	17 757
NL	21 299	23 429	25 069	26 322	27 638	29 020
В	10 987	12 086	12 932	13 579	14 258	14 971
L	1 064	1 277	1 455	1 601	1 761	1 937
UK	6 708	7 165	7 667	8 050	8 452	8 875
IRL	809	871	932	979	1 027	1 079
DK	4 274	4 488	4 802	5 042	5 294	5 559
GR	2 008	2 209	2 364	2 482	2 606	2 737
E	14 614	14 647	15 672	16 456	17 279	18 143
P	2 105	2 260	2 418	2 539	2 666	2 799
TOTAL	113 652	125 909	134 812	141 626	148 787	156 314

a: 10% increase except D, F, UK, IRL, E and P which are known, DK for which 5%, and L for which 20%

b: 7% increase except for L for which 14%

c - e : 5% increase except for L for which 10%

Forecast of use of Community Quota authorisations, 1989-4.8. 1992

in Annex A of the 1988 Analysis and Forecasts Report, a method was developed to adjust the average use of Community Quota authorisations downwards if the share of tonne-kilometres held by hauliers using Community Quotas exceeded 40% of the total "hire and reward" market. The results in Table 4.3. show that the average use of Community Quota authorisations is falling for all Member States even when the share held by Community Quotas is less than 40%. It is therefore necessary to adapt the methodology used previously to take these observed effects into account.

The share held by Community Quotas has already reached 40% in 4 Member States, L, IRL, DK and P (in 1984, 1987, 1986, 1988 respectively) and should be excluded from the calculation of declining average use for those with less than 40% under Community Quota. B has also been excluded, because of the doubts about the 1987 figures. For the remaining 7 Member States the

figures for 1986 to 1988 are:

4000 to 1000 ara:			
figures for 1986 to 1988 are:	1986	1987	1988
Tonne-kilometres under Community Quota (mio)	11182	14856	19294
Average Number of Authorisations	5423	7688	10815
Average tonne-kilometres per authorisation (000's)	2062	1932	1784
Change in average tonne- kilometres		-6.3%	-7.7%

Based on the above analysis, it was decided to assume that the average use of Community Quota authorisations would decline by 8% from 1989 onwards (under the assumption of a 40% increase in the number of authorisations per year as per the Commission proposal) with an additional decline if the Community Quota would have over 40% of the market for hauliers of the Member State concerned. The revised methodology and the detailed calculations are set out in Annex A to this report.

The forecast use of the Community Quota authorisations is set out in Table 4.11 (based on Table A4 of Annex A) which also includes the forecasts published in the 1988 Analysis and Forecasts Report - for this purpose the average of 1988 B and 1988 C projection from the previous Report has been used since the (major) change of the number of authorisations in 1988 occurred on 30 June 1988.

TABLE 4.11 Forecast use of Community Quota authorisations (mio t-km)

(figures in bold type correspond to observed or provisional values)

(rigures in bold type correspond to observed or provisional values)										
M.S.	projection 1989	1986	1987	1988 p	1989	1990	1991	1992		
of haulier	projection 1988	1986	1987 p	1988	1989		7551	1332		
D	proj. 1989	2 722	3 104	3 876	5 477	7 055	9 087	11 396		
	proj. 1988	2 722	3 104	4 232	6 498	, , ,	0 007	11030		
F	proj. 1989	1 853	2 850	3 724	5 249	6 762	8 710	11 218		
	proj. 1988	1 853	2 407	3 258	4 991	- · • • •	07.10	11210		
1	proj. 1989	1 902	2 587	3 281	4 662	6 006	7 542	9 180		
	proj. 1988	1 902	2 312	3 272	5 031			0.00		
NL	proj. 1989	1 908	2 753	3 494	4 922	6 340	8 116	10 518		
_	proj. 1988	1 908	2 753	3 724	5 703			10 010		
В	proj. 1989	1 474	2 309	2 486	3 560	4 586	5 860	7 261		
_	proj. 1988	1 474	2 309	3 248	4 902		7 000	0.		
L	proj. 1989	445	610	957	1 220	1 392	1 582	1 775		
	proj. 1988	445	610	791	933					
UK	proj. 1989	1 032	1 224	1 595	2 268	2 922	3 685	4 508		
	proj. 1988	1 032	1 209	1 660	2 381			. 500		
IRL	proj. 1989	280	393	571	740	835	912	987		
D	proj. 1988	280	368	536	714					
DK	proj. 1989	1 776	2 053	2 577	3 237	3 756	4 320	4 797		
0.0	proj. 1988	1 776	1 953	2 606	3 425					
GR	proj. 1989	217	222	437	702	905	1 141	1 393		
_	proj. 1988	217	222	456	783					
E	proj. 1989	1 549	2 116	2 886	4 171	5 373	6 922	8 582		
	proj. 1988	1 549	2 116	3 178	4 962					
P	proj. 1989	379	644	1 074	1 465	1 727	2 002	2 298		
EUR-12	proj. 1988	379	622	1 090	1 542					
EUN-12	proj. 1989	15 537	20 865	26 958	37 673	47 659	59 879	73 913		
	proj. 1988	15 537	19 985	28 051	41 865					

For EUR-12 as a whole, the number of ton-km (mio) is expected to rise from the (provisional) 1988 figure of 26958 to 73913 in 1992, by annual increases of 40%, 27%, 26% and 23%, (the large increase in the first year is due to the change in the number of authorisations at mid-1988) on the assumption that the 40% increases in number of authorisations for 1990, 1991 and 1992 each apply from January 1st. (see Section 4.2). These increases are smaller than those expected in the 1988 Analysis and Forecasts Report which were 40% (1987 to 1988) and 49% (1988 to 1989).

In comparing the 1988 and 1989 projections for individual Member States, readers should note that there were sometimes substantial revisions in the (provisional) 1987 figures used in the 1988 projection (see especially F). Because of the 18 month delay between publishing the 1988 and 1989 projections, there is not expected to be many revisions (if any) to the 1988 provisional figures used in the 1989 projection.

4.9. Share of Community Quota in total "Hire and Reward" international intra-Community tonne-kilometres 1984-1992

The observed and forecast shares (as measured in tonne-kilometres) held by the Community Quota in total "Hire and Reward" international intra-Community from 1987 to 1992 can be obtained by dividing the tonne-kilometres under Community Quota (Table 4.11) by the total "Hire and Reward" international intra-Community tonne-kilometres (Table 4.10); the series is completed from 1984 to 1986 by using the observed shares given in Table 4.9. The results are given in Table 4.12.

TABLE 4.12 Share of Community Quota in total "hire and reward" international intra-Community traffic

	1984	1985	1986	1987	1988	1989	1990	1991	1992
D	11.0%	13.5%	15.3%	16.8%	18.9%	25%	31%	38%	45%
F	6.5%	11.0%	11.5%	15.6%	16.5%	22%	27%	33%	40%
1	8.5%	11.3%	13.9%	19.9%	23%	30%	37%	45%	52%
NL	7.8%	8.9%	10.2%	12.9%	15%	20%	24%	29%	36%
В	11.0%	13.6%	16.2%	21.0%	21%	28%	34%	41%	49%
L	40.6%	52.1%	50.3%	57.3%	75%	84%	87%	90%	92%
UK	19.7%	25.1%	25.5%	18.2%	22.3%	30%	36%	44%	51%
IRL	25.2%	35.3%	36.0%	48.6%	65.6%	79%	85%	89%	91%
DK	28.5%	35.1%	43.6%	48.0%	57%	67%	74%	82%	86%
GR	4.0%	7.0%	11.0%	11.1%	20%	30%	36%	44%	51%
E			11.8%	14.5%	19.7%	27%	33%	40%	47%
P			21.7%	30.6%	47.5%	61%	68%	75%_	82%
TOTAL	10.4%	13.5%	15.2%	18.4%	21.4%	27.9%	33.7%	40.2%	47.3%

The results shown in Table 4.12. show that the hauliers using Community Quotas are expected to have about 47% of the total "hire and reward" international intra-Community market by 1992 (on the various assumptions made in this Report), this compares with 10.4% in 1984, 18.4% in 1987, and an estimated 21.4% in 1988. The 1988 estimate (21.4%) and 1989 forecasts (27.9%) are considerably lower than the forecasts given in the 1988 Analysis and Forecast Report; this is due to the larger than expected fall in average use of authorisations (as discussed in Section 4.7.) and larger than expected increase in the total market in 1987 and 1988, both of these effects tend to reduce the share held by the Community Quota. Thus the estimate for 1988 (21.4%) is lower than the previous forecast for 1988 (25.4%, being the average of 1988 B, 22.8%, and 1988 C, 28.0%, the number of authorisations actually having changed at mid-year) while that for 1989 (27.9%) is almost identical with 1988 C (28.0%) and the level previously expected for 1989 (36.1%) is not now expected to be reached in 1990.

The results of Table 4.12 also show, as remarked in previous Analysis and Forecasts Report (e.g. Section 3.5 of the 1988 Report) that the proportion of market held by Community Quota varies considerably from one Member State to another. These results follow, at least in part, from past Council decisions to allocate a larger proportion of the Community Quota authorisations to the "smaller", often peripheral, Member States whose hauliers had to transit a "large" neighbouring Member State to reach the rest of the Community; or, in the case of Luxembourg, needed to be able to make cross-trade journeys to "survive". Thus in 1988, L (estimated 75%) and IRL (65.6%) had more than three times the Community average (estimated 21.4%) under Community Quota while DK (estimated 57%) and P (47.5%) are more than twice the Community average. Conversely only NL (estimated 15%) and F (16.5%) are substantially below the Community average (21.4%) in 1988.

Under the Commission's proposal for a 40% cumulative linear increase in the Community Quota for 1990, 1991 and 1992, the differences between Member States will be gradually reduced as shown in Table 4.12.

4.10. Past and future trends in the market not performed under Community Quota

An estimate of the trends in markets covered by "bilateral quotas" or "free from quotas" can be obtained from subtracting the tonne-kilometres performed under Communnity Quota, Table 4.11, from the total tonne-kilometres by hire and reward hauliers on international intra-Community journeys, Table 4.10; the results are shown in Table 4.13.

TABLE 4.13 Tonne-kilometres in total international Hire & Reward intra-Community traffic not performed under Community Quota

	1004	1985	1986-10	1986-12	1987	1988	1989	1990	1991	1992
	1984			15 080	15 364	16 659	16 495	16 016	15 138	14 040
D	13 215	13 563	13 530		15 433	18 883	18 940	18 637	17 959	16 784
F	12 226	12 001	12 688	14 208			10 677	10 100	9 369	8 577
1 1	12 462	11 673	10 297	11 737	10 445	11 054			19 522	18 502
NL	14 050	15 079	16 401	16 792	18 546	19 935	20 147	19 982		7 710
В	6 566	6 857	7 255	7 604	8 679	9 600	9 372	8 993	8 398	
1 7	258	270	442	440	454	320	235	209	179	162
L	1	2 296	2 691	3 019	5 485	5 570	5 399	5 128	4 767	4 367
UK	2 591			498	416	300	192	144	115	92
IRL	361	374	488		2 221	1 911	1 565	1 286	974	762
DK	2 558	2 320	2 226	2 295			1 662	1 577	1 465	1 344
GR	2 415	2 105	1 755		1 787	1 772		11 083	10 357	9 561
E				11 575	12 498	11 761	11 501			501
P				1 371	1 462	1 186	953	812	664	
TOTAL	66 703	66 538	67 772	86 374	92 788	98 951	97 139	93 967	88 908	82 401
IOIAL	00 703	00 000								

The overall results show that the tonne-kilometres not performed under Community Quota which have been rising slowly since 1984 are expected to peak in 1988 and to decline rather slowly thereafter — this is on the assumption of a 40% increase in the number of Community Quota authorisations for 1990, 1991 and 1992 and the other assumptions made in this chapter.

The trends for individual Member States show that the tonne-kilometres "not performed under Community Quota" would decline for every Member State after 1989 if the number of Community Quota authorisations increased by 40% in 1990, 1991 and 1992. Such results would help to reduce the "discriminatory" aspects of the present mixed system of Community and bilateral authorisations during the period up to 1992.

Forecast of total tonne-kilometres under Community Quota authorisations

The (unadjusted) tonne-kilometres under Community Quota authorisations are calculated pro rata to the increase in the number of authorisations (Table Al) and after taking into account the multiplier given at the top of the column which is $(0.92)^n$ to allow for the 8% reduction in average use (see section 4.8). Dividing these results by those for total tonne-kilometres (Table 4.10) gives the (unadjusted) % share under Community Quota authorisations (Table A2).

The adjusted figures are obtained via the "Universal adjustment factor" table (Table A5) which is the same as Table A1 in Annex A of the 1988 Analysis and Forecasts Report. The unadjusted % shares (Table A2) are examined one by one in the left-hand column (of Table A5) and the corresponding adjusted % share read off from the right-hand column (of Table A5) - interpolating linearly for intermediate values. The resulting adjusted % shares are set out in Table A 3.

The (adjusted) tonne-kilometres under Community Quota authorisations are then obtained by multiplying the (adjusted) % shares (Table A3) by the Total tonne-kilometres (Table 4.10); the results are given in Table A4.

Tables Al to A4 also show, at the foot of the tables, the modified results for L, IRL, DK and P to take into account the fact that these Member States had over 40% of the tonne-kilometres under Community Quota in 1988 (see section 4.8). These modified figures are called "pre-adjusted" in Tables Al and A2 (since they have been adjusted backwards) while those in Tables A3 and A4 are described as "pre- and post-adjusted" (as they have been adjusted backwards and then forwards using the Universal adjustment factor). It should be noted that the pre- and post-adjusted figures for L, IRL, DK and P are the same as the "adjusted" figures given in the upper part of the table for 1988 only.

TABLE A1
UNADJUSTED TOTAL-KM UNDER COMMUNITY QUOTA

multip	lier	1	0.92	(0.92)2	(0.92)3	(0.92)4
	Ave. t-km per auth.					
	1988	1988	1989	1990	1991	1992
D	1791	3876	5477	7055	9087	11705
F	2019	3724	5249	6762	8710	11218
I	1790	3281	4662	6006	7736	9964
NL	1816	3494	4922	6340	8116	10518
В	1857	2486	3560	4586	5908	7611
L	1603	957	1432	1845	2377	3062
UK	1392	1595	2268	2922	3763	4848
IRL	1047	571	905	1166	1503	1936
DK	2024	2577	3765	4850	6248	8047
GR	828	437	702	905	1166	1502
E	2098	2886	4171	5373	6922	8916
P	1509	1074	1698	2188	2819	3632
EUR-12	(19774)	26958	38811	49998	64355	82959

PRE-ADJUSTED FIGURES FOR L, IRL, DK, AND P

L	2347	1401	2097	2702	3480	4483
IRL	1342	732	1161	1495	1926	2481
DK	2283	2908	4247	5470	7047	9077
P	1575	1121	1772	2284	2942	3790

TABLE A2

UNADJUSTED % SHARE UNDER COMMUNITY QUOTA

	1988	1989	í990	1991	1992
D	18.9	24.9	30.6	37.5+	46.0
F	16.5	21.7	26.6	32.7	40.1
I	22.9	30.4	37.3	45.7	56.1
NL	14.9	19.6	24.1	29.4	36.2
В	20.6	27.5+	33.8	41.4	50.8
L	74.9	98.4	(115.2)	(134.9)	(158.0)
UK	22.3	29.6	36.3	44.5+	54.6
IRL	65.6	97.1	(119.1)	(146.2)	(179.4)
DK	57.4	78.4	96.2	(118.0)	(144.8)
GR	19.8	29.7	36.5-	44.7	54.9
E	19.7	26.6	32.7	40.1	49.1
P	47.6	70.2	86.2	(105.7)	(129.8)
EUR-12	21.4	28.8	<u>/</u> 35. <u>3</u> 7	<u>/</u> 43. <u>3</u> 7	<u>/</u> 53. <u>1</u> /

PRE-ADJUSTED FIGURES FOR L, IRL, DK AND P

P 49.5 73.3 90.0 (110.4) (135.4)	L IRL	(109.7)	(144.0)	(152.7)	(197.5+) (187.4)	(231.3) (229.9) (163.3)
	DK P	64.8 49.5	88.4 73.3	(108.5-) 90.0		

TABLE A3

ADJUSTED % SHARE UNDER COMMUNITY QUOTA

	1988	1989	1990	1991	1992
D	18.2	24.9	30.6	37.5+	44.8
F	16.5-	21.7	26.6	32.7	40.1
I	22.9	30.4	37.3	44.6	51.7
NL	14.9	19.6	24.1	29.4	36.2
В	20.6	27.5+	33.8	41.1	48.5-
L	74.9	71.4	76.6	82.0	85.8
UK	22.3	29.6	36.3	43.6	50.8
IRL	65.6	70.8	77.7	84.2	87.9
DK	57.4	63.2	70.5	77.4	84.0
GR	19.8	29.7	36.5-	43.8	50.9
E	19.7	26.6	32.7	40.1	47.3
P	47.6	59.1	66.5-	73.7	80.9
EUR-12	21.4	27.6	33.3	39.9	47.1

PRE- AND POST-ADJUSTED FIGURES FOR L, IRL, DK AND P

					
L	74.9	83.8	86.9	89.8	91.6
IRL	65.6	79.4	85.3	88.7	91.5
DK	57.4	67.4	74.5+	81.6	86.3
Р	47.6	60.6	68.0	75.1	82.1
EUR-12	21.4	27.9	33.7	40.2	47.3

TABLE A4

ADJUSTED T-KM UNDER COMMUNITY QUOTA

	1988	1989	1990	1991	1992
D	3876	5477	7055	9087	11396
F	3724	5249	6762	8710	11218
I	3281	4662	6006	7542	9180
NL	3494	4922	6340	8116	10518
В	2486	3560	4586	5860	7261
L	957	1040	1227	1445	1663
UK	1595	2268	2922	3685	4508
IRL	571	660	761	866	948
DK	2577	3035	3555	4098	4670
GR	437	702	905	1141	1393
E	2886	4171	5373	6922	8582
P	1074	1429	1688	1965	2264
EUR-12	26958	37175	47180	59437	73601

PRE- AND POST-ADJUSTED FIGURES FOR L, IRL, DK AND P

L	957	1220	1392	1582	1775
IRL	571	740	835	912	987
DK	2577	3237	3756	4320	4797
P	1074	1465	1727	2002	2298
EUR-12	26958	37673	47659	59879	73913

Table A 5

Unadjusted % by Community		Adjusted % share
0 -	40 %	No change
50	9	48 %
60	8	54 %
70	8	59 %
80	8	64 %
90	8	68 %
100	8	72 %
110	8	75 %
120	8	78 %
130	8	81 %
140	8	83 %
150	ફ	85 %
200	8	90 %
300	ફ	95 %
400	ફ	98 %
600	ક	99 %

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