

Short Sea and Waterway Freight – the position today

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Waterborne Freight

- What makes it so wonderful?
- How can we define it?
- How much is there?
- Does it make a public interest contribution?
- How can we have more and how would we know?

What makes it so wonderful?

- Cost, energy and labour efficient
 - crucial given growing shortages of HGV drivers and energy costs
- Environmental impact low
 - practically invisible at sea
 - one weekly coaster load of containers between Southampton to the Mersey worth £1m per annum in Sensitive Lorry Miles (Government's official test)
- Can contribute substantially to Government's policy of sustainable distribution

The state of the industry

- A cost effective, expanding ports industry able to invest in quayside facilities given the right incentives
- Innovative inland waterway carriers who require the support their potential environmental contribution merits
- Ship owners with vessels available for profitable flows
- Shipping lines with limited experience of relating to public sector interest
- A public sector with very limited experience of the maritime world (in contrast to its experience of rail)

Examples of current achievement

- 5m tonnes of stone/aggregates between mainland ports
- 15m tonnes of petroleum products between mainland ports
 - Solent to Thames: 1.6m tonnes
 - Milford H to Bristol: 2.0m tonnes
 - Tees to Mersey: 1.2m tonnes
 - Tees to Humber: 4.0m tonnes
- 4m tonnes of internal waterways freight
- 56,000 containers between mainland ports in 2002

A problem of definition – contrast with rail

- Rail freight can be objectively defined – little room for doubt
- Rail uses a network under single ownership – measurement straightforward
- A Government agency – SRA – with a clear remit
- A regulator to promote good practice
- An industry association : the Rail Freight Group
- Planning policies which specify rail linked distribution parks
- Clear annual statistics:
 - 87 million tonnes
 - 19 billion tonne km

The wider context: modal shares across Europe

Billion tonne kilometres

	1970	1980	1990	2000	Index for 2000 1970 = 100
Road	487	717	974	1348	277
Rail	282	290	256	249	88
Waterway	102	106	107	125	123
Sea	472	780	922	1270	269
Pipeline	64	85	70	85	133
	1407	1978	2329	3070	218

- The decline of rail; the relative success of water transport
- But is this also a reflection of globalisation and the decline of rail served INLAND heavy industry

THESE DIFFERENT STATISTICAL MEASURES MAY BE ACCURATE BUT DO THEY MAP THE WAY FORWARD?

How much waterborne freight is there in Britain? : Government Statistics

	Millions tonnes	Billions tonne kms.
On inland waterway	49	1.7
Coastwise at sea	59	35.1
One-port traffic	44	30.8
TOTAL	139	67.2
As compared with:		
ROAD	1708	157.3
RAIL	87	18.7

Definition: UK Domestic Waterborne Freight

Government statistics include:

- Inland waterway/estuarial barge traffic
- Ships making significant penetrations along inland waterways
- Coastal shipping between GB ports
- Domestic shipping between the islands of the UK
- One-port traffics (aggregates dredging and North Sea oil)

Includes some traffic not transferable to other modes

Excludes foreign flows moving directly to local seaboard ports

Therefore not easily interpreted in terms of public interest.

Official statistical definition is not complete picture

- Does not include most traffic with the Continent
 - so switch of HGVs from Dover/Calais to Rosyth/Zeebrugge goes unnoticed
 - deep sea container feeder Felixstowe to Grangemouth 'counts' but not Rotterdam to Grangemouth
- Some trades not a substitute for road haulage (e.g. North Sea crude oil)

SIMILAR ISSUES FOR RAIL FREIGHT

- not all rail freight a substitute for road haulage (e.g. power station coal)

Some other indicative measures

Containers through ports in Humber – Forth range: growing

	'000s containers	Index	% of GB ports total
1989	192	100	9%
1992	237	123	9%
1999	277	144	7%
2002	456	237	10%

Shipping traffic on key inland waterways: fluctuating

'000s tonnes

	Trent	Ouse	MSC	Severn
1989	4.0	2.7	6.2	0.6
1992	2.7	2.2	6.1	0.3
1999	2.2	3.2	6.5	0.3
2002	2.3	2.4	5.5	0.6

Do these definitions matter?

The Purpose of Sea & Water

“To champion water as an alternative and effective way of moving freight in the UK through removing obstacles, influencing policy and providing support”

- we clearly do have to understand what it is we are championing!

Government Policy

“Gaining the environmental benefits of shipping: the Government will continue to be involved in European initiatives to encourage short sea shipping”

British Shipping (1998)

“The Government is keen to encourage greater use of waterborne transport where this is practicable and economic”

Sustainable Distribution (1999)

“Government shares with the ports industry a natural interest in exploiting the potential of shipping on coastal and short-sea routes.....There may be scope for operators to route ships to ports nearer the origin or destination of goods. There may also be potential for bulk and unit loads to shift to coastal highways.”

Modern Ports (2000)

More Government Policy

“Our revised planning guidelines will encourage more freight to be carried by water. Local authorities in their development plans will be expected to consider opportunities for new development which are served by waterways”

A new deal for transport (1998)

“In preparing their development plans...local authorities should..promote opportunities for freight generating development to be served by rail or waterways”

PPG 13 paragraph 45

A need also therefore for:

- A policy oriented definition of waterborne freight (and of rail freight)
- Linkage of that definition to measures under Government control
 - land use planning to promote waterborne freight
 - grant regimes which minimise market distortion and reflect environmental value

A means of valuing the removal of HGVs

Sensitive Lorry Miles (2003)

- Government's measure of the value of each truck mile removed from the road network
- Varies by road classification/level of congestion
- Particularly high rates for urban roads within conurbations
- Overall mean approximately 30p/kilometre

Waterborne flows in active competition with inland modes, 2002: a simple estimate

- broadly similar to rail's current contribution

	Million tonnes	Billion tonne km
Between mainland GB ports (exc. crude oil)	20	13.4
Longer sea crossings		
Near continental Unitised freight landing in northern British ports	17	5.1
Irish Sea freight landing in English ports	12	1.4
Bulk foreign traffics to inland ports	32	1.1
Internal barge freight	4	0.2
Waterborne freight contribution:	85	21.2
As compared with rail freight:	87	18.7

Excludes crude oil, sea dredged aggregates, offshore supply and bulk shipping to seaboard ports

How does this definition relate to transport grants?

Grants based upon sensitive lorry miles

RAIL

- 19 billion tonne km moved
- SRA pays Network Rail to ensure infrastructure charges limited to long run wear and tear
- Annual grant approx £50m (mean 0.27 pence per tonne km)

WATERBORNE

- 21 billion tonne km moved in competition with road
- Annual grant under £10m per annum (mean of 0.03 pence per tonne km)

European Commission December 2003

- State aid N 464/2003 – United Kingdom
- Company Neutral Revenue Support Scheme (CNRS)

Approximate grant levels set out for England and Wales based on Sensitive Lorry Miles (£m) (all grant schemes)

	2001/2	2003/4	2005/6	2010/11
Rail	53	41	38	37
Water	4	6	12	12

Which include:

Company Neutral Grants for intermodal rail services.

- fixed subsidies per container by rail by origin to destination

e.g.

		£/container
Hull – Leeds	:	£30
Southampton – North West	:	£18
Felixstowe – London	:	£65

Could these also be available for waterborne freight?

How can we have more?: by being well informed!

- **AGGREGATION & INTER-LINING**

- bulk shipping companies already use local ports when available
- challenge lies in developing high frequency unit load services

Requiring knowledge and co-operation between carriers

- **DEVELOPMENT OF WATERSIDE DISTRIBUTION AT REGIONAL AND INLAND PORTS**

- to minimise road delivery costs
- examples include Goole and Port Salford
- a need for handling facilities close to point of use

Requiring appropriate land use strategies by planners and developers

- **A GRANT REGIME TARGETTED AT APPROPRIATE TRAFFIC**

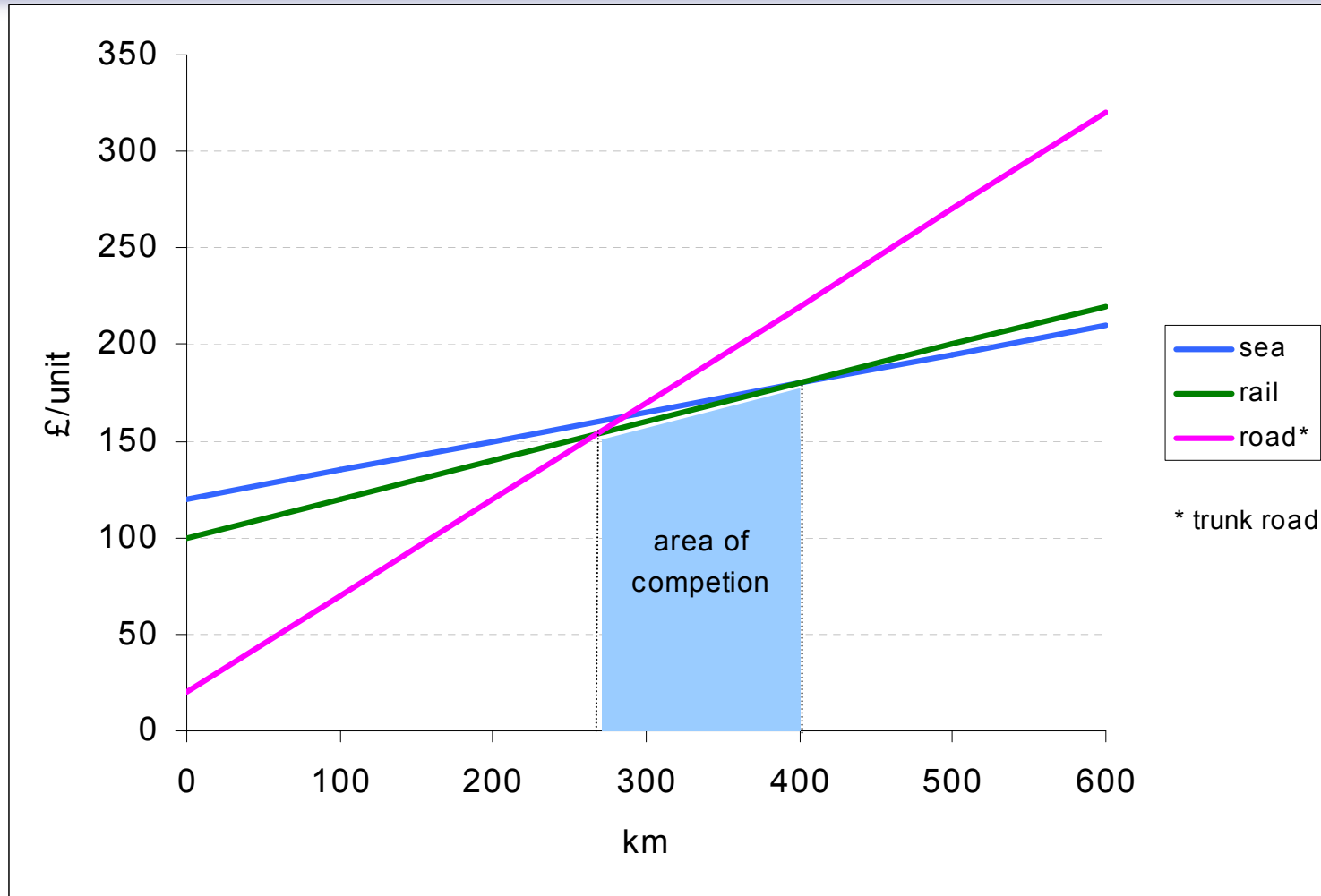
- to avoid waste, distortion and abuse
- to maximise real road to water transfer

A matter for Government

Being informed: Waterborne Freight Economics

- Dominated by handling costs
- Benefits (like rail) from length of haul
- Very effective serving regional ports from Continental origins
- Benefits from waterside origins

A cost illustration: coastal container shipping v. other modes



Plus local road delivery costs

Being informed: GB road & rail freight 2002

M tonnes

	L/SE/ EE	Midlands	NW	NE/ Yorks	Scotland	Wales/ SW	Total
London/ South East	385	40	19	15	7	21	487
Midlands	47	203	24	23	3	17	317
North West	16	19	147	22	9	8	221
NE/Yorkshire	20	33	23	200	9	8	293
Scotland	5	5	7	8	138	2	165
Wales/SW	36	16	11	5	4	189	261
Total	509	316	231	273	170	245	1744

Being informed: drilling down to detailed data

Freight flows 2002 East Anglia – Central Scotland

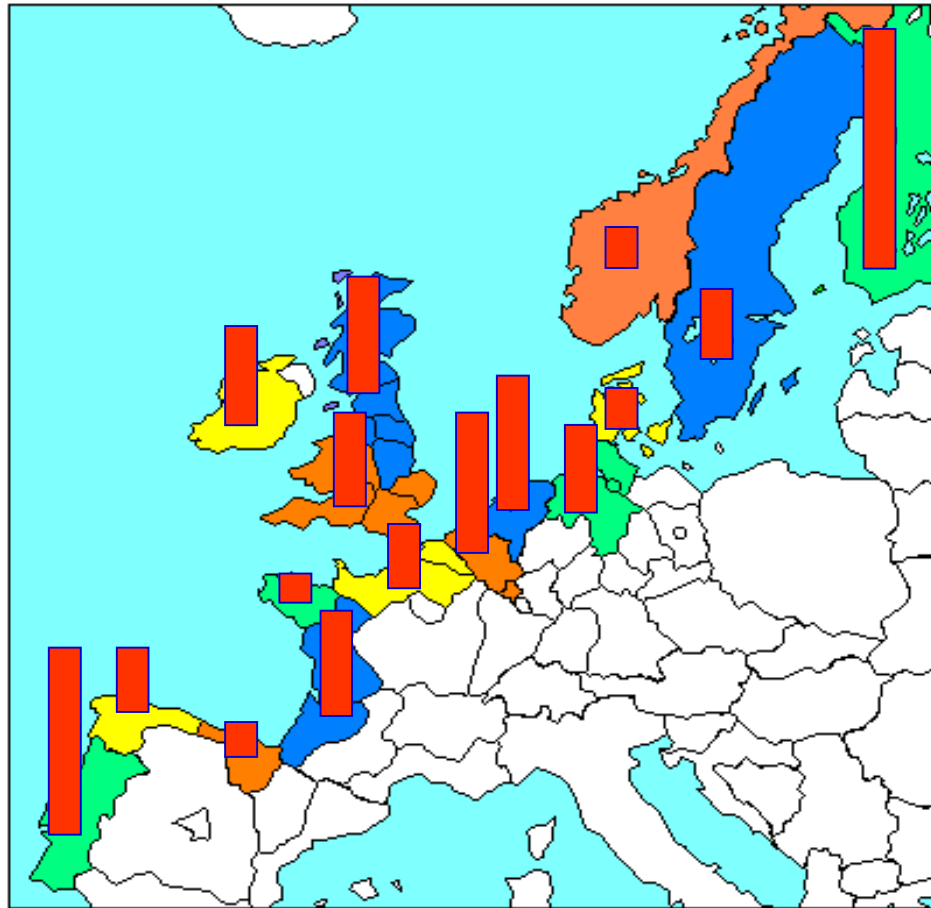
'000s tonnes

	Northbound	Southbound
Agricultural	179	45
Beverages	16	40
Chemicals	46	50
Coal	-	33
Food	71	16
Forest Products	12	13
Petroleum	17	-
Maritime Containers	129	202
Manufactured Goods	257	230
Others	50	41670
	777	670

Being informed: Port facilities

Port Name	Cargo type	Quay length (m)	Max length (m)	Beam (m)	Draft (m)	Area (hec)
Aberdeen	Roro	122	160	0	8.5	0
Aberdeen	Semi Bulk	1258	160	0	8.5	4
Ardrossan	Dry Bulk	405	0	0	5.8	0
Ardrossan	Lolo	280	140	53	5.2	44.6
Ardrossan	Semi Bulk	225	0	0	5.8	0
Ayr	Liquid Bulk	1261	110	0	6.2	2
Ayr	Lolo	160	110	0	6.2	1.3
Ayr	Semi Bulk	2150	110	0	6.2	1.3
Barrow	Dry Bulk	152	230	35	10	5
Barrow	Lolo	285	230	35	10	15
Barrow	Semi Bulk	4219	230	35	10	0
Blyth	Dry Bulk	1825	150	0	6.7	2
Blyth	Liquid Bulk	350	190.5	40	10	0
Blyth	Semi Bulk	671	190.5	40	10	0
Boston	Liquid Bulk	1340	9	15.0	5.5	0
Boston	Lolo	160	90	0	5.5	0
Boston	Semi Bulk	1554	118	13.6	5.5	5.2

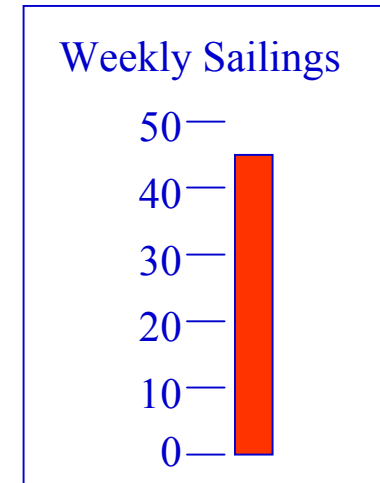
Being informed: at the European Scale: Motorways of the Sea



Excludes UK – Near Continent

Cargo Available in Maritime Regions

*(weekly sailings
generated per region –
100 units per ship)*



Being informed: variety & capacity of lo-lo services

existing '000s TEU capacity

	UK Coastal	Irish Sea	Scand & Baltic	Nr Continent	Biscay/Portugal	Total
Greenock	11	22	-	-	56	89
Liverpool	11	60	2	-	83	156
Cardiff	-	26	-	-	-	26
Bristol	-	23	-	-	61	84
Southampton	11	37	-	-	20	68
London	-	26	31	178	70	305
Thamesport	41	-	-	-	55	96
Felixstowe	103	26	42	52	175	398
Ipswich	-	-	24	18	-	42
Lowestoft	-	-	7	-	-	7
Boston	-	-	-	10	-	10
Humber (4)	-	-	368	205	20	593
Tees	-	-	89	135	-	224
Tyne	42	-	-	39	36	117
Blyth	-	-	11	21	-	32
Grangemouth	124	-	21	133	-	278

In conclusion

- Waterborne freight probably already keeps more freight off the road than rail – estimated 21 billion tonne km per annum
- It would be more effective if it served industry through port based distribution parks
- It needs to define itself more coherently
 - operationally, physically and statistically
- It needs to demonstrate how it can better serve the public interest and the commercial freight market

And the guardians of the public interest should recognise its potential and determine how it can be most usefully assisted with the minimum of market distortion.