

13. Volume of port traffic

Key message

- The volume of port traffic is increasing around Europe and is related to the growth of harbour infrastructures.
- The volume of goods handled is highest in the countries bordering the North Sea.



Port of Ostend, West-Vlaanderen, Belgium © Maritieme Dienstverlening Kust-Afdeling Kust

Why monitor the volume of port traffic?

Ports are a major economic consideration, both for the transport of people and the transport of goods between different places. Ports are also used for the support of economic activities in the hinterland, because they act as a crucial connection between sea and land transport. On the other hand, one should also consider the negative effects of port traffic on the environment, for example in terms of air pollution.

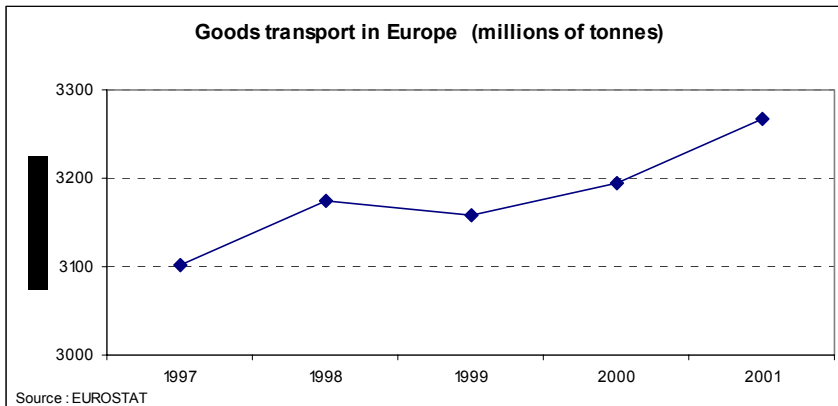
This indicator belongs to the set of 4 indicators that monitor progress towards achieving the third goal for coastal sustainability set out in the EU Recommendation concerning the implementation of ICZM - to promote and support a dynamic and sustainable coastal economy.

The indicator has 3 measurements: the number of incoming and outgoing passengers per port, the total volume of goods handled per port and the proportion of goods carried by short sea routes. In this fact sheet, only the measurement of the total volume of goods handled per port is highlighted because the transport of goods is the core business of most major ports and is a common parameter for the evaluation of trends in port development all over Europe. An increasing throughput of goods year-on-year will lead to a demand for additional port infrastructure such as new docks, roads, sea defences, freight storage facilities and so on. These will have varying degrees of benefit or detriment on the local and regional economy and environment.

Results and assessment

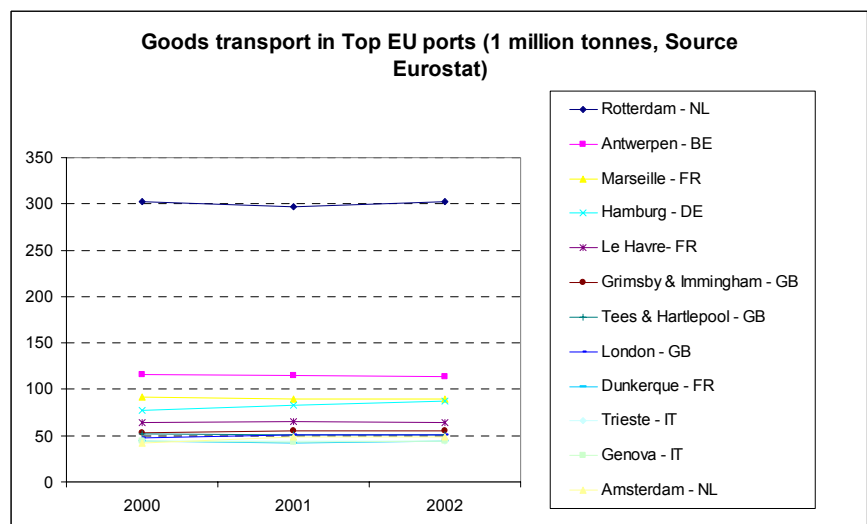
What does the indicator show from European to local level?

Europe has approximately 1200 maritime ports which handle nearly 1 billion tonnes of cargo per year. Around 90% of the EU external trade is shipped by sea. The EU merchant fleet is therefore the world leader, both in terms of tonnage and by flag, predominantly in the container ship category. In the White Paper on European transport Policy for 2010, marine transport is also clearly identified as a key priority. The increase in the number of tonnes of goods transported (from 3101 million tonnes in 1997 to 3267 million tonnes in 2001) is directly related to the growth of harbour infrastructures all over Europe, with the collateral effects on land take in the coastal areas.

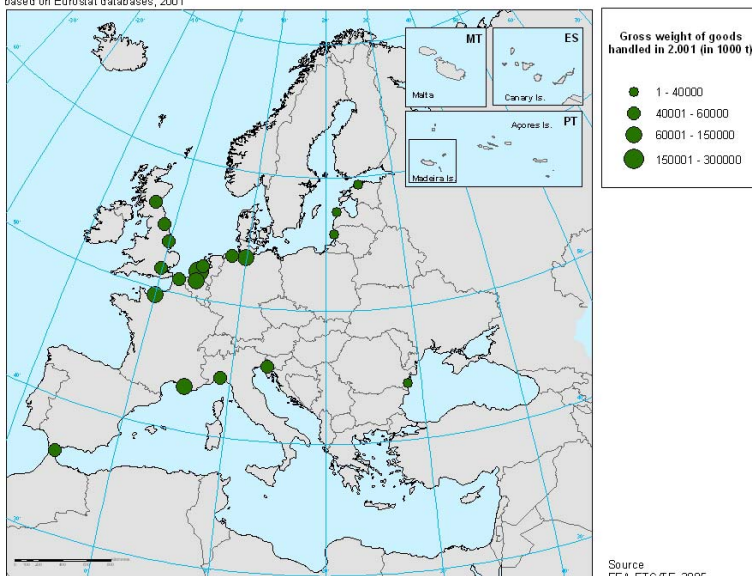


In the Eurostat Database, only figures for the main ports are included.

Rotterdam, the major port in The Netherlands, is the European leader for the handling of goods. Each year, close to 300 million tonnes is shipped, which is well above the other European ports. Antwerp, the second port in terms of volume, handles less than half that of Rotterdam (115 million tonnes). The other significant ports handle between 40 and 90 million tonnes per annum.

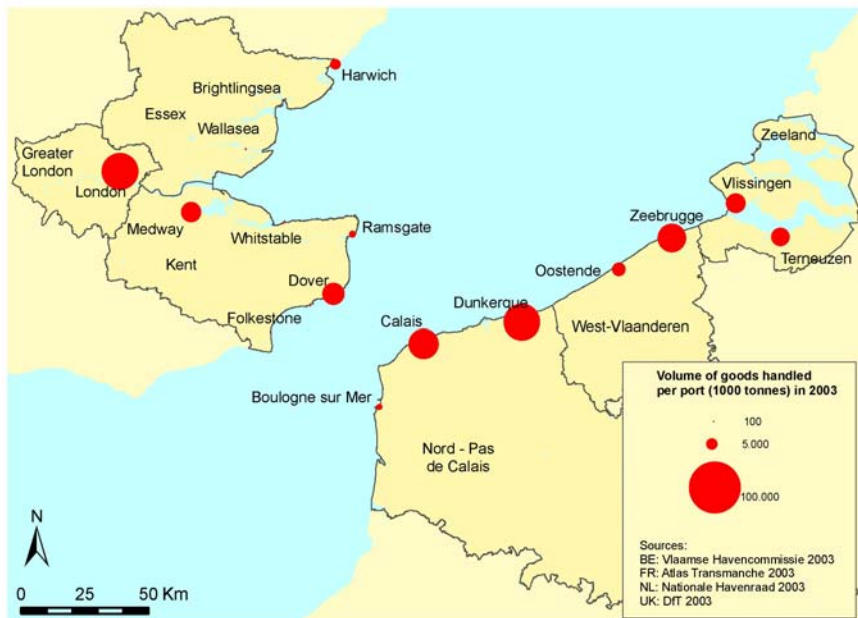


Marine transportation based on Eurostat databases, 2001



A number of major ports are situated around the North Sea (Rotterdam, Antwerp, Le Havre, Grimsby and Immingham, London, etc.) and also on the Mediterranean such as Marseille (France), Genova and Trieste (Italy). There is no transport of goods in ports bordering the Atlantic.

For most of the regions or countries there is one major port handling the highest volume of goods over time (Latvia: Ventspils, Poland: Gdansk, Malta: Marsaxlokk, West-Vlaanderen: Zeebrugge, Nord-Pas de Calais: Dunkerque, etc.). In Catalonia, the differences between the two main ports of Barcelona and Tarragona, are small.

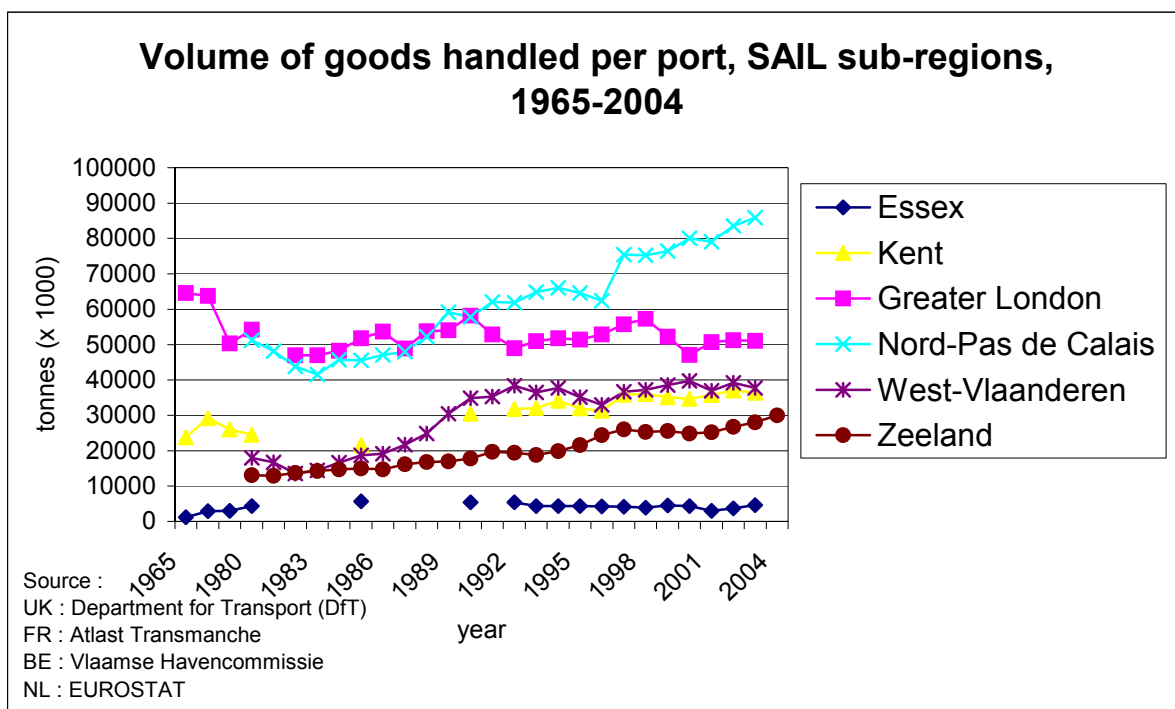


Comparing the ports in the coastal zone of countries bordering the southern North Sea (excluding Antwerp) there is intense traffic between the mainland, especially Nord-Pas de Calais and the United Kingdom. Dunkerque, to the north of the region Nord-Pas de Calais, handled about 50 million tonnes in 2003 and Dover, in the region of Kent, about 18 million tonnes of goods.

The total volume of goods handled in ports of the southern North Sea region has increased by more than 60% over the last twenty years. In 2003, about 250 million tonnes were handled in the ports bordering the southern North Sea.

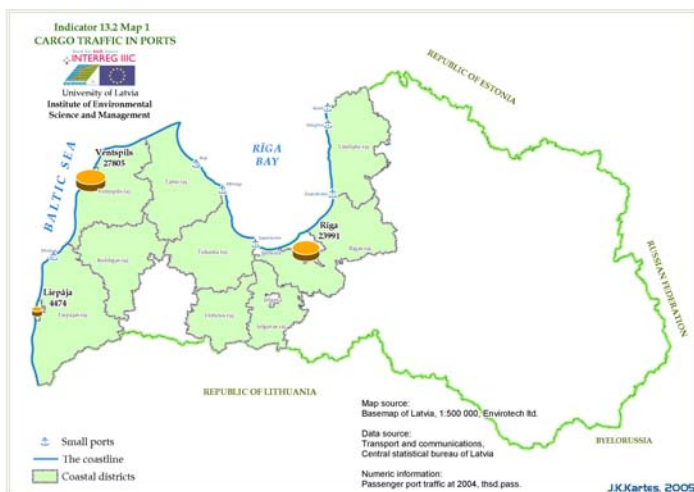
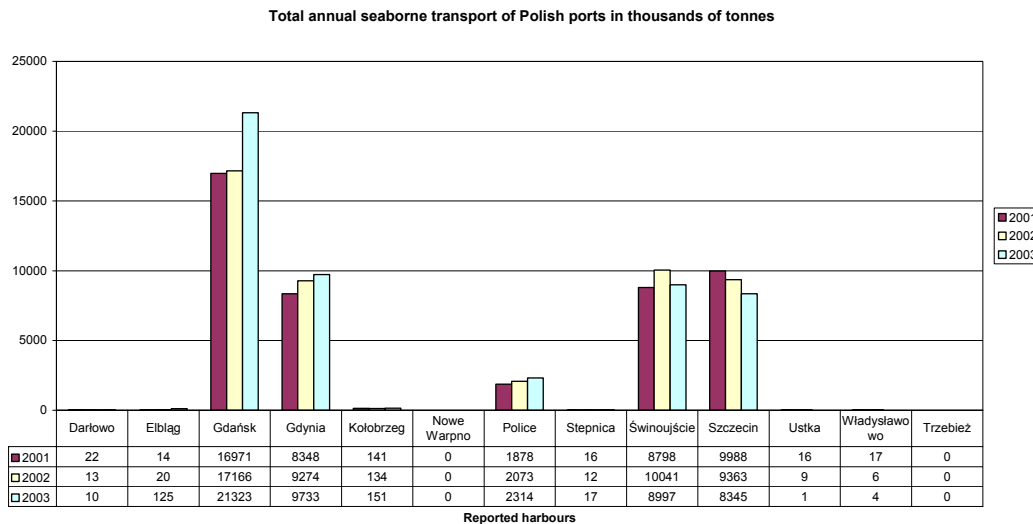
© Compiled by VLIZ from sources in countries bordering southern North Sea, as stated in the key

The increasing trend in the transport of goods in the southern North Sea becomes more explicit when looking at the individual regions of West-Vlaanderen and Zeeland. In these regions, the volume of goods handled has more than doubled since the eighties (West-Vlaanderen: from 18 million to 37 million tonnes, Zeeland: from 13 million to 28 million tonnes). In Kent and Essex, the trend is less clear. In London also, there is no significant trend but the figures are stable and very high over time (50 million tonnes). The major ports in Nord-Pas de Calais (Calais and Dunkerque) also show a significant increase (Calais: from 6 million to 34 million tonnes, Dunkerque: from 41 million to 50 million tonnes), while Boulogne-sur-mer has decreased since 1997.



Compared to the ports bordering the southern North Sea, the volume of goods transported for the Deduce regions located in the Baltic Sea is much lower. In Poland for example, the total volume of goods handled is almost the same as in the major port of Nord-Pas de Calais (Dunkerque) in 2003 (50 million tonnes).

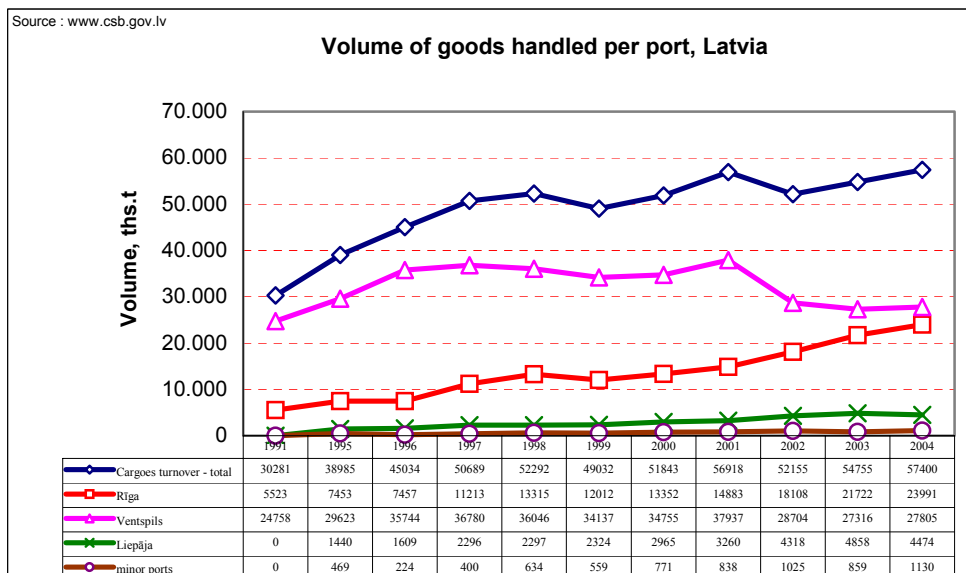
The general trend in Polish ports is a small increase of goods handled (from 46 million in 2001 to 51 million tonnes in 2003). This is the case for Gdansk, Gdynia and Police. For the second largest ports of Poland (Swinoujscie and Szczecin) the trend is stable or decreasing respectively.



In Latvia, also on the Baltic Sea, a rapid increase is observed until 1998. After that, the trend remains stable.

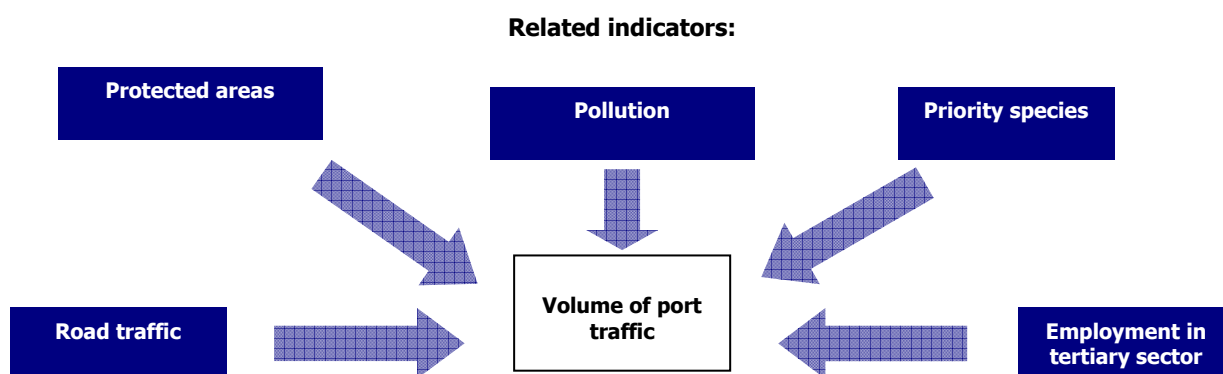
The transport of goods in Latvia is largest in the ports of Ventspils (28 million tonnes) and Riga (24 million tonnes) in 2004. However, the dominance of the port of Ventspils is decreasing for several reasons. Firstly, the port worked close to its maximum carrying capacity in 2001. The second reason is political; namely, the withdrawal of a certain volume of trans-shipping products on behalf of Russia. The last reason for the decreasing dominance of Ventspils is the constantly growing volumes in Riga since 1996 and also the acceleration of the rate of increase.

The role of Liepāja and other minor ports is still insignificant but the volume of goods handled grows constantly.



What are the implications for planning and managing the coastal zone?

Ports and transport policies play a key role in the EU strategies for dealing with climate change and alleviating the negative impact of transport on health of the population in urban areas. Two of the key actions proposed by the European Commission to achieve sustainable transport are: decoupling economic growth and demand for transport as well as bringing back the shares of modal split to their 1998 levels by 2010. As such, *the introduction of 'Motorways of the Sea' as a competitive alternative to land transport in the framework of the Trans European Networks (TEN's), creates the possibility for member states to set up projects for coastal navigation corridors at 'short sea' distances with the financial support of EU Trans-European projects.* Even so, ports have to compete with other – sometimes conflicting – land uses in the coastal zone (tourism, conservation of priority habitat and landscapes). Therefore, other functions of the coastal zone need to be considered when planning for port expansion and regulation so as to avoid conflict, preserve valuable natural and historical heritage and integrate other economic and public interests. Spatial planning and integrated coastal zone management may provide a helpful approach for achieving those objectives.



Further work needed

EUROSTAT is the common, easily accessible, database for data on this indicator. However, only major harbours are included and data needs to be cross-checked with local data sources. Two major items are not reported with regard to passenger flow:

- cruise passengers
- ports visited between embarking and disembarking

The economic performance, in terms of revenue generated per port, may be necessary to draw a better picture of the impact of such ports within the coastal zone and their relative importance with respect to other existing or potential uses and natural resources.

Data sources

Europe: EUROSTAT – 1997-2002

West-Flanders (and local network of partners):

- West-Flanders: Vlaamse Havencommissie – 1982-2004
- Nord-Pas de Calais: Atlas Transmanche port website, Chambre de Commerce et d'Industrie, Port Autonomes – 1982-2004
- Zeeland: Nationale Havenraad – 1982-2004
- Kent, Essex and Thames: Department for Transport, Maritime statistics – 1965-2004

Pomeranian Voivodship: Maritime Economy 2004 - statistic review. Papers of the Maritime Institute in Gdansk, no. 746, Gdansk, 2004, ISBN 83-85780-71-8

Latvia: Request from <http://www.csb.gov.lv> – 1991-2004

Reliability of the indicator

The EUROSTAT database is a reliable source for this indicator because trends are available, it is updated annually and it has a common reporting format and quality parameters. However, for smaller ports one should check local sources. Although there is a clear indication of the scale of cargo handling within each port, the economic importance of each port may be more clearly understood if there is corresponding financial information. Another issue is the containers in transit that are reported twice, first as import and then again as export. This might produce a different result for the volume of each port.

References

none



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