

Cefic Position on Intermodal Transport Network Development

Summary

The goal of the European Union to shift 30 % of road transport to intermodal means is very ambitious. The chemical industry has a strong commitment to contribute to achieving this goal.

For that reason Cefic carried out a study evaluating possible options for further increasing the share of intermodal transport and to highlight those aspects in need of improvement to enable such a modal shift. A survey was undertaken among major chemical companies and logistics service providers to identify the main chemical intermodal transport corridors and volumes, as well as the bottlenecks and barriers. The survey has shown that the main current flows run between the Benelux, Germany and Northern Italy. These main transport corridors already have a high share of intermodal transport today. The survey demonstrated that 1.4 million tonnes might be shifted towards intermodal transport solutions if the necessary conditions would be created.

The following main obstacles are hindering a more extensive use of intermodal transport solutions:

- Costs not competitive in comparison to road transport;
- Missing intermodal connections, especially for France, Spain and Eastern Europe;
- Insufficient frequency or capacity of intermodal connections ;
- Insufficient or missing terminal infrastructure;
- Insufficient or missing last mile solutions.

To reach the required modal shift the following measures should be taken by the different stakeholders involved in intermodal transport:

- **Policy and regulations:** In order to enable an increase in cross-border intermodal transport, more international harmonization at technical, legal and organisational level is needed. This includes:
 - Open intermodal market
 - EU-wide technical rail standards
 - Harmonised dangerous goods regulations
 - Harmonized customs regulations
 - Better connection of ports
 - Improvement of the reliability of inland waterway services.
- **Railway companies and infrastructure managers** need to develop a more holistic and international view of the intermodal market, with a more transparent and comparable set of services securing high reliability and competitive prices.

- **Intermodal operators and logistics service providers** need to optimise the transparency of intermodal solutions to their customers and increase collaboration among each other to enable new intermodal connections that are necessary to further push intermodal transport.
- **Chemical companies** need to take a more active role in evaluating the most sustainable and efficient mode of transport for each corridor and define expectations and objectives to their respective service providers. Their willingness to increase the share of intermodal transport should be demonstrated by actively supporting the development of intermodal alternatives.

Background

One of the most prominent targets in the EU Transport White Paper is the ambition to shift 30% of road freight over 300 km to other modes such as rail or waterborne transport by 2030, and more than 50% by 2050. The goal is to facilitate this by efficient and green freight corridors. To meet this goal the EU has recognized that this will require the development of appropriate infrastructure, concluding that development efforts “should focus on the completion of missing links – mainly cross-border sections and bottlenecks/bypasses – and the upgrading of existing infrastructure and development of multimodal terminals at sea and river ports”.

Chemical companies have to a large extent already captured current intermodal transport opportunities, finding it difficult to further increase modal shift without jeopardizing service levels, being either constrained by lack of capacities, lack of sufficiently developed routes, lack of reliability, lack of services at competitive rates or a combination thereof.

A Cefic Issue Team composed of representatives from the chemical industry and the logistics industry and supported by SGKV (Studiengesellschaft fuer den Kombinierten Verkehr e.V., Germany) carried out a study to identify current and expected intermodal flows of the chemical industry throughout Europe and the main barriers for using more intermodal transport.

Barriers hindering a more extensive use of intermodal transport

Chemical companies and logistics service providers believe that a further increase of intermodal solutions for current and future transport flows can only be achieved if considerable efforts are undertaken to ensure that intermodal transport services better meet industry requirements and become a true and efficient alternative to road transport.

The main obstacles that hinder more use of intermodal solutions are:

- **High costs:** The cost structure of intermodal transport, when compared to road transport, is the most important reason that prevents further shifts from road to intermodal solutions.
- **Missing intermodal connections:** There is still a significant lack of intermodal connections, in particular in France and Spain.
- **Insufficient frequency or capacity of existing intermodal connections,** in particular in Northern Italy, Southern France and South-Eastern Europe.
- **Last mile (on-carriage trucking) solutions insufficient or missing:** The last leg of intermodal transport is a very complex field when it comes to quality, safety and costs. Finding the right

partner for the transport on the last leg may be especially difficult, in particular for hazardous or temperature sensitive cargo.

- **Insufficient or missing terminal infrastructure:** The terminal infrastructure is considered to be at its limit and further capacities need to be created to make more intermodal transports possible. Insufficient terminal capacities result in long waiting times and can result in late deliveries. Major terminals along the axes between Benelux / Germany and Northern Italy need more capacity to deal with additional volumes. New terminals are also needed to further develop the intermodal market to the CEE countries and Russia.
- **A consistent implementation strategy** at national and EU level is necessary to realize more cross border transport. The rail transport market today is considered to be dominated by national interests preventing the further development of cross-border operations. A cross-border approach for developing intermodal transport solutions and further harmonization in technical and legal matters are needed.
- **On-time reliability of intermodal services:** To be competitive on-time reliability must be comparable to road transport.
- **A lack of customer orientation** resulting in missing transparency and lack of information. The availability of information on the detailed status of every transport operation would lead to a higher acceptance of intermodal alternatives.
- **Missing focus on barge transport:** At this moment both service providers and the chemical industry focus on rail and short-sea-shipping transport for intermodal solutions. Intermodal barge transport is limited to dedicated solutions for specific single transport chains or to connection with deep sea ports.

Recommendations for increasing the intermodal share

The chemical industry has a strong interest in shifting volumes to sustainable intermodal transport. The goal of the European Union to shift 30 % of transport from road to intermodal can only be achieved with a combined effort of all parties involved. Given the market situation for intermodal transport in Europe, significant further intermodal shifts will not be possible in the current environment. For that reason measures from different parties (policy makers and regulators, railway companies, infrastructure managers, intermodal operators, logistics service providers and chemical companies) are necessary to reach this goal. The development of a single, Europe-wide intermodal market must be the main target of all actions of the different parties.

Policy and regulations

In order to enable an increase in cross-border intermodal transport, more international harmonization at technical, legal and organisational level is needed to ensure interoperability. Public funding should be focusing on the development of intermodal infrastructure, creating equal market conditions for every transport mode.

The following issues will need to be addressed:

- Open intermodal market: In the current situation national rail companies (rail operators and infrastructure managers) still play a key role in the intermodal market. To achieve a significant shift to intermodal transport, there is a need of a more transparent, customer-oriented approach. Further liberalisation of the railway market in practice is necessary to enable more competition between the railway companies, so that the market becomes more customer-oriented.
- EU-wide technical rail standards: Create a unified legal framework for intermodal transport within the EU. Consistent technical parameters (e.g. gauges, train lengths, total train weight, weight of wagons, security, noise, etc.) are needed throughout Europe, as well as a standardized certification of railway rolling-stock for cross-border acceptance resulting in complete interoperability of services.
- Harmonised dangerous goods regulations: Regulations for the handling and storage of dangerous goods need to be harmonised throughout Europe (e.g. a standardized minimum storage time allowance of at least 48 hours). Also, dangerous goods regulations for short- sea transports need to be further harmonised with ADR.
- Harmonized customs regulations: The documentation procedures for transporting goods need to be further harmonised, so that a more reliable planning of the logistics supply chain is possible. This especially applies to non-EU countries. Today, short- sea transports are in many cases still handled the same way as deep- sea shipments. Introduction of paperless systems should be supported.
- Better connection of ports: Sea ports are the backbone of international transport and especially suitable for intermodal hinterland transport strategies. Current actions to increase the connectivity of ports, like the TEN-T approach, investments in rail infrastructure, etc. need to be enforced to raise additional capacity and more competitive services.
- Strategies to increase the efficiency of intermodal transport need to be further explored, e.g. the possibility of heavier and longer trains. In this context, authorized weights of up to 48 tonnes for intermodal road transport need to be considered.
- Improvement of inland waterways transport services: In order to increase the utilization of barge solutions, proper maintenance and development of the existing infrastructure is needed, as well as the realisation of missing infrastructure, along with sufficient funding.

Railway companies / rail infrastructure managers

To attract additional market potential, railway companies, infrastructure managers and terminal operators will need to develop a more holistic and international view of the intermodal market, with a more transparent and comparable set of services securing high reliability and competitive prices.

Efficiency of terminal handling should be increased by more standardisation of the terminal design. If terminal modules follow the same standard, they may become interchangeable, which may be helpful when planning a network of intermodal terminals, resulting in a more efficient use of their capacity and services.



Railway companies and infrastructure managers need to develop methods to facilitate cross-border intermodal transport, e.g. IT-solutions for tracking and tracing of intermodal loading units with open standards for data exchange or more flexible logistical concepts in cross-border transports. Also, more efficient logistics systems, such as hub-and-spoke terminal network strategies, need further development in the rail sector.

Longer trains, more capacity (loading units, vehicles) and higher departure frequencies should make the intermodal system more competitive.

Also, more investment and further development of infrastructure (i.e. terminals, wagons, tracks) is needed.

Intermodal operators and logistics service providers

Intermodal operators and logistics service providers need to optimise the transparency of intermodal solutions to their customers and increase collaboration among each other to enable new intermodal connections that are necessary to further push intermodal transport.

Intermodal operators and logistics service providers should optimise the transparency of intermodal solutions to their customers, so that the choice of the appropriate transport mode is made easier. Increased collaboration among service providers to enable new intermodal connections, as well as between the logistics companies and their customers, may help develop networks that have a better market position towards the supply side.

IT solutions that provide real time information about the status of shipments during the entire transport chain will prove inevitable in the further development of reliable, flexible and competitive intermodal transport solutions.

Chemical companies

Chemical companies have always been supportive of intermodal transport, favouring intermodal transport options over pure road transport where available and feasible.

Since intermodal operators generally do not have direct (contractual) relationships with chemical companies, they are lacking visibility of both potential demand and expectations. Chemical producers should therefore take a more proactive role in strategic planning discussions, to give logistics service providers and in particular intermodal operators more visibility of their intermodal transport demand, in particular when it comes to strategic network planning of particular lines.

Chemical companies, their logistics service providers and intermodal operators should come together at round table meetings, jointly exploring opportunities for further modal shift, concentrating their dialogue on the further development of key strategic corridors where logistics service providers and intermodal operators are bundling demand of multiple chemical companies and shippers from other industries.