



## Full Truck Load Chemical Liquid Bulk Benchmark

- European bulk freight rates moving in opposite directions
- Trends in chemical liquid bulk shipping
- Benchmarking as driver for best-in-class performance

## Benchmark study provides insight into European chemical bulk freight market

*LHC Consulting recently concluded the 2012 edition of its Full Truck Load Chemical Liquid Bulk Benchmark study. This annual study compares the contracted freight rates of chemical shippers for liquid bulk transport on a pan-European basis. The benchmark is executed on city-to-city level and accounts for differences in transport specifications including mode of transport, equipment type and product classification. The companies participating in this year's study together spend approximately €420 million on chemical liquid bulk freight on an annual basis.*

Benchmark participants are asked to provide both quantitative and qualitative information regarding their FTL chemical liquid bulk freight. First, respondents provide detailed information on their current shipment profile including pricing, volume and lead-time information. Second, participants complete a qualitative questionnaire containing questions on the company's procurement organization and strategy, contracts and additional costs, service and sustainability. All the provided information is subsequently used to account for any differences between the benchmark participants and to enable a direct and objective comparison between the different companies' freight expenditures.

Michiel van Dorst and Gijs Hofman of LHC Consulting analyzed the results of this year's study and provide an overview of the most important findings.

### *European bulk freight rates moving in opposite directions*

#### *Developments during 2012*

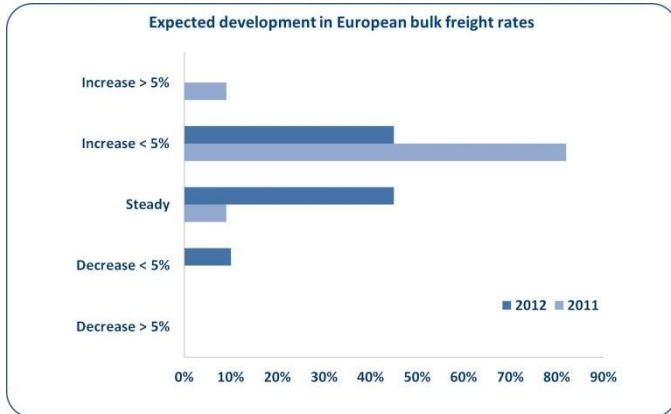
On an aggregate level, freight rates for shipping chemical liquid bulk loads throughout Europe have decreased slightly between 2011 and 2012. At the same time, prices across different trade lanes often moved in opposite directions. Shipments originating from the Iberian peninsula, for example, on average have become 9% less expensive, at least

in part caused by the financial crisis in that part of Europe. During the same one-year period, shipments out of Sweden did become 5% more expensive.

Apart from developments in basic freight rates, it is also important to look at fuel prices since they can have a significant impact on the total freight spend of shippers. While there was a general decrease in basic freight rates between 2011 and 2012, fuel prices increased by approximately 10%. As a result, chemical shippers on average still experienced a total costs increase for their liquid bulk freight. In addition, this means that fuel costs continue to account for an even larger part of total freight spend than before.

#### *Outlook for 2013*

Last year most shippers (82%) expected an average freight rate increase for 2012 of up to 5%. This year, this number has dropped to 45%. The same amount of participants now expects steady freight rates for the upcoming year. In addition, 10% of the respondents expects the average rates for chemical liquid bulk freight to decrease with a maximum of 5%. Last year, there were no shippers predicting a fall in freight rates. This significant change of opinion among chemical shippers may be caused by the deteriorated macroeconomic situation in Europe. This causes a decline in the demand for chemicals and therefore in the required capacity for shipping these products. As carriers normally try to maximize the utilization of their fleet, they may agree to be paid lower prices by their customers and this, in turn, could lead to a drop in freight rates.



### Trends in chemical liquid bulk shipping

The benchmark study also identified a number of trends in chemical liquid bulk shipping by analyzing the responses of the different participants to the qualitative questionnaire. The most interesting as well as important conclusions from this year's study are as follows:

- Most chemical shippers participating in the benchmark (86%) procure FTL chemical liquid bulk freight on a pan-European level. Only a small number of companies follows a more decentralized approach and procures liquid bulk freight on either a country or site level.
- The main focus during a tender for chemical liquid bulk freight is on cost (35%), followed by service (25%), security (21%) and sustainability (13%).
- Shippers have significantly increased the number of carriers they are using over the past year. The overall average has increased from 19 to 29, while the average number of strategic suppliers has increased from 5 to 9. Companies may have decided to increase their carrier base as a way to safeguard capacity at a time when there are frequently carriers going out of business.
- Not all shippers measure the on time delivery performance of their carriers. The companies that do measure their carriers' performance on average apply a target of close to 99%. In day to day practice, carriers deliver almost 97 out of every 100 shipments on time at the customer.
- Chemical shippers are using a range of services that are provided by their carriers. All companies participating in this year's study ship dangerous goods under ADR regulations. Other services offered by carriers and frequently used by shippers are EDI connectivity, temperature controlled transport, loading and unloading, Track & Trace functionality and documents handling.

- Most companies' strategy on sustainability in transport is limited to increasing the share of intermodal transport through a combination of road and rail, barge and/or short sea transport. The carbon reduction potential of intermodal transport as compared to road transport indeed can be as high as 66% for specific trade lanes<sup>1</sup>, although it is important to note that there are various operational and financial constraints that inhibit a full modal shift across all lanes.

Carbon emission figures and the reduction potential when compared to road transport<sup>1</sup>

Transport mode	gCO <sub>2</sub> / tonne-km	CO <sub>2</sub> reduction potential
Road transport	62	-
Rail transport	22	65%
Barge transport	31	50%
Short sea	16	74%
Intermodal road/rail	26	58%
Intermodal road/barge	34	45%
Intermodal road/short sea	21	66%

### Benchmarking as driver for best-in-class performance

The 2012 FTL Chemical Liquid Bulk Benchmark study provided all participants with a detailed and accurate insight into the performance of their liquid bulk freight procurement. A number of shippers proved to have contracted very competitive rates for their liquid bulk freight, but there were also shippers for which a significant saving potential was identified.

The benchmark also helps companies to identify those trade lanes that require immediate attention and for which more competitive rates should be negotiated. Companies can subsequently use this information during contract renewal discussions with current carriers as well as during freight tenders.

Apart from the financial benefits that follow from benchmark participation, the study's qualitative findings enable shippers also to optimize performance from both a service and sustainability standpoint. In addition, they facilitate a strategic approach towards liquid bulk freight procurement by showing companies how to enhance both their procurement organization and strategy.

*Eindhoven, December 2012*

<sup>1</sup> McKinnon, A. and Piecyk, M. (2010) 'Measuring and Managing CO<sub>2</sub> Emissions from the Transport of Chemicals in Europe' Cefic, Brussels.

## General information about LHC Consulting

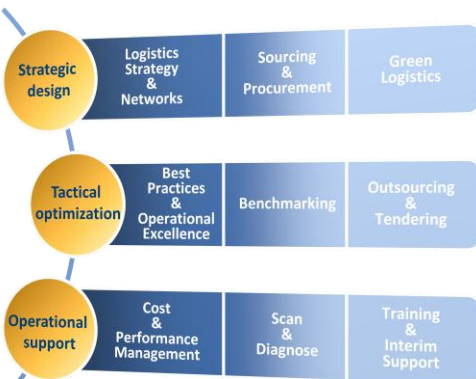
LHC Consulting is a consultancy firm with a clear supply chain focus. We work closely with clients in multiple industries to deliver workable solutions and create value. These solutions are aimed at optimal control of the supply chain on all levels: from operation to strategy.

Our fundamental principle is based on the experience that by closely controlling the supply chain, the key insights gained will not only lead to greater efficiency, but will also boost the business as a whole, resulting in direct value creation.

Supply chain solutions are tailored to each client's unique requirements and are attained through close cooperation with the client. This ensures the quality and efficiency of our projects and a maximum support for our recommendations.

### Services

Our solutions include proven project methodologies for a range of supply chain topics, addressing strategic design, tactical choices and operational issues.



### Transport Benchmark



**Air freight**



**Road**

*FTL, LTL and Groupage*



**Road**

*Chemical Liquid Bulk*



**Ocean**

*Full Container Load*



**Courier, Express & Parcel**

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