

# **THE ECONOMIC IMPACT OF CARRIER LIABILITY ON INTERMODAL FREIGHT TRANSPORT**

## **Executive Summary**

**European Commission**

London  
22 January 2001

**Contract No: B99-B2 7040 10-SI2.81489/P E1 99 002/ETU/IM**

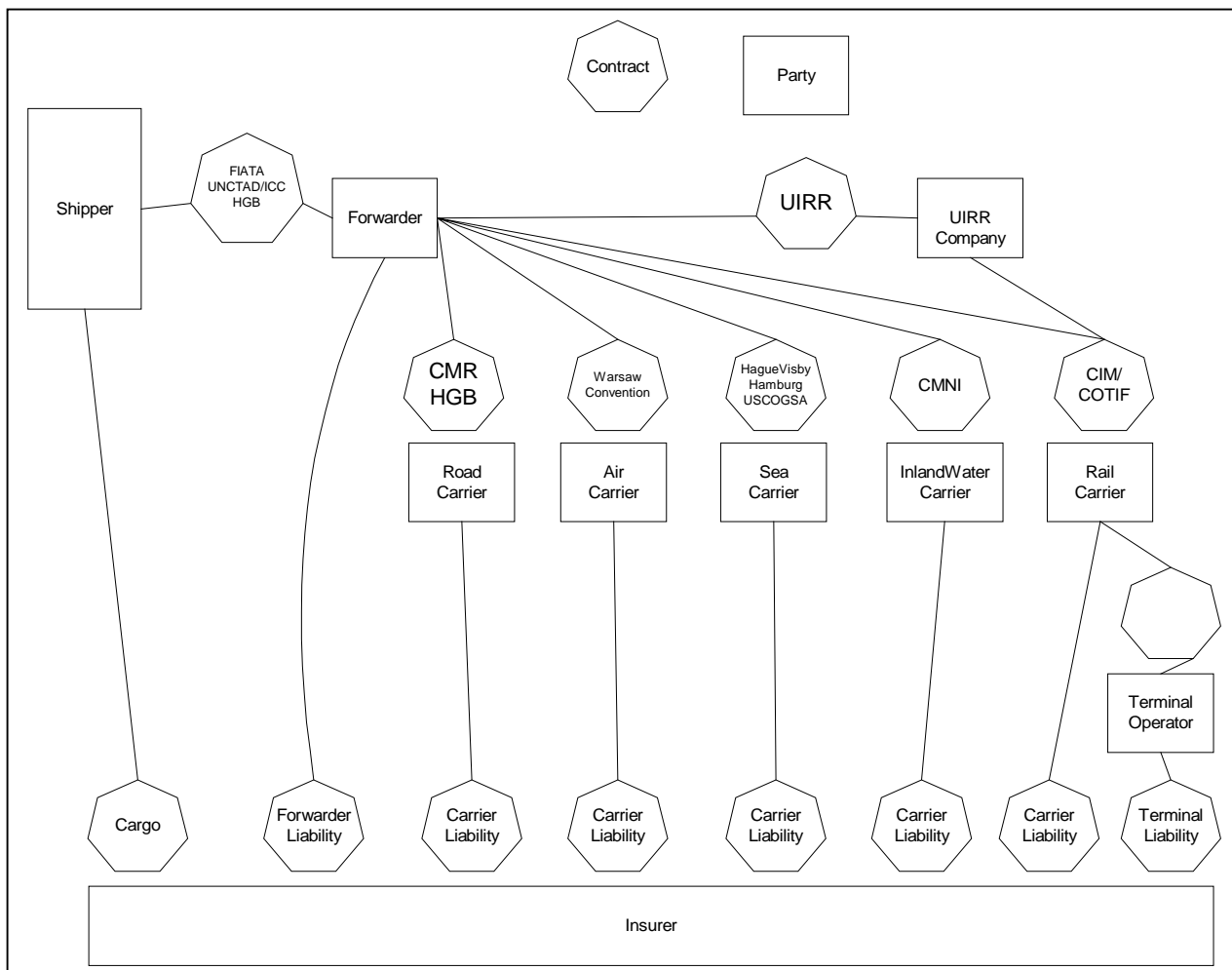
**IM TECHNOLOGIES LIMITED**  
**Studiengesellschaft für den kombinierten Verkehr e.V.**

The Communication on Intermodality and International Freight Transport (COM(97) 243) established that a lack of uniform carrier liability arrangement, which tends to lead to additional (ie friction) costs surrounding the associated insurance system, is an impediment for further development of freight intermodalism in the European Union. Following an EC sponsored study (EC Contract Nr. EI-B97-B27040-SIN6954-SUB) by a group of learned experts on harmonisation of freight transport carrier liability regimes, IM Technologies, United Kingdom, (with Studiengesellschaft für den kombinierten Verkehr e.V., Germany, as sub-consultant), was commissioned by the EC to study the underlying economics of carrier liability in the context of intermodal freight transport.

This Executive Summary summarises the key characteristics of the economic impact of carrier liability on intermodal freight transport and the main findings and conclusions of the study undertaken.

### Freight Transport Supply Chain and Carrier Liability

The transport supply chain has four principal stakeholders, viz.: shipper, freight forwarder, carrier(s), and insurer (both cargo and carrier liability insurance). Beyond these 4 are further stakeholders, including terminal operators, warehouse operators, track (ie infrastructure) providers and intermediaries in the insurance world. The schema demonstrates the interrelationships between stakeholders and the carrier liability regimes that are related to the individual modes.



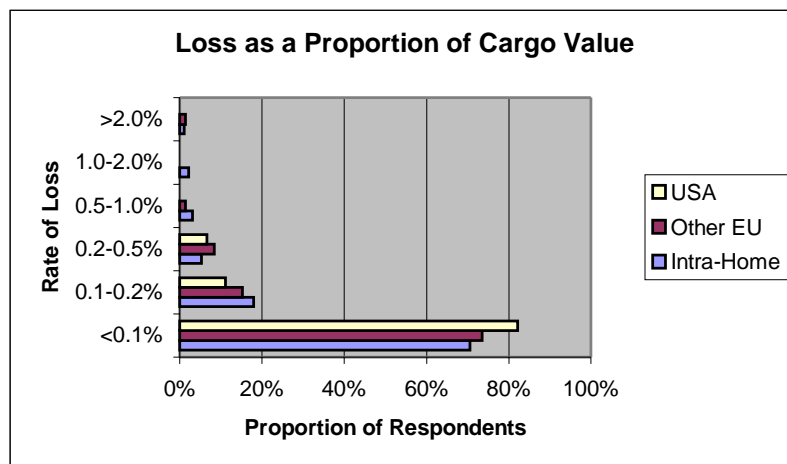
The principles of carrier liability, comprehensively summarised by the UNECE<sup>1</sup>, define the conditions under which carriers, forwarders and terminal operators are liable with respect to loss and damages, and, for certain modes, delay of goods moved. Carrier liability regimes are modal based, this is true even for network liability regimes, such as UNCTAD/ICC, which aims to facilitate intermodal transport.

<sup>1</sup> 'POSSIBILITIES FOR RECONCILIATION AND HARMONIZATION OF CIVIL LIABILITY REGIMES GOVERNING COMBINED TRANSPORT', Overview of provisions in existing civil liability regimes covering the international transport of goods. UNECE, April, 2000.

## Cargo Loss and Damage and Insurance

It is often said that much of EU countries' trade is of high value, nonetheless, the average cargo value<sup>2</sup> of intra-EU freight by mode seems low relative to the limitation of liability. For example, for road freight the average cargo value is about 1.6 Euro/kg whereas the CMR limitation of liability is about 11.4 Euro/kg.

A survey of selected EU shippers was carried out and most reporting shippers (> 75%) indicate a rate of loss of less than 0.1% and only a small handful (< 5%) of shippers report a loss of more than 1%. Land based carriers appear to have less favourable loss records than those of air and maritime carriers. This is most probably due to the relative level of containerisation of the different modes. Certainly analysis of loss and damage by geographic distribution indicates that USA related freight has a better record than intra-EU freight; again one can expect a higher level of containerisation related to the cross-Atlantic freight. The perception on rate of loss over recent years is heading in the right direction, ie slightly down!



It appears that the responding shippers are not very knowledgeable of the many different carrier liability regimes, which could apply, as demonstrated by the low response rate when they were asked to provide the terms of their transport contract.

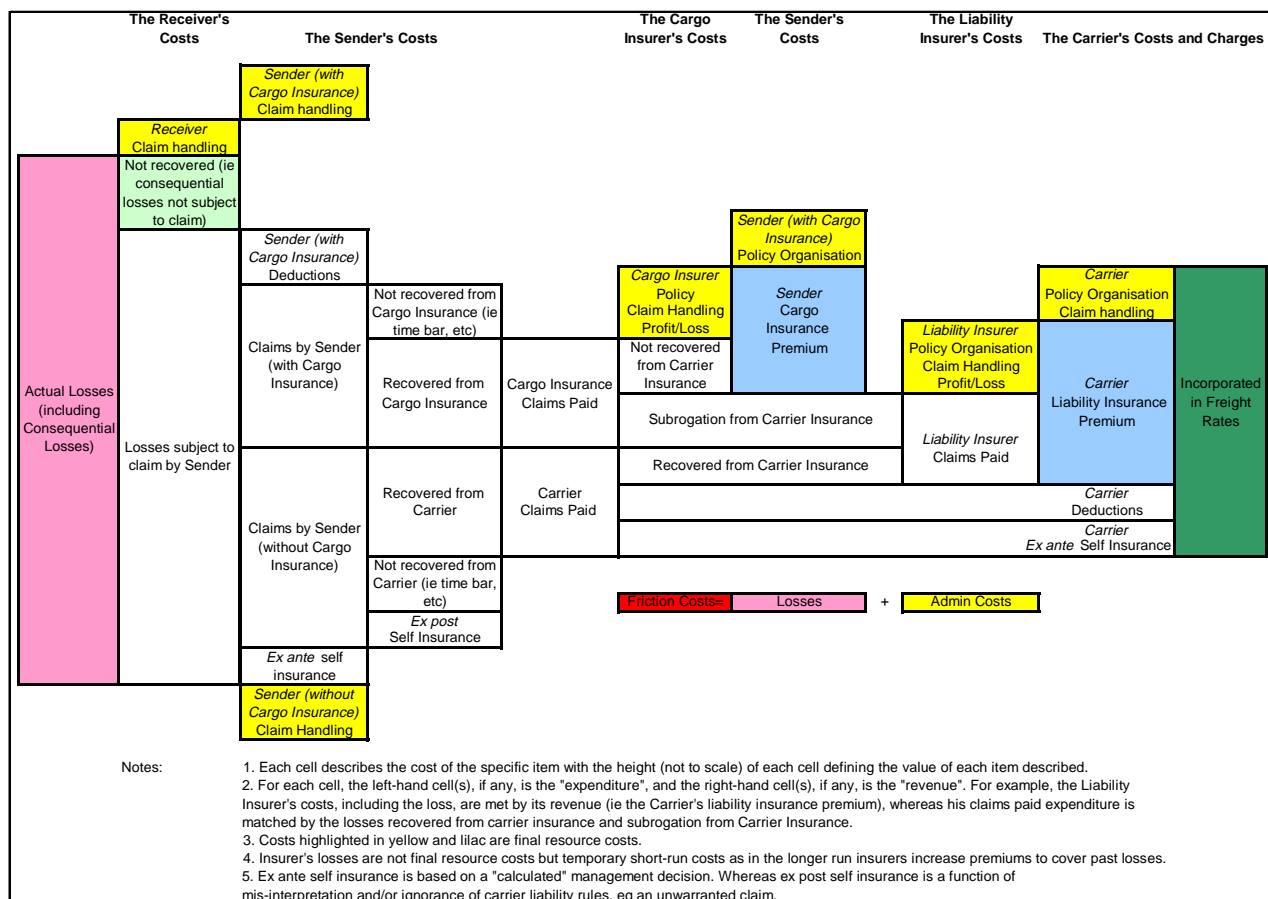
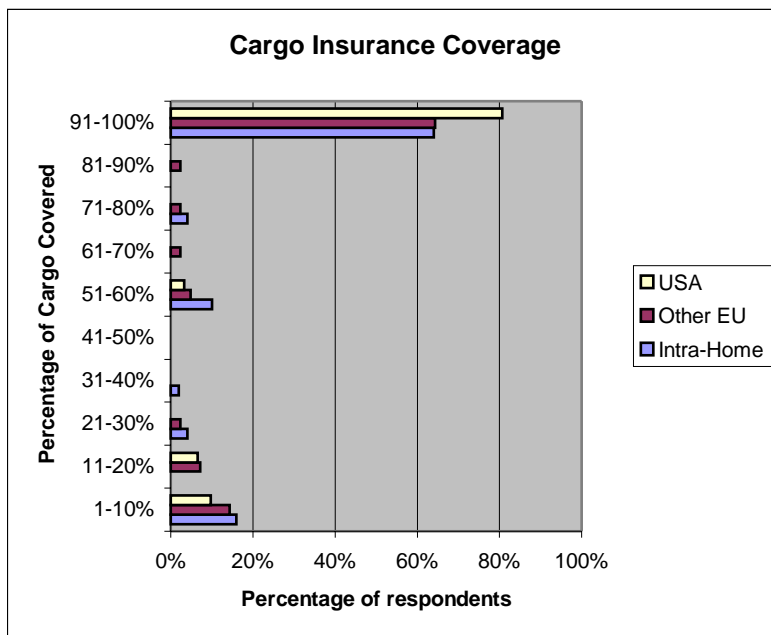
The level of disputed claims related to loss and damage is very small – more than 90% of responding shippers reported that less than 1% of claims led to litigation and carriers and forwarders concur.

Insurance is widely available and used by both the carriers and the shippers to mitigate risk, should the unexpected happen. Results of this study survey suggest that the cost of cargo insurance to shippers is very low compared to the value of the cargo, often below 0.1%. These low cargo insurance premium rates are a reflection of the very low rate of loss and damage. This low premium rate may partly explain the high propensity (about 75-80%) of shippers to buy cargo insurance to protect its cargo liability.

## Friction Cost

Friction costs of carrier liability can be conveniently defined as those from loss, damage, delay and consequential losses ('actual losses') plus those arising from the administration of the regime that supplies insurance and deals with claims ('administrative costs'). These administrative costs are incurred to some extent by all the stakeholders. The shipper through payment of cargo insurance premiums and freight rates together with his own administrative costs incurs, in the end, all the friction costs. A convenient accounting framework is used in the study to translate rates of risk and insurance ratios into quantitative estimates of friction cost of carrier liability.

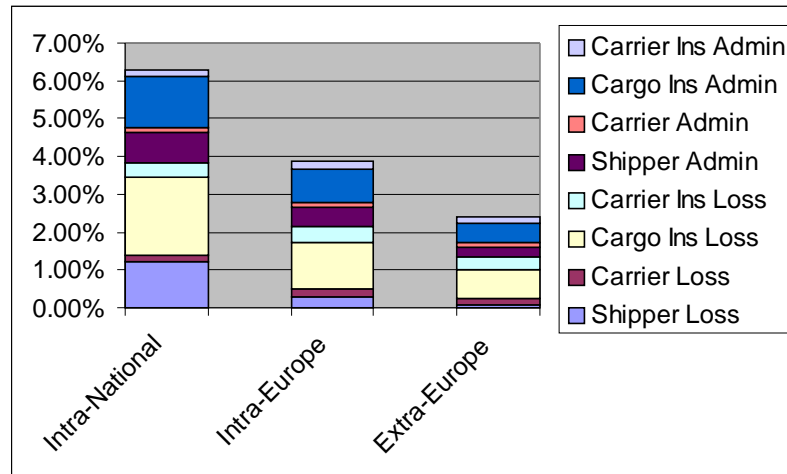
<sup>2</sup> 'EU Transport in Figures - Statistical Pocketbook - 1999', European Commission, 125pp, 1999.



Stakeholder surveys yielded estimates of the various figures in the accounting framework. Carriers and forwarders use insurance to mitigate their carrier liability risk. Yet apparently, only about 20-30% of the cargo insurance claims is recovered from the carrier insurance. This is due to a combination of the fact that many insurance companies provide both carrier and cargo insurance and that the administrative cost for recourse is in many cases judged too high to be financially worthwhile.

Friction costs of carrier liability vary for different types of journey depending particularly on consignment (cargo) value, journey length and the level of risk. For typical National, intra-Europe and extra-Europe journeys friction costs of carrier liability are estimated to amount to 6.3, 3.9 and 2.4 % of

freight charges. These friction costs of carrier liability amount to less than 0.2% of consignment (cargo) value. In Europe the total friction cost of carrier liability for existing intermodal transport operations is estimated to be about 500-550M Euro per annum.



The UNCTAD/ICC Model Rules, which are based on the network principle, have filled a gap in intermodal transport liability left by the failure of the 1980 UN Convention on Multimodal Transportation of Goods to attract sufficient support and as a consequence failed to enter into force. Shippers and forwarders make widespread use of contracts, such as FIATA FBL and BIMCO's Multidoc95 and BIFA STC, which are predicated upon the Model Rules. Although these Model Rules give the impression of simplicity they mask the precedence of the international Conventions and the contracts adopting these Rules are effectively private contracts which are subject to different interpretations by different courts. The result is remaining uncertainty in the terms of liability and legal position. Harmonisation of conditions, such as uniform liability limit for all modes, to facilitate intermodal transport could yield savings in friction costs to intermodal transport of up to 50M Euro per annum.

Intermodal transport's friction costs of carrier liability could be reduced by internet and e-commerce applications but this benefit is likely to be small (about 20-30M Euro per year). However, the same applications should be applicable to unimodal transport yielding major saving of over 500M Euro per annum.

## Recommendations

In the light of the main findings and conclusions the recommended 'way forward' is:

- The EC should invest time and effort on seeking and facilitating greater harmonisation of conditions of carrier liability in order to secure the potential reduction in friction costs for intermodal transport;
- It would be sensible for the EC to seek incremental improvements focussing first on harmonising the conditions for the road, railway and inland water modes, which form the core modes for intra-EU freight;
- It would be more pragmatic to aim for a regional solution covering the EU, the accession countries and the neighbouring countries as this should prove easier as the CMR and CIM/COTIF conventions have similar spatial coverage and the CMNI conventions is very much a pan-European affair;
- The EC and many other international institutions, e.g. UN/ECE, OECD, CMI and UNCITRAL, are currently pursuing further development in carrier liability for multimodal transport and it will be sensible for the EC to work with the various institutions;
- The EC should engage the EU Member States to include national level operations - warehousing, terminal, infrastructure – as part of the process to create harmonisation across the transport supply chain from end to end; and
- Above all the EC should facilitate the use of common language for EU15 at local level and support further work on internet and e-commerce business-to-business platforms which bring benefits to both intermodal and unimodal transport.

## **IM TECHNOLOGIES LIMITED**

156 Mercers Road, London, United Kingdom N19 4PX  
Telephone +44 20 7263 2171 Facsimile +44 20 7263 4837  
E-mail: [info@imtechnologies.co.uk](mailto:info@imtechnologies.co.uk)