



INTERMODAL TRANSPORT IN EUROPE AND NORTH AMERICA: WHAT CAN WE LEARN FROM EACH OTHER?

UIRR, the International Union for Road-Rail Combined Transport, and IANA, the Intermodal Association of North America, came together to jointly devise an exhibition in the European Parliament to show how intermodal freight transport is done on the two shores of the Atlantic Ocean.

The presentation is broken into two strands: (i) a case study depicting in parallel a concrete intermodal transport-chain - how is it done in Europe and how in the USA, while (ii) an explanation of key concepts such as

what is an Intermodal Loading Unit,

who are Combined Transport Operators and Intermodal Marketing Companies

the role of intermodal in rail freight,

how does intermodal freight serve society, and
who are the industry associations behind the sector.



A MESSAGE FROM UIRR'S PRESIDENT, RALF-CHARLEY SCHULTZE

Thank you for taking the time to visit the first intermodal exhibition in the European Parliament. UIRR and IANA came together to bring news of intermodal transport to you just as the European legislators begin deliberating the amendments to the Combined Transport Directive proposed by the European Commission. I trust that you have found the exhibition informative. UIRR stands by to provide answers to any questions that you may have.



A MESSAGE FROM IANA'S PRESIDENT AND CEO, JOANNE F (JONI) CASEY

The exhibition you have just visited is the first manifestation of IANA and UIRR coming together to jointly promote intermodal transport and to exchange information on the best practice found on the two sides of the Atlantic Ocean. Learning from others is an important source of self-improvement, which has been the driver of intermodal excellence in both the USA and in Europe. Please do not hesitate to contact IANA in case you have any questions about intermodal in North America.





STEP 1:

The mission: transporting consumer goods – tomatoes in Europe and sporting goods in the USA – over multiple thousand kilometres to reach their prospective buyers.

The intermodal solution: in Europe – a refrigerated container holding the tomatoes packaged for the supermarket shelf loaded onto Euro-pallets, which is to be shipped to Daventry in the United Kingdom. In the USA – three 40-foot ISO containers holding sporting goods arriving from the factory in the South Pacific and destined to a Shopping Mall in Memphis, Tennessee. Important to note that in the USA the goods are repacked from the three 40-foot ISO containers into two 53-foot high-cube containers for the inland portion of the journey.

THE INTERMODAL LOADING UNIT:

Intermodal loading units – containers, swap bodies and semi-trailers – holding the cargo is the prerequisite for a transport to be intermodal. The second condition is that at least two modes of transport are to be used for the journey, during which the transshipment between the modes takes place at a Transshipment Terminal (in Europe) or Intermodal Facility (in the USA). Intermodal loading Units, or ILUs (sometimes also abbreviated ITUs, or Intermodal Transport Units) come in several lengths and forms: those complying with the ISO 6346 standard are dominantly used in transcontinental trade, while in domestic transport a much wider variation may be admissible – to comply with local standards and peculiarities.

CTO/IMC:

The Combined Transport Operator (CTO) in Europe and its American counterpart, the Intermodal Marketing Company (IMC), is responsible for designing the intermodal transport solution. These actors possess the expertise and know-how needed to bring together the various modes of transport and the terminals to create an intermodal transport product usable for a shipper: hence they connect the supply, determined by the diverse peculiarities of the various modes, with the demand of the marketplace.

THE ROLE OF INTERMODAL WITHIN RAIL FREIGHT:

Intermodal trains make up about half of rail freight traffic today on both sides of the Atlantic. This ratio was reached at a quite rapid pace, which coincided with the shrinking of mining and primary raw material processing in both Europe and North America.

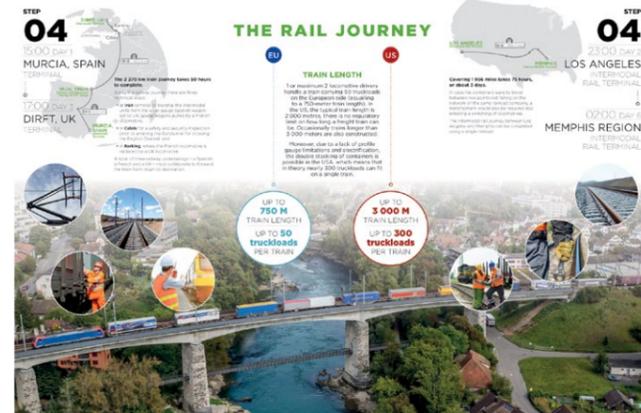
The private operation of rail infrastructure allows the focussing of attention to high value-added freight transport in North America, while in Europe, the rail sector, which continues to be dominated by state-owned and government-managed entities, is increasingly passenger focused – this distracts from the needs of freight transport, resulting in a poorer quality of performance.

STEP 4:

The sustainability benefits of rail freight transport, as well as the other non-road modes of land transport such as inland waterways and short sea shipping, were opened to time-sensitive high value (often palletised) consumer goods via intermodal transport using the expertise amassed in CTOs and IMCs.

STEP 5:

Intermodal terminals also function as important components of city logistics: they provide intermediate/temporary storage, warehousing and stuffing services, as well as the capacity to receive empty containers, clean and repair them if needed, before they are used again.



STEP 2:

The first mile: from their point of origin, the units travel on road to the transshipment terminal. The trucks used to transport them are relatively simple, equipped with a day-cabin (with no overnighting function for the driver needed on long-distance assignments) and a somewhat smaller engine since they rarely must climb steep mountains.

Intermodal road hauliers, or motor carriers as they are called in the USA, are best situated to use vehicles equipped with an alternative propulsion system such as **CNG, LNG or electric**. These are not only less polluting than their diesel-powered long-distance brothers but in case of using methane manufactured using renewables, or electricity generated using solar, wind or other renewable sources, they can have a **zero carbon footprint**. Day-trucking means that a costly alternative fuelling infrastructure is not needed and any distance constraints of the alternative propulsion system do not matter.

STEP 3:

The intermodal terminal is a location where besides the transshipment from one mode to another, a series of other important procedures take place:

- visual technical inspection of the loading unit
- confirmation of the documentation of the shipment
- load planning for the railway journey
- safety inspection of the train
- the handing over of all related documentation.

The key actors of an intermodal transport chain are brought together at the terminals: the road haulier/motor carrier, the Combined Transport Operator/Intermodal Marketing Company, the railway/railroad, as well as any government authority responsible for safety/security.

INTERMODAL FREIGHT SERVES SOCIETY:

Intermodal transport helps alleviate road congestion, reduce road degradation, road accidents (fatalities, injuries and material loss), while boosts the safety and security of transport chains, and at the same time dramatically reduce pollution – also by opening the possibility to use alternative propulsions in first/last mile road transport – and carbon emissions.



UIRR/IANA:

The industry associations of the intermodal sector materially contribute to the successful daily operation of intermodal transport, the dissemination of information about intermodal and the development of industry best practice. Regulators and legislators, as well as society at large, understand intermodal freight transport better through the communication efforts of UIRR and IANA.

