

## Freight Forwarders Training Courses

for Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Tajikistan, Turkmenistan, Ukraine, Uzbekistan

### Module 6 Rail Transport



This project is funded  
by the European Union



A project implemented by  
NEA and its partners STC,  
TRADEMCO and Wagener &  
Herbst Management  
Consultants

**CONTENTS**

	<u>Page</u>
<b>6</b>	<b>RAIL TRANSPORT.....4</b>
<b>6.1</b>	<b>Introduction: Advantages and Disadvantages of Rail Transportation .....4</b>
<b>6.2</b>	<b>Legal requirements of Rail Transport.....5</b>
<b>6.3</b>	<b>Main Conventions and Agreements Regarding Rail Transport.....12</b>
<b>6.4</b>	<b>Geography and Rail Transport Operations .....17</b>
<b>6.5</b>	<b>Transit Times in Euro-Asian Freight Routes.....23</b>
<b>6.6</b>	<b>Ways and Means of Transportation .....26</b>
<b>6.7</b>	<b>Combined Transport By Rail .....34</b>
<b>6.8</b>	<b>European Agreement on Important International Combined Transport Lines and Related Installations (AGTC).....39</b>
<b>6.9</b>	<b>Waybills and Accompanying Documents .....40</b>
<b>6.10</b>	<b>CIM consignment note .....44</b>
<b>6.11</b>	<b>Tariffs in Railway Transport.....58</b>
<b>6.12</b>	<b>Uniform Distance Table for International Freight Traffic (DIUM) .....59</b>
<b>6.13</b>	<b>Outline of Tariff Setting Methods Applied by Railways in CIS.....60</b>
<b>6.14</b>	<b>References - Further Reading .....63</b>
<b>Annex 1</b>	<b>Best Practices</b>
<b>Annex 2</b>	<b>CIM</b>
<b>Annex 3</b>	<b>Frachtbrief CIM SMGS RU-ENG</b>
<b>Annex 4</b>	<b>Case</b>

### Acronyms and Terms

AGC	:	European Agreement on Main International Rail Routes
AGTC	:	European Agreement on Important International Combined Transport Lines and Related Installations
CEEC	:	Central and Eastern European Countries
CER	:	Community of European Railways
CIF	:	Cost, Insurance and Freight
CIM	:	Contract for International Carriage of Goods by Rail - International Consignment Note of COTIF
COTIF	:	Convention concerning International Carriage by Rail
CT	:	Combined transport
DIUM	:	Uniform Distance Table for International Freight Traffic
EC	:	European Commission
ECO	:	Economic Cooperation Organisation (Islamic states)
ERA	:	European Railway Agency
EU	:	European Union
FBL	:	FIATA bill of lading
FCL	:	Full container load
FOB	:	Free on Board
MLA	:	Basic Multilateral Agreement of TRACECA
MTT/ETT	:	International Transit Tariff (Russian abbreviation) of OSJD members
NIS	:	New Independent States (former CIS)
NHM	:	Harmonised Commodity Code - Harmonised System (HS)
OSJD	:	Organisation for Railways Cooperation
OTIF	:	Intergovernmental Organisation for International Carriage by Rail
RID	:	Regulations concerning the International Carriage of Dangerous Goods by Rail
RIV	:	Agreement governing the Exchange and Use of Wagons between Railway Undertakings RIC: same, but for passenger coaches
SMGS	:	Convention concerning the International Carriage of Goods by Rail - Agreement on International Rail Freight Communications, by OSJD
TEU	:	Twenty-foot equivalent unit (container)
TRACECA	:	Transport Corridor Europe - Caucasus - Asia
TAR	:	Trans - Asian Railway
UIC	:	International Union of Railways

UIRR	:	International Union of Combined Road - Rail Transport Companies
UNECE	:	United Nations Economic Commission for Europe
UNESCAP	:	United Nations Economic and Social Commission for Asia and the Pacific

6 RAIL TRANSPORT

6.1 Introduction: Advantages and Disadvantages of Rail Transportation

**Learning objectives:**  
 The applicant should be aware of general advantages and disadvantages of rail transportation

**Rail Transport**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• increased security of cargo (especially in areas such as Central Asia)</li> <li>• capability to transport large and heavy volumes of cargo over long distances (&gt;200 km) at low unit cost</li> <li>• efficient operations in a multi-modal environment</li> <li>• faster (with respect to sea) on some routes</li> <li>• cheaper (with respect to road) in most cases</li> <li>• operations usually not affected by weather conditions</li> <li>• reliability of operations (in most cases)</li> <li>• effectiveness in regular consignments - block trains / full train loads</li> </ul>	<ul style="list-style-type: none"> <li>• interoperability problems (gauges, platforms, signaling systems, voltage, data exchange, operational rules)</li> <li>• relatively low (in comparison to road) network density and door-to-door capability</li> <li>• variations in technical / operational characteristics along rail route sections and missing links</li> <li>• severe delays (in some cases) at border crossings</li> <li>• no single agent for door-to-door transport and intervention of several rail operators / networks in international and transit transports</li> <li>• tariffs differentiations and complex structures -no single bill of lading</li> <li>• low commercial speed in most lines</li> <li>• necessity of two intermediate handling phases in the majority of cases (departure + destination rail yards), unless private sidings are used</li> <li>• expensive in short distances</li> <li>• limitations to standardized units fitting with load gauge profile restrictions</li> </ul>

For examples of best practices but also of malfunctions on railways see Annex 1 for examples of Best Practices.

**Test Questions**

Please indicate whether the statement is right / wrong:

- a. Rail transport is expensive in short distances. (right)
- b. Rail transport makes efficient operations in a multi-modal environment possible. (right)
- c. Rail transport is cheaper and faster than road transport (wrong)
- d. The rail network makes door-to-door transportation possible. (wrong)
- e. There is a low commercial speed in most rail lines. (right)
- f. An unitized tariff is widely-used in rail transport. (wrong)

**6.2 Legal requirements of Rail Transport**

**Learning objectives:**

The applicant should be aware of the main international organisations of rail transportation and their objectives. The applicant should be aware of the liability of the rail carrier according to CIM Uniform Rules and the Rules of the SMGS.

**Major Actors involved in Rail Transport**

**Learning objectives:**

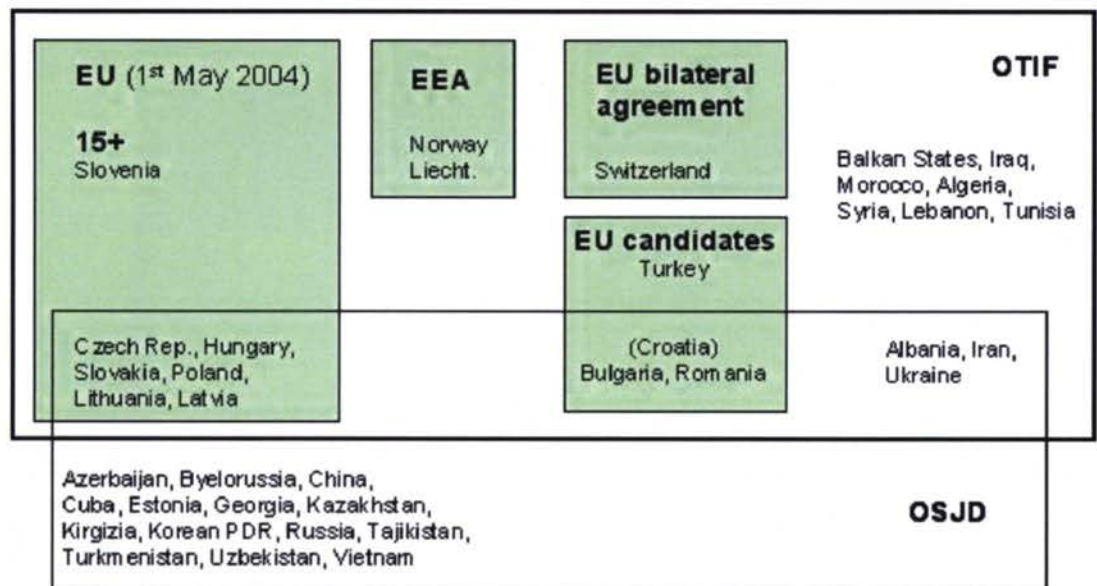
The applicant should be aware of main international organizations that regulate rail transportation.

Name	Main Objectives	Members	Internet link
International Union of Railways (UIC)	<ul style="list-style-type: none"> <li>• developing and forwarding specifications and standards to standardisation bodies,</li> <li>• acting as a technical platform to support the work of railway associations,</li> <li>• heading international rail cooperation projects,</li> <li>• defining provisions and recommendations for its members,</li> <li>• concluding agreements with intergovernmental organisations and other trade organisations responsible for transport</li> </ul>	177 members (railway undertakings) in 94 countries	<a href="http://www.uic.a.sso.fr/apropos/Overview.html">http://www.uic.a.sso.fr/apropos/Overview.html</a>
Intergovernmental Organisation for International Carriage by Rail (OTIF)	<ul style="list-style-type: none"> <li>• enforcing COTIF (Conventions concerning International Carriage by Rail) and the Protocol of Vilnius</li> <li>• widening the scope of COTIF and harmonizing with other transport legislations in order to facilitate in the longer term through carriage by</li> </ul>	42 States, e.g. countries of the EU, Ukraine, Turkey; Tunis, Syria, Macedonia,	<a href="http://www.otif.org/html/e/pres_info_generales.php">http://www.otif.org/html/e/pres_info_generales.php</a>

	<p>rail under a single legal regime from the Atlantic to the Pacific.</p> <ul style="list-style-type: none"> <li>• facilitation of border crossing in international rail transport</li> <li>• participation in the preparation of other international conventions concerning rail transport within UN/ECE and Unidroit</li> <li>• ongoing updating of the regulations concerning the carriage of dangerous goods (RID)</li> </ul>	<p>Morocco, former Yugoslavia, Iran, Iraq, Algeria, Albania</p>	
<p>Organisation for Railway Cooperation (OSJD)</p>	<ul style="list-style-type: none"> <li>• developing international transport by rail especially between Europe and Asia.</li> <li>• developing the common strategy for international transport by rail.</li> <li>• harmonising international legal framework for rail transport</li> <li>• cooperation in problems regarding rail transport</li> <li>• technical cooperation</li> <li>• cooperation with other international organisations involved in rail transport</li> </ul>	<p>Former USSR, Albania, Iran, former Yugoslavia, China; Cuba; North Korea, Vietnam</p>	<p><a href="http://www.osjd.org/r-index.htm">http://www.osjd.org/r-index.htm</a> (in Russian only)</p>
<p>European Agreement on Main International Rail Lines (AGC)</p>	<ul style="list-style-type: none"> <li>• Adoption of an international E-rail network consisting of main lines and supplementary lines and establishment of a coordinated plan for development and construction of rail lines of major international importance at set technical / operational characteristics</li> </ul>	<p>24 countries, of which 14 countries from EU-25, Bulgaria, Romania, Turkey, Moldova, Ukraine, Russia, Belorussia</p>	<p><a href="http://www.unec.e.org/trans/convention/agc_ale.pdf">http://www.unec.e.org/trans/convention/agc_ale.pdf</a></p>

UNECE	<ul style="list-style-type: none"> <li>• Development of Euro-Asian transport links</li> <li>• Organisation of pilot runs of container block trains in Euro-Asian corridors</li> <li>• Facilitation of border crossing in international rail transport</li> <li>• Productivity in rail transport</li> <li>• Determination of rail infrastructure capacity</li> <li>• Interoperability and harmonization of conditions of different rail systems (OTIF - OSJD).</li> <li>• Trans European Rail Project.</li> <li>• AGC</li> </ul>		<a href="http://www.unecce.org/trans/main/sc2/sc2.html">http://www.unecce.org/trans/main/sc2/sc2.html</a>
-------	---	--	---

Some countries are members both of the OTIF and of the OSJD, these are shown in the figure below.



Both organizations work on a merger of both systems. For information about the unification of transport law please read the following text:



#### CONFERENCE ON INTERNATIONAL RAIL TRANSPORT LAW - JOINT DECLARATION

The international "Conference on International Transport Law" was organized on 21 - 22 October 2003 in Kiev with the aim of finding possible means of bridging the gap between two international rail transport law systems - namely that of OSJD (or OSZhD) and that of OTIF - particularly in the area of freight transport.

The Conference has established that CEECs that will become members of the EU, as well as the CIS States, should direct their attention firstly to improving the legal basis of transiting transport in order to create favorable conditions to attract additional transport to exclude the possibility of a new dividing line coming into being between the EU and CIS States.

The railways should become more efficient and competitive compared with other modes of transport, especially roads. They should provide a quality service to customers, characterized by reliability, punctuality and safety. Special attention should be paid to smooth and efficient border - crossing procedures.

The fact that two legal systems regulate international rail transport in the large geographical area of Eurasia should not be an obstacle to exploiting the opportunities available to the railways. Harmonization of legislation between the two regulatory legal systems is needed with short and medium term objectives to be set up. Legal and technical interoperability as well as the development of infrastructure are shared priorities although they have different timeframes.

The Conference has established that a real disadvantage for rail transport is the absence of a direct consignment note. Action to improve matters can be provided as follows:

- development of a direct consignment note as a first step;
- standardization of the laws governing questions of liability for the entire transport activity as a second step.

The Conference has agreed that a work programme between OSJD and OTIF (with joint working group), that will build on the existing "Common position", should contribute to reach the objectives of this declaration. In addition, the EC will stimulate the work on a number of trans-European corridors to facilitate the implementation of joint solutions.

For information about the European international associations of railway enterprises CER and UIRR see here:

#### Other Major Actors

##### International Union of combined Road - Rail transport companies (UIRR)

UIRR has currently 19 members in 14 countries who represent approximately 60% of the total volume conveyed in Europe by combined transport. UIRR was founded in 1970 in Munich. His members carried 230,000 units of swap bodies and semi-trailers on a national level and only 17,000 units as international traffic, in the first year.

In 1972 the first international rolling road link (trucks on rail) was introduced (Cologne - Verona). In 1984 the first General Conditions organizing the responsibility of the operators in international combined transport were adopted. In 1988, 1 million consignments were reached and 3 years later international traffic exceeded national traffic. In 1997 / 1998 UIRR adopts new statutes and opens to all CT operators. In parallel new General Conditions are adopted giving to operators more responsibilities in their commercial contacts with clients. In 2000, 2 million consignments were reached.

##### Community of European Railway and Infrastructure Companies (CER)

CER brings together 53 railway undertakings and infrastructure companies from the European Union, the accession countries (Bulgaria, Croatia and Romania) as well as Bosnia / Hercegovina, Serbia / Montenegro, Norway and Switzerland. It is based in Brussels and represents its members' interests vis-à-vis the European Parliament, Commission and Council of Ministers as well as other policy makers and transport actors. CER's main focus is promoting the development of rail as essential to the creation of a sustainable transport system which is both efficient and environmentally sound. A key priority in this respect for CER is the achievement of a more balanced modal split in the transport system, minimizing external costs arising to society and improving economic efficiency. In parallel to the railways' own initiatives for improving the quality of rail services, CER sees ensuring sufficient investment in infrastructure rail projects as a prerequisite for achieving the desired modal split. All policy areas of significance to railway transport are dealt with by CER, which offers advice and recommendations to European policy makers. CER monitors and contributes to railway policy making. Its interests span the whole spectrum of European transport policy: infrastructure planning, passenger and freight services, public service, the environment, research and development and social dialogue.

The EC aims for a revitalization of railways. For details please read the following:

#### E.C. DIRECTIVES AND POLICIES

E.C. common transport policy up to the year 2010, is described in the White Paper, published in 2001. One of the main objectives of E.C. is to **Revitalise Railways**. More specifically the policy aims on (a) integrating rail transport into the internal market and guaranteeing safety, (b) making optimum use of rail infrastructure, (c) modernising of rail services.

The reasons behind the promotion and prioritisation of railways by E.C., are, the increasing shares of road transport (causing severe environmental and congestion problems) and the declining shares of rail transport.

E.C. since 1991 launched a series of Directives to support its policy and to open the rail market in order to achieve liberalization, as is already the case in the other modes of transport. The goal is, rail to be able to better compete with other modes.

The Directives deal with separation of operations from infrastructure, railway licensing, access to infrastructure (access fees / capacity allocation), interoperability and safety.

- 91/440/EC, 95/18/EC, 95/19/EC, 96/48/EC
- 2001/12/EC, 2001/13/EC, 2001/14/EC, 2001/16/EC (1<sup>st</sup> railway package)
- 2004/49/EC, 2004/50/EC, 2004/51/EC (2<sup>nd</sup> railway package)

Specific attention is given to the interoperability issues, aiming to (a) ensure safe and uninterrupted movement of trains across E.U. and (b) standardize equipment to reduce costs. For interoperability and safety issues the European Railway Agency (EAR) was set up. Freight services were the first to be liberalized and opened to operators, since 1993 for international combined transport, since 2003 for international freight services, whilst since 2007 all freight services will be liberalized.

Directive 2001/12/EC defines a Trans-European Rail Freight Network (TERFN) comprising approximately 50,000 km of line open to freight services since 2003. By 2007, however, freight services market will be opened up over the whole 150,000 km network.

The E.C. also launched multimodal / combined transport programs aiming to link up the various modes of transport towards a more efficient transport chain. Firstly, the PACT

program was introduced back in 1992, followed by the Marco Polo program in 2003. Marco Polo is a large - scale program to support intermodal activities and alternatives to road transport, particularly focusing in interoperability on containers, loading units and the profession of freight integrator.

Both the UIC and the FIATA work on higher quality of railways. See below:



**Joint Declaration by UIC/CER and FIATA/CLECAT on  
"Quality in international conventional and combined railway freight traffic"**  
(15 April 2005)

At its meeting on 1 March 2005 in Paris, the UIC-FIATA Permanent Contact Group announced the launch of joint efforts to boost quality standards in international rail freight traffic, both conventional and combined.

This joint initiative is based on moves to develop a set of quality indicators, building on the Quality Charter published by CER and UIC in July 2003 in conjunction with the CIT. These indicators, which offer a response to market demand and must also be realistically achievable for the Railway Undertakings, enshrine the customer's right to incorporate quality parameters in individual contracts concluded with the railway undertakings, with the necessary consequences for both parties in the event of non-compliance. In an initial phase, the idea is to begin with block trains in conventional wagon and combined transport, before moving onto a subsequent stage in which wagon groups or less-than-trainload operations are also included.

UIC and FIATA have agreed that, in an open market, an improvement in the quality of rail freight services can only be introduced and developed by the market protagonists themselves.

Any intervention on the part of the EU would distort the free play of market forces and consequently jeopardise the economic viability of the transport operations, with the railway undertakings liable to lose business as a result.

UIC is planning to discuss the results of this joint work with other customer associations, to ensure that the work rests on a broad spectrum of customer requirements.

CER and CLECAT welcome and support this initiative and see it as a confirmation of their existing position in relation to EU moves to develop a high quality regulation.

FIATA  
**Heiner ROGGE**  
Chairman of the Working  
Group Rail of MFI

UIC  
**Günther ENGELHART**  
Chairman of the UIC Delegation to the  
Permanent Contact Group UIC/FIATA

CLECAT  
**Heiner ROGGE**  
Chairman of the CLECAT  
Rail Committee of ETI

CER  
**Johannes LUDEWIG**  
Executive Director

### Test Questions

*Please indicate whether the statement is right /wrong:*

- a. The UIC acts as a technical platform to support the work of railway associations (right)
- b. The OTIF participates in the preparation of other international conventions concerning rail transport within UN/ECE and Unidroit. (right)
- c. The COTIF was developed by the OSJD. (wrong)
- d. The development of regulations concerning the carriage of dangerous goods (RID) is an objective of the UIC. (wrong)

### 6.3 Main Conventions and Agreements Regarding Rail Transport

***Learning objectives:***

The applicant should be aware of the main rules of the CIM (including RID) and SMGS and of the liability of the rail carrier. The applicant should be able to fill in the CIM form.

### COTIF

COTIF (in French: Convention relative aux transports internationaux ferroviaires) is the Conventions concerning International Carriage by Rail, managed by OTIF. The Appendices of COTIF include:

- the international rail transport law (passenger - CIV - and freight traffic - CIM)
- the carriage of dangerous goods (RID)
- the contract of use of vehicles (CUV)
- the contract of use of railway infrastructure (CUI)
- the validation of technical standards and the adoption of uniform technical prescriptions for railway material (APTU)
- the procedure for technical admission of railway vehicles and other railway materials used in international traffic (ATMF);

COTIF - Conventions concerning International Carriage by Rail	
<p><b>Appendices of the COTIF</b></p> <p>The international rail transport law (passenger - CIV - and <b>freight traffic - CIM</b>)</p> <p>The <b>carriage of dangerous goods (RID)</b></p> <p>The contract of use of vehicles (CUV)</p> <p>The contract of use of railway infrastructure (CUI)</p> <p>The validation of technical standards and the adoption of uniform technical prescriptions for railway material (APTU)</p> <p>The procedure for technical admission of railway vehicles and other railway material used in international traffic (ATMF)</p>	<p><b>Revisions of the COTIF</b></p> <p><b>1980:</b> contract of international carriage of goods by rail (CIM)</p> <p><b>1995:</b> basis for the cross-boarder freight forwarding; Liberalization and modernization of the CIM Uniform Rules,</p> <p><b>Protocol of Vilnius (1999):</b> Adaptation to the laws applicable to other transport modes, especially to the CMR; Modernization regarding liberalization of the rail transport</p>

**CIM Uniform Rules**

COTIF contains the Uniform Rules concerning the Contract of the International Carriage of Goods by Rail (CIM), of 9-5-1980 please see Annex 2 , as amended in 9-6-1999 (Vilnius Protocol) to cater for the recent developments in the rail sector (please see earlier on in this chapter).

The Uniform Rules apply to every contract regarding the carriage of goods by rail for reward when the places of origin and destination are situated in two different member states -irrespective of the place of business and the nationality of the parties to the contract- or if at least one place is in a member state and the parties agree that the contract is subject to these rules.

**CIM Contract of Carriage**

By the contract of carriage, the carrier shall undertake to carry the goods for reward to the place of destination and to deliver them there to the consignee. The contract of carriage must be confirmed by a consignment note which accords with a uniform model. However, the absence, irregularity or loss of the consignment note shall not affect the existence or validity of the contract which shall remain subject to these Uniform Rules.

The consignment note shall be signed by the consignor and the carrier. The signature can be replaced by a stamp, by an accounting machine entry or in any other appropriate manner.

The carrier must certify the taking over of the goods on the duplicate of the consignment note in an appropriate manner and return the duplicate to the consignor.

The consignment note shall not have effect as a bill of lading.

A consignment note must be made out for each consignment. In the absence of a contrary agreement between the consignor and the carrier, a consignment note may not relate to more than one wagon load.

In the case of carriage which enters the customs territory of the European Community or the territory on which the common transit procedure is applied, each consignment must be accompanied by a consignment note satisfying the requirements of Article 7 of CIM.

The international associations of carriers shall establish uniform model consignment notes in agreement with the customers' international associations and the bodies having competence for customs matters in the Member States as well as any intergovernmental regional economic integration organization having competence to adopt its own customs legislation.

The consignment note and its duplicate may be established in the form of electronic data registration which can be transformed into legible written symbols.

### CIM Liability of Carrier

Transit period	12 hrs for dispatch and 24 hrs for each 400 km
Period of liability for loss or damage of goods	The time between the carrier accepted goods for carriage and the time of delivery and for the loss or damage resulting from the transit period being exceeded
Relief of liability	When the loss or damage of goods was caused by <ul style="list-style-type: none"> <li>• a fault on the part of the person entitled</li> <li>• an order given by the person entitled other than as a result of a fault on the part of the railway</li> <li>• inherent vice of the goods (decay, wastage, etc.)</li> <li>• circumstances which the railway could not avoid and the consequences of which it was unable to prevent (e.g. carriage in open wagons, absence or inadequacy of packing, defective loading, irregular, incorrect or incomplete description of articles)</li> </ul>
Compensation for loss of goods	The carrier must pay, to the exclusion of all other damages, compensation calculated according to the commodity exchange quotation or, if there is no such quotation, according to the current market price, or if there is neither such quotation nor such price, according to the normal value of goods of the same

	kind and quality at the time and place at which the goods were accepted for carriage. Compensation shall not exceed 17 Special Drawing Rights SDR per kilogram of gross weight plus the rail freight.
Compensation for damage of goods	The carrier must pay compensation equivalent to the loss in value of the goods, to the exclusion of all other damages.
Period of limitation	1 year

### **CIM Packing, and handing over of goods**

When the railway accepts for carriage goods showing obvious signs of damage, it may require the condition of such goods to be indicated in the consignment note.

When the nature of the goods is such as to require packing, the consignor shall pack them in such a way as to protect them from total or partial loss and from damage in transit and to avoid risk of injury or damage to persons, equipment or other goods. Moreover the packing shall comply with the provisions in force at the forwarding station.

The consignor shall be liable for all the consequences of the absence of packing or defective condition of packing and shall in particular make good any loss or damage suffered by the railway from this cause. In the absence of any particulars in the consignment note, the burden of proof of such absence of packing or defective condition of the packing shall rest upon the railway.

The handing over of goods for carriage shall be governed by the provisions in force at the forwarding station. Loading shall be the duty of the railway or the consignor according to the provisions in force at the forwarding station. When the loading is the responsibility of the consignor, he shall comply with the load limit. Unloading shall be the duty of the consignee.

The consignor shall be liable for all the consequences of defective loading carried out by him and shall, in particular, make good any loss or damage suffered by the railway through this cause. Nevertheless Article 15 shall apply to the payment of costs arising from the reloading of goods in the event of defective loading. The burden of proof of defective loading shall rest upon the railway.

### **RID Regulation concerning the International Carriage of Dangerous Goods by Rail**



The development of regulations concerning the carriage of dangerous goods by rail is a main and ongoing task of the OTIF. RID (Regulation concerning the International Carriage of Dangerous Goods by Rail) has about 1,000 pages and is reissued every two years.

Since 1993, work has been in progress on the legal and technical restructuring of RID. The legal restructuring was completed, together with the other revision work, at the 5th General Assembly in June 1999. RID has become an independent Appendix to COTIF. This means that the application of RID will no longer depend on the existence of a CIM transport contract. The establishment of definitions and defining the duties of those participating in a transport operation involving the carriage of dangerous goods creates greater legal clarity. A legal basis for special provisions applicable to supplementary carriage on maritime routes has been set up.

After the restructuring RID in the year 2001 RID now has a more user-friendly presentation and now only differs from ADR (European Agreement concerning the International Carriage of Dangerous Goods by Road) and ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) in the mode-specific parts. Details about RID please read in the Module 11 Safety, Security and Dangerous Goods.

**SMGS**

SMGS is the Agreement on International Railway Carriage of Cargoes “in Russian: Soglasheniye o Meshdunarodnom Grusowom Soobschtschenii), concluded in Warsaw 1950 between Eastern European and Asian countries. There are some differences in the uniformed rules of CIM and the rules of the SMGS concerning cargo transport:

	<b>CIM Uniform Rules</b>	<b>SMGS</b>
Official languages	English, French, German	Chinese, Russian
Transit period	12 hrs for dispatch and 24 hrs for each 400 km	24 hrs for each 200 km
Compensation for loss of goods	Compensation shall not exceed 17 SRD per kilogram of gross weight plus freight.	There are no maximal limitations for compensation for loss of goods.
Period of limitation	1 year	9 months

For the full text of the SMGS convention in Russian can be downloaded from <http://www.osjd.org/r-index.htm>

For a unified consignment note for CIM and SMGS (with 6 copies) please see Annex 3.

### Test Questions

*Please indicate whether the following statements are right /wrong:*

- a. The CIM is an appendix of the Conventions concerning International Carriage by Rail (right)
- b. In the Protocol of Vilnius (1999) CIM Uniform Rules were adapted to the laws applicable to other transport modes, especially to the CMR (right)
- c. The Rules for the transportation period by rail are 24 hrs for dispatch and 36 hrs for each 100 km (wrong)
- d. Compensation for loss of goods shall not exceed 17 Special Drawing Right SDR per kilogram of gross weight plus freight. (right)
- e. Period of limitation for compensation is in the CIM Uniform Rules shorter than in the Rules of the SMGS. (wrong)
- f. Unloading shall be a duty of the rail carrier. (wrong)

## 6.4 Geography and Rail Transport Operations

### Learning objectives:

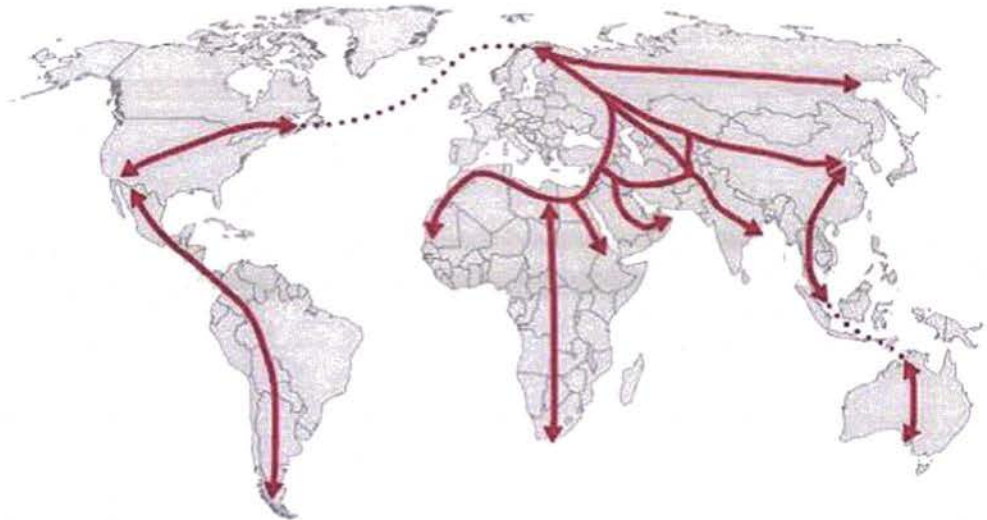
The applicant should be aware of main transport routes by rail and average transportation times on the main routes.

### Rail Corridors and Networks

#### Learning objectives:

The applicant should be aware of main transport routes by rail.

The main rail corridors in the world can be seen on the map on the following page.



### *Global Rail Corridors*

ESCAP, as part of the Asian Land Transport Infrastructure Development (ALTID) project which was endorsed by the 48<sup>th</sup> ESCAP Commission Session in Beijing (April 1992) has studied the three Asia - Europe rail land bridges. The EC also adopted in 1992 resolution 48/11 on road and rail transport in relation to facilitation measures and in 1996 resolution 52/9 on intra - Asia and Asia - Europe land bridges. Three routes of international significance have been identified in the southern corridor of Trans Asian Railways (TAR):

- TAR-S1: Kunming (South China) - Kapikule (Turkish / Bulgarian borders): 11,700 km
- TAR-S2: Bangkok - Kapikule: 11,450 km
- TAR - S3: Sarakhs (Iran/Turkmen borders) - Tehran - Razi (Turkish borders)

In cooperation with ESCAP, the OSJD is working on the organisation and test run of container block trains along the northern corridor in communication East-West. Container trains ran successfully on following routes:

- Nakhodka - Brest (via Moscow)
- Berlin - Moscow
- Budapest - Moscow
- Helsinki - Moscow

UIC has identified major weaknesses that need to be solved in order to make rail corridors more attractive. In summary, such weaknesses include among others:

- Considerable delays in border crossings due to huge documentation, customs procedures, change of trains and other formalities.
- Different gauge widths in various countries which imply that bogies have to be changed or even the whole wagons. Four different types of gauge are existing:
  - 1.435 m (standard) in Turkey, Iran, China and Middle East, as well as in Europe
  - 1.520 m in CIS countries and Russia
  - 1.676 m in India and Pakistan
  - Narrow gauge (mostly 1.000 m) in South / S.E. Asia, Middle East and Europe.
- Differences in tariff structure and liability conditions in various countries.
- Missing links crucial for the rail corridors as well as poor infrastructure.

In order to cope with the above problems and find solutions to a more efficient rail transportation between Asia and Europe 6 international multi-modal corridors in world trade were established where the role of railways will be critical and of paramount importance. The corridors addressing freight movements between Asia and Europe are:

1. Europe ↔ China via CIS and Middle East (Task Force chaired by Iran)
2. South/S.E Asia ↔ Central Asia/Europe via Middle East (Task Force chaired by India)
3. Far East ↔ Europe via China & Russia (Task Force chaired by China)

As surface transport links will form the main element in the overall transport chain, UIC is coordinating the various related aspects through Corridor Task Forces' working groups.

Recently UIC adopted the N.E.W. Corridor (Northern East West Freight Corridor) linking Far East with Northern America via Scandinavia.



*N.E.W. Corridor (Northern East West Freight Corridor)*

In cooperation with UIC, the technical terms for East - West freight wagons were elaborated as well as the technical requirements for communication between 1,435 km and 1,520 m. gauges.

The growing importance of Asia to Europe's economic future suggests that European rail and other infrastructure investment decisions need increasingly to take account of Euro-Asian perspectives. The importance of the Euro-Asian land bridge will become increasingly obvious as the significance of China to the world economy grows.

The EU has already agreed to the further development of the Trans-European Transport Network towards ten Pan-European Crete/Helsinki Corridors on the territory of CEECs. Of particular importance for Europe-Asia routes are the following corridors:

- Corridor No. 2: Berlin - Warsaw - Minsk - Moscow - Nizhny Novgorod
- Corridor No. 3: Berlin/Dresden - Wroclaw - Katowice - Krakow - Lviv - Kiev
- Corridor No. 4: Berlin - Prague - Budapest - Costanza - Sofia - Thessaloniki/ Istanbul
- Corridor No. 5: Venice - Trieste/Koper - Ljubljana - Budapest - Uzgorod - Lviv - Kiev

- Corridor No. 9: Helsinki - Moscow - Kiev - Chisinau - Bucharest - Alexandroupoli

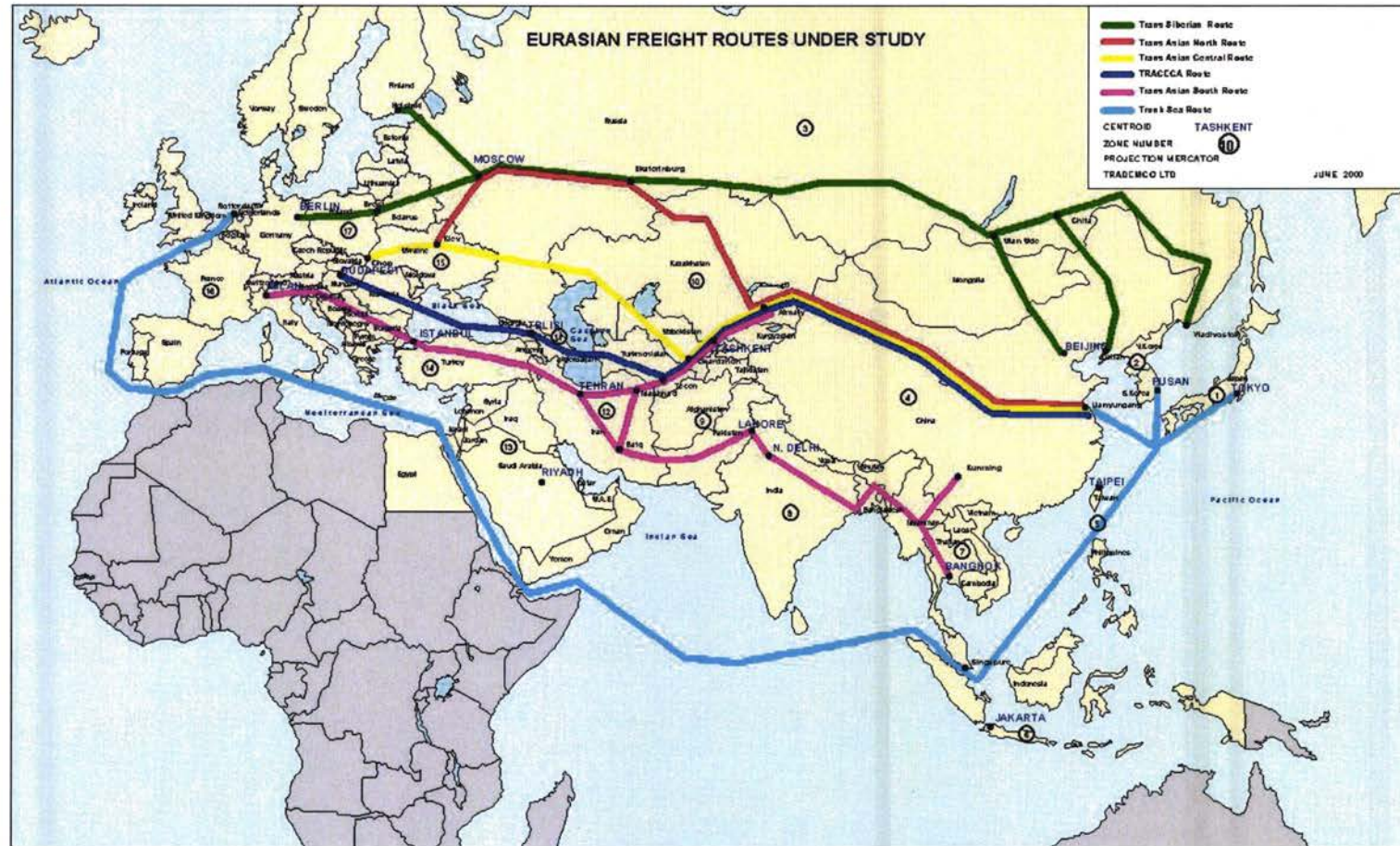
These corridors link into the following Europe - Asia main routes

- Trans-Siberian Route: Moscow - Yekaterinburg - Novosibirsk - Vladivostok / Beijing
- Trans - Asian North Route: Kiev/Moscow - Chelyabinsk - Druzhba - Liangyungang
- Trans-Asian Central Route: Kiev - Almaty - Druzhba - Alashankou - Liangyungang.
- TRACECA: Constanza/Varna - Poti - Baku - Tashkent - Almaty - Aktogay - Druzhba - Alashankou - Liangyungang.
- Trans-Asian South Route: Istanbul - Ankara - Tabriz - Teheran - Mashad - Serakhs - Tashkent - Almaty - Aktogay - Druzhba - Alashankou - Liangyungang.

There are track gauge changes at the following borders: Poland - Belarus (Brest), Slovakia/ Hungary - Ukraine (Chop), Russia - China, Mongolia - China, Kazakhstan - China, Iran-Turkmenistan.

For a case study on different transport routes including rail see Annex 4.

### Eurasian Freight Corridors



### Test Questions

1. Please indicate the correct names of the corridors.

Name	Route
Corridor No. 2	Berlin - Warsaw - Minsk - Moscow - Nizhny Novgorod
Corridor No. 3	Berlin/Dresden - Wroclaw - Katowice - Krakow - Lviv - Kiev
Corridor No. 4	Berlin - Prague - Budapest - Costanta - Sofia - Thessaloniki/ Istanbul
Corridor No. 5	Venice - Trieste/Koper - Ljubljana - Budapest - Uzgorod - Lviv - Kiev
Corridor No. 9	Helsinki - Moscow - Kiev - Chisinau - Bucharest - Alexandroupoli

Name	Route
TAR-S1	Kunming (South China) - Kapikule (Turkish / Bulgarian borders)
TAR-S2	Bangkok - Kapikule
TAR-S3	Sarakhs (Iran/Turkmen borders) - Tehran - Razi (Turkish borders)

Please indicate whether the statements below are right /wrong:

- There are three main corridors addressing freight movements between Asia and Europe: Europe – China via CIS and Middle East; South/S.E. Asia – Central Asia/Europe via Middle East; Far East – Europe via China, Russia (right)
- The Trans-Siberian Route is the one of the main transport corridors Europe- Asia (right)
- Brest and Chop are the main point for change of the track gauges between Europe and CIS-countries. (right)
- The main break-of-gauge point between China and the middle east countries is Druzhba. (right)

### 6.5 Transit Times in Euro-Asian Freight Routes

#### **Learning objectives:**

The applicant should be aware of transit time on main transport routes by rail.

Rail transit times, in general, are lower than sea but higher than road. Indicatively the following comparative picture emerges for transit times by sea or by either rail, or combined sea-rail for movements between Northern



Europe and the Persian Gulf with onward connections to South and South - East Asia:

<b>HELSINKI TO:</b>	<b>Sea</b>	<b>Rail</b>	<b>Combined land-sea</b>
Tehran	33 days	11 to 12 days	33 days
Lahore	41 days	17 to 18.5 days	22 to 24 days
New Delhi	32 days	18 to 20 days	25 to 27 days
Bangkok	31 days	Not applicable	33 to 35 days

Source: UN-ESCAP study, 2001

The above estimates show a distinct transit time advantage for rail over shipping, reflecting the actual differences in distances. While there is no doubt that the rail and combined land-sea options are likely to offer attractive transit times in future, much will have to be done to capitalize on this advantage in the fields of tariffs, services and facilitation.

<b>Rail route</b>	<b>Distance (km)</b>	<b>Indicative transit time* (days)</b>
1. Vladivostok - Moscow - Brest - Berlin (Trans Siberian Rail)	11,830	16
2. Lianyungang - Druzhba - Moscow - Brest - Berlin (TAR North)	11,260	23
3. Lianyungang - Druzhba - Kiev - Chop - Budapest (TAR Central)	11,870	28
4. Lianyungang - Druzhba - Poti - Costanza - Budapest (TRACECA)	11,310	26
5. Lianyungang - Druzhba - Tehran - Istanbul - Milan (TAR South 1)	13,950	33
6. Calcutta - Delhi - Tehran - Istanbul - Milan (TAR South 2)	10,910	27
7. B. Abbas - Jolfa - Poti - Odessa - Moscow	5,790	19
8. B. Abbas - Tabriz - Istanbul - Budapest	5,400	14

Source: UIC study, 2000

\* Includes border crossing delays, as well as loading / unloading time (without customs and security control delays) at the points of origin / destination.

Existing break-of-gauge points at Drushba / Alashankou (China / Kazakhstan), Sarakhs (Turkmenistan / Islamic Republic of Iran) and Brest (Belarus / Poland) are certainly operational hindrances, but do not cause exceptional delays compared with existing institutional barriers, which

represent the main reasons for waiting times and delays at border crossing points. Different types of railway operations for transport to Central Asia have achieved different transit speeds, with commercially organized block trains achieving speeds in excess of 700 kilometers per day. The potential for realizing low transit times could become a reality, once commercially organized block train operations become more widespread.

Rail transit time between Europe and Almaty / Kazakhstan vary between 25 to 35 days, according to ESCAP.

Minimum and maximum transit times, of 15 days and 23 days respectively, for regular and express rail services from ports in China to Kazakhstan are achieved. Freight forwarders have reported that the transfer time at the border between China and Kazakhstan is 2 -3 days, which includes bread-of-gauge handling and customs documentation and proceedings. Meanwhile, data on the container block trains established for shipments from Daewoo Corporation in Republic of Korea via the Chinese port of Lianyungang, just north of Shanghai, reveal that a transit time of 9 days is possible. This suggests that significant reductions in transit time can be achieved if a high level of priority is given to the transit service.

### **Market Share of Rail Transport**

The share of rail transport on total transport (Modal Split) differs widely between the different regions:

EU (15):	13%
CEECs:	38%
USA:	40%
Central Asia:	70%
Russia:	80%

In USA rail haulage accounts for 40% of total freight compared with only 13% in EU It is worth noting that in 1970 the rail share in Europe was 21%.

In Russia almost 80% of land transports are performed by rail (more than 90% of them bulk cargo). In Central Asia (mainly Kazakhstan, Uzbekistan, Turkmenistan) almost 70% of land transports are performed by rail.

In China approximately 35% of domestic freight transports are performed by rail (but only 5% of international transports, as 90% is transported by sea). In Turkey less than 2% of international freight is performed by rail.

**Test Questions**

*Please indicate whether the statement below is right / wrong:*

- a. Rail transport is usually quicker than sea transport. (right)
- b. The average transit time between Helsinki and New Delhi is 10 days. (wrong)
- c. The average transit time between Berlin and Vladivostok with the Trans-Siberian Rail is 16 days. (right)

**6.6 Ways and Means of Transportation**

**Learning objectives:**  
The applicant should be aware of main technologies in rail transport.

**Conventional Transport By Rail**

**Learning objectives:**  
The applicant should be aware of main types of rail wagons and their main technical characteristics. He should have an idea about the different types of gauge.

The main points of rail transport which are of interest to a forwarder are the following:

The overall length of the wagon	12m, 15m, 18.50m ( = three 20' containers, for example); 20m or 25m for a flat wagon
Payload of the wagon	From 20 to max. 50 to 65 t
Speed	depends on lines 24 to 48 hours in the EU
Trainload	in average 50 wagons, 1000 t payload (differs between 800 to maximum 3,000 tonnes)

Compared to road carriage rail transport is limited by:

- The accessibility (stations, rail lines): additional intermediate handling;
- The rigidity of the schedule;
- The shippable height which varies according to the route;
- The operator's monopoly: even if the customer is able to negotiate prices and conditions more effectively today thanks to the competition, they can still find themselves at the mercy of the carrier in case problems arise during the carriage: strikes, technical incidents, and concerning rail lines, the closure of the line.

European freight forwarders generally consider rail freight as a viable possibility when it concerns maritime pre- and post-carriage with direct access to the vessel by the “dock siding” and an interesting flexibility concerning waiting times.

Train operating systems in Europe, comprise, among others.

<b>Shuttle trains</b>	directly operating in a loop between two terminals with fixed composition of rail cars
<b>Block trains</b>	directly operating between two terminals, but not with fixed composition
<b>Part trains</b>	composed of sets of rail cars with more than two destinations and not with fixed composition
<b>Liner trains</b>	similar to passenger trains, with frequent stops, where boxes are loaded / unloaded in a sequence of terminals

As gauges in various countries are different and this can not be changed without vast investments, appropriate transshipment equipment and/or rolling stock is necessary to ensure fast procedures, as is the case between Spain and France and between Poland and Belorussia.

**Different rail gauges** (inner distances between rail tracks)

Due to historical developments we have different rail gauges which must be considered in international transport:

Standard gauge	mm
(Europe, Turkey, China, Middle East, Iran)	
CIS and Finland	1,524 mm
Spain	1,674 mm
Portugal	
India, Pakistan, Bangladesh	1,676 mm

Gauge changes thus are existing:

- Between China & Kazakhstan/Russia
- Between Pakistan & Iran in Zahedan
- Between Iran & Turkmenistan in Sarakhs
- Between Turkey/Iran & Caucasus countries
- Between Poland & Belorussia
- Between Hungary/Slovakia and Ukraine

Rail lines should be capable of accommodating axle loads of at least 20 tons, which is not always the case.

**Different Loading gauges** (maximum width and height of wagon and cargo)

The physical dimensions of a vehicle and its load are governed by a series of height and width profiles, known as loading gauges. These are applied to a given route, to ensure that a vehicle will not collide with a lineside or overline structure, such as station platforms, canopies, overhead power supplies, over bridges or tunnels.

Loading gauge profiles vary by route, reflecting the constraints on rail vehicle size caused by lineside and overline structures.

For more details see Module 3.2.2

**Different Railway Line Classes and Weight Limitations**

The different railway lines within a country and internationally are classified in the SMGS and CIM countries, depending on the possible maximum weight per axle and the possible maximum weight per metre. Since the weakest part of an international transport line determines the maximum weight over the whole line it is important to plan the route, the type of the wagon and the maximum payload accordingly.

$$\text{Maximum Weight per Axle} = \frac{\text{Wagon Weight /t/} + \text{Payload /t/}}{\text{Number of Axles of Wagon}}$$

The forwarder must know the maximum weight per axle (according to railway line class, published in railway tariff), the wagon weight (indicated at each wagon) and the number of axles (indicated by wagon number, e.g. Ea means a 4 axle open wagon, Eaa a 6 axle open wagon). With this information he is able to calculate the maximum possible payload.

$$\text{Maximum Weight per metre} = \frac{\text{Wagon Weight /t/} + \text{Payload /t/}}{\text{Length over bumpers /m/}}$$

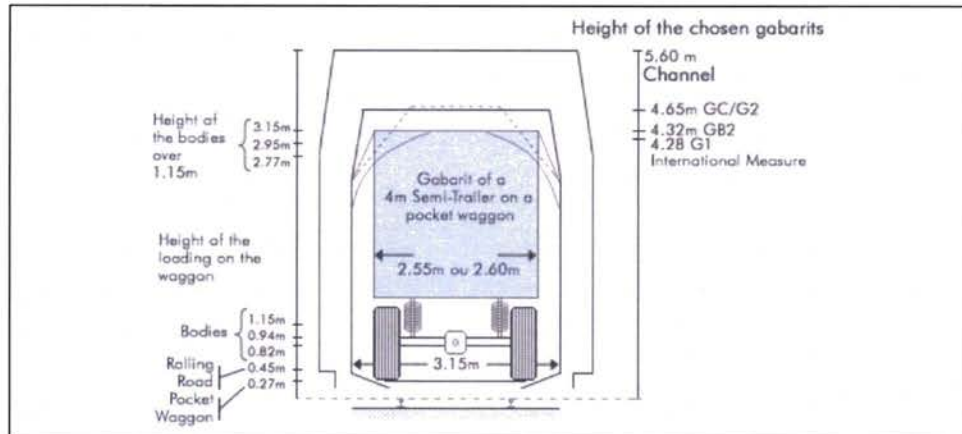
The railway lines are classified according to maximum weight per axle and per metre in the following classes:

Line Class	Maximum Weight per Axle	Maximum Weight per Meter
A	16 t	5.0 t/m
B 1	18 t	5.0 t/m
B 2	18 t	6.4 t/m
C 2	20 t	6.4 t/m
C 3	20 t	7.2 t/m
C 4	20 t	8.0 t/m
D 2	22.5 t	6.4 t/m
D 3	22.5 t	7.2 t/m
D 4	22.5 t	8.0 t/m

Each country has a standard class, but there are exceptions within a country which must be considered. For example Sweden B 1, Netherland B 1, Germany C 2, Great Britain B 1, Turkey B 2, Poland C 3, France C 4 etc.




The maximum total weights per class for a certain wagon are indicated at each wagon, so that the forwarder can elaborate the possible payload by deducting the wagon weight. Note that he must know the lowest classes of the route planned.




**GAUGE**



The gauge of all the loading units used in CT is "coded" on a yellow plate that informs the railwayman about the dimensions of the unit. The capital letters "C" for containers and swap bodies and "P" for semi-trailers in ladle carriages are used to indicate the difference in loading units.

**Types of rail wagons**

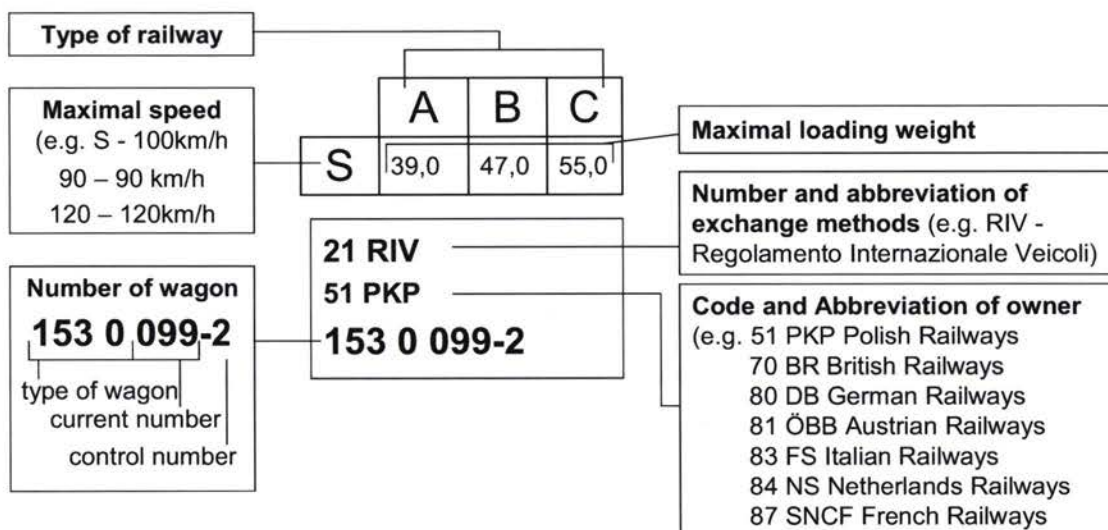
Rail wagons	
<p>Open rail wagon (wagon class E)</p>	
<p>Flat cars (wagon class F, K and S)</p>	
<p>Self-Unloading Wagon (wagon class H)</p>	

<p>Closed Wagon (wagon class G)</p>	 A brown closed wagon, likely used for transporting bulk goods, is shown on a railway track. The wagon has a boxy, rectangular shape with a flat roof and is positioned on a set of tracks. The background shows a clear sky and some railway infrastructure.
<p>Tank Wagon (wagon class U, Z)</p>	 A red tank wagon, used for transporting liquids or gases, is shown on a railway track. The wagon is cylindrical and has "NS Cargo" and "OSTERWALDES" branding on its side. It is positioned on a set of tracks with gravel ballast.
<p>Refrigerated Wagon (wagon class I)</p>	 A red refrigerated wagon, used for transporting perishable goods, is shown on a railway track. The wagon has "Pacific Fruit Express" branding and a logo on its side. It is positioned on a set of tracks with a water tower visible in the background.



### Labeling of wagons

Labeling of wagons is used for information of sender, forwarder and carrier etc. about important characteristics of the wagon.



The control number is calculated as follows:

**2 1 5 1 1 5 3 0 0 9 9 - 2**

multiplication







**2 1 2 1 2 1 2 1 2 1 2**

**4 1 10 1 2 5 6 0 0 9 18**

$4 + 1 + 1 + 0 + 1 + 2 + 5 + 6 + 0 + 0 + 9 + 1 + 8 = 38$  rounded **40** => control number is **2 (40 – 38)**.

**Test Questions**

1. Please give the correct names of the types of rail wagons to the picture.

Name	
Open Wagon	
Flat cars	
Self-Unloading Wagon	
Closed Wagon	
Tank Wagon	
Refrigerated Wagon	

2. Please indicate which types of gauge belong to the countries that are using this type.

1.435 mm	Europe, Turkey, Middle East, Iran and China
1.524 mm	CIS countries and Russia
1.676 mm	India, Pakistan and Bangladesh

3. Please indicate whether the statements below are right /wrong:

- a. Block trains operate directly between two terminals, but not with fixed composition. (right)
- b. Part trains are operate directly in a loop between two terminals with fixed composition of rail cars. (wrong)
- c. Liner trains are similar to passenger trains, with frequent stops, where boxes are loaded / unloaded in a sequence of terminals. (right)
- d. The railway lines are classified according to the maximum number of possible axles per wagon. (wrong)

## 6.7 Combined Transport By Rail

### Learning objectives:

The applicant should be aware of main types of combined transport by rail.

For main definitions given by the UNECE and benefits of the combined transport please read the following on definitions.

### Definitions

The following definitions are given by the United Nations Economic Commission for Europe:

- Intermodal transport : The movement of goods in one and the same loading unit or road vehicle, which uses successively two or more modes of transport without handling the goods themselves in changing modes. By extension, the term intermodality has been used to describe a system of transport whereby two or more modes of transport are used to transport the same loading unit or truck in an integrated manner, without loading or unloading, in a door to door transport chain.
- Combined transport (CT) : Intermodal transport where the major part of the European journey is by rail, inland waterways or sea and any

initial and/or final legs carried out by road are as short as possible. The Railway Companies offer two types of intermodal transport

- Unaccompanied transport, changing from one mode of transport to another using a purpose-built terminal (road, maritime, waterway, rail, air).
- Accompanied transport, also known as "rolling road".

**Unaccompanied Traffic** is the most widespread form of CT (transport of containers, swap bodies and semi-trailers). This form of transport, where only the loading unit is transported by rail, accounts for the largest share of the CT market (78% of shipments).

This form of transport requires a lot of techniques, organisation and infrastructure. For the road transport companies and the freight forwarders, it primarily means that they have to have special containers that can be lifted and transferred using mobile or full gantry cranes. Here we are referring to "vertical loading". These road vehicles with swap bodies or semi-trailers are slightly more expensive to buy than the so-called "normal" road vehicles.

The transport company also has to make sure that the container is removed from the arrival terminal in order to reach its destination.

Unaccompanied transport is especially profitable because of the advantageous ratio between useful load and dead weight.



*Transfer of a tank container*



*Depot of containers*



*Transfer of a semi-trailer*

In the case of **accompanied transport**, the whole lorry is driven up a ramp onto a special low wagon. This is called "horizontal loading". A couchette carriage is made available to the driver, so that he has a comfortable place to sleep during the trip.

At the arrival terminal, he disembarks with his lorry and completes the final leg of the journey to the customer. The advantage here is that the driver can rest during the rail portion of the voyage. Several countries have legislation requiring rest periods, and rail is an ideal way to comply with those

provisions. What is more, working conditions are improved, because there is no night work anymore.

The trains of the "Rolling Road" can be rapidly loaded and unloaded; this technique is particularly suitable when the transport has to be quick. Also, the transporters do not need any special equipment, and nothing in particular is needed at the terminals. It is especially appropriate for short and medium-haul trips (200 to 400 km). But there are also drawbacks, the main one being that the Rolling Road also has to carry a lot of dead weight, meaning the traction of the lorry.



*Lorry on the ramp*



*Rolling Road Train*



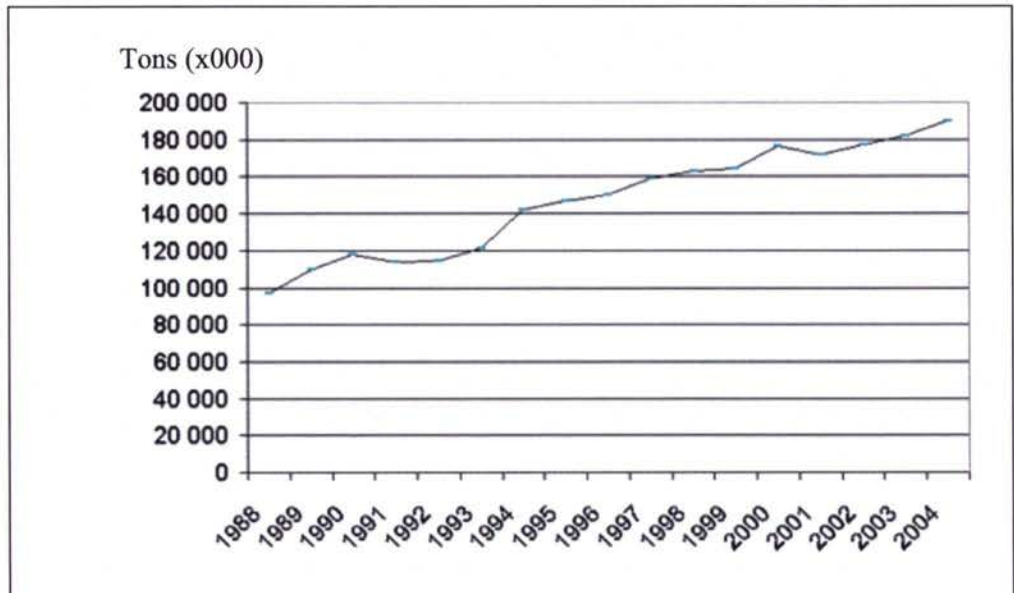
*Rolling Road Train*

### **Benefits of Combined Transport and Statistics**

Combined transport helps safeguard the quality of life and at the same time preserve the economic interests of users by integrating and making optimum use of the resources and assets offered by each transport mode. Indeed, a seamless transition of goods in their loading unit from one mode of transport to another is instrumental in improving productivity throughout the entire transport chain. The main assets of combined transport can thus be summed up as follows:

- Reliability (timekeeping, capacity purchasing)
- Safety and low damage rate of loading (of rail and goods)
- Speed (efficiency)
- Environmental compatibility
- Optimisation of resources of each player in the chain (block trains over long distances)
- Flexibility (concentration of flows, redistribution on arrival)
- Integrated logistics
- Increased transport capacity (44 t instead of 40 t for lorries)
- Low personnel costs
- More effective use of equipment

Rail / Road combined transport more than doubled in the period 1986 - 2000 attaining 180 mil. tons in 2000 and reaching 200 mil. tons in 2005. The average annual growth rate is approximately 5%.



**Growth in Combined Transport by Rail**



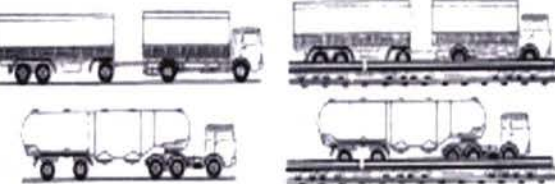
*E.U. and Switzerland and Norway*

Source : UIC

The following techniques are applied in combined transport by rail:

**Containers:** lead to better logistical management of the areas used for loading and unloading goods, since their rigid structure enables up to six of them to be stacked in one pile. Container lengths have been standardised at between 20 and 53 feet (20' and 40' most frequently used). The rated payload of a standard 20' dry container is 21 – 22 t and that of a 40' is 29 - 30 t.

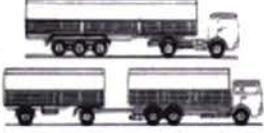
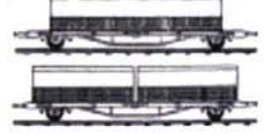
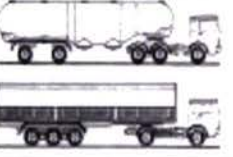
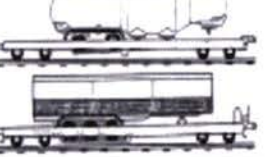
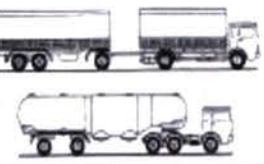
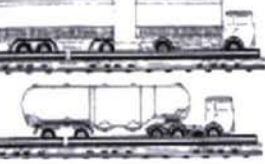


<p><b>Swap bodies:</b> interchangeable body system where the truck body is lifted off the chassis, transported by rail and, at the point of destination, placed on another truck chassis for final delivery; this type of technology does not significantly differ from container system.</p>	
<p><b>Piggy back:</b> or trailer on flat car TOFC system, where semi-trailers are loaded on flat cars (usually by crane) and transported as a unit; at the terminal of destination the semi-trailer is picked up by a tractor for final delivery.</p>	
<p><b>Rolling road (or kangaroo system):</b> where both trucks and trailers are transported by rail; this system is also referred to as the “rolling road”. The trucks roll-on and roll-off horizontally onto / from the railcar.</p>	

For details about techniques for combined transport by rail see Module 3.6.1.  
 For Combined Transport Operators in Rail-Road-Transport see Module 3.6.2.

**Test Questions**

1. Please link the types of combined transport to the pictures.

Type		
Swap bodies		
Piggy back		
Rolling road (or kangaroo system)		

**6.8 European Agreement on Important International Combined Transport Lines and Related Installations (AGTC)**

**Learning Objective:**  
 The student should know the existence of the AGTC and its influence on combined rail transport.

AGTC creates a plan for the development of international combined transport infrastructure and services on the basis of an international network and generally accepted infrastructure and operational standards. The purposes of the AGTC are:

- to facilitate international transport of goods, that are expected to increase as a consequence of growing international trade
- to minimise adverse environmental consequences that such developments might have
- to emphasise the important role of combined transport to alleviate the burden on the European road network and mitigate environmental damage
- to establish legal framework laying down a coordinated plan for the development of combined transport services and the infrastructure necessary for their operation based on internationally agreed performance parameters and standards, in order to attract customers.



Annex II of AGTC identifies gauge interchange stations of importance for international combined transport. At these stations either change of wagon axles / bogies is done either transshipment of loading units by crane or other equipment. Within the TRACECA area such stations are located at Ukrainian borders (Chop, Vado Siret, Deakovo, Motsiska) and at borders between Moldova (Ungeny) and Romania.

Important terminals mentioned in AGTC are these of Chop, Kiev and Lvov, while important ferry link / Ra-Ra that of Samsun - Constanta.

Of the TRACECA countries, Parties of this Agreement are: Turkey, Bulgaria, Romania, Moldova, Georgia, Kazakhstan and Ukraine, as well as 16 countries of EU-25, Russia, Belorussia and some more.

### **Test Questions**

*1. Please indicate whether the statements below are right/wrong*

- a. AGTC creates a plan for the development of international combined transport infrastructure. Right
- b. Important international gauge interchange stations have not been identified by AGTC. Wrong
- c. An interchange gauge station in the Ukraine is Chop. Right

## **6.9 Waybills and Accompanying Documents**

### **Learning objectives:**

The applicant should be aware of main liabilities of the rail carrier and of main contents of the CIM consignment note.

### **Contractual Framework**

#### **Learning objectives:**

The applicant should be aware of main liabilities of the rail carrier.

There is an important difference in the nature of a rail transport contract compared to that of other modes; that is its real rather than consensual character. The contract does not exist until the transport document, made out by the shipper, has been duly stamped by the railway. The transport document acts as a consignment note and is not negotiable.

For wagons which are loaded by the shipper (e.g. in the freight station), the transport operation is preceded by a request for a wagon.

The loading, including stowing and sheeting, is paid by the shipper. The loading and unloading time is around 8 hours in Europe. Practically speaking these operations will often in fact be longer than the frequency of the departures from the station or the rail spur (every 24 hours for example) and can thus be subject to a negotiated agreement. These operations might take 2 days on the dock siding to which are added two additional days of waiting time, if necessary.

The shipper must pay attention to the constraints specific to this method of transport: wedging, stowing, avoiding overloading, paying attention to heights and widths.

The wagon can be sealed, which is mandatory in combined transport and for certain types of goods.

For additional information about transit procedures please read the following:

### Transit Procedures and Facilitation Issues

A very important issue of international freight traffic is transit facilitation at border crossings, as the necessary procedures actually applied are increasing severely the average transit times of the consignments as well as the quantity of documents which, in its turn, leads to increased transport costs. Transit facilitation measures are of equal importance with infrastructure development. This is particularly important along Euro-Asian rail routes where there are frequent border crossings and rail has to compete both in cost and time with sea transport, which does not face such problems. At border crossings there are three types of delays:

- Customs clearance and security control, veterinary / phytosanitary controls (institutional)
- Freight transshipment and bogies exchange (technical)
- Rail operational procedures i.e. train inspection, brake testing, wagons checking, change of locomotives and crew, marshalling, consignments documentation, etc. (operational)

Institutional issues, usually are responsible for the major share of delays at border crossings.

In view of the above, ESCAP at its 48th session in April 1992 adopted Resolution 48/11 on road and rail transport modes in relation to facilitation measures. This resolution recommended that countries in the region, if they have not already done so, consider the possibility of acceding to major international conventions in the field of land transport facilitation. Those conventions were developed by the Economic Commission for Europe (ECE) to provide an international legal base for harmonisation of land transport facilitation measures.

To regulate international rail freight transportation, several countries (mostly CIS) are now using the Agreement on International Railway Freight Communications (SMGS), which was formulated by OSJD. On the other hand, the functioning of the TAR as a landbridge linking Asia and Europe depends also on co-ordination with European states, which regulate their international rail traffic in accordance with the "Uniform Rules Concerning the Contract for International Carriage of Goods by Rail" (CIM), formulated by the Convention Concerning International Carriage by Rail (COTIF). The necessity of harmonising the two systems has been recognised by both international transport organisations: OSJD and the Intergovernmental Organisation for International Carriage by Rail (OTIF).

Since the 1980s several efforts have been made towards this goal. One of the major initiatives in this field is the draft ECE Convention on International Customs Transit Procedures for the Carriage of Goods by Rail. This convention has been designed with the objective of establishing a homogeneous international customs transit system replacing the traditional national customs documents with the CIM Consignment Note. ECE member countries are also studying the possibility of making the convention applicable also in countries, which are not using the CIM Consignment Note but other similar systems.

Institutional issues for transit facilitation can be distinguished in 3 levels:

- At the top level there are multilateral agreements and international conventions. With respect to freight transport, two conventions (standard procedures for customs clearance) are relevant.
  - The Customs Convention on Containers (1972) and Resolution 48/11 (1992).
  - International Convention on Harmonisation of Frontier Control of Goods (1982).In terms of consignment documentation, two conventions are relevant:
  - Convention Concerning International Transport of Goods by Rail (COTIF).
  - Agreement of International Rail Freight Communications (SMGS).
- At the middle level there are bilateral agreements.
- At the bottom level there are joint operations of border stations and of related facilities.

Average border - crossing times in Europe are in the 30 - 40 minutes range, whereas those in the CIS countries are measured in days rather than hours. The ECE recommendation for border stopping time is 60 minutes for international shuttle trains and 30 minutes for combined transport (AGTC). Regional studies carried out under the auspices of TRACECA indicate that border - crossing procedures can be simplified and streamlined and have recommended performance indicators to establish common standards.

It is recognized that the processing time for this type of operation is dependant on the size of train, number of wagons and whether wagons are being inspected by one of two railway organizations. However, it is considered that a target processing time of 120 minutes should be achievable, even on the largest international trains.

### **Test Questions**

*Please indicate whether the statements below are right /wrong:*

- a. The contract is concluded not prior to the stamping of the transport document by the railway. (right)
- b. The loading and unloading time is around 20 hours in Europe. (wrong)

### **6.10 CIM consignment note**

***Learning objectives:***

The applicant should be aware of using of CIM consignment note. He should be able to fill in the form and to address it to the right receivers of copies.

The contract of carriage must be confirmed by a consignment note (please See the following pages) which accords with a uniform model. However, the absence, irregularity or loss of the consignment note shall not affect the existence or validity of the contract which shall remain subject to these Uniform Rules. The consignment note shall be signed by the consignor and the carrier. For details about filling in the CIM consignment note please read the following:

The form is a complex document with the following main sections:

- Top Section:** Includes the title 'LETTRE DE VERTÈBRE' and 'LETTERA DI VERTEBRA', along with 'CIM 1' and 'CIM 2' checkboxes. It contains fields for 'Date de départ' and 'Date d'arrivée'.
- Sender Information (Expéditeur):** Located in the top left, containing fields for name, address, and telephone number.
- Receiver Information (Destinataire):** Located in the top right, containing fields for name, address, and telephone number.
- Goods Description (Marchandises):** A large central section with multiple rows for describing the cargo, including 'Description', 'Quantité', and 'Unité'. It also includes checkboxes for 'Fragile', 'Fusible', and 'Inflammable'.
- Carriage Details (Voitures):** A section at the bottom with columns for 'Voiture', 'Conteneur', 'Date de départ', and 'Date d'arrivée'.
- Administrative Fields:** Various checkboxes and fields for 'Expéditeur', 'Destinataire', and 'Voitures'.

A large diagonal watermark across the center of the form reads: **SPÉCIMEN ORIGINAL DE LA LETTRE DE VERTÈBRE ORIGINALI DELLA LETTERA VERTEBRATA**.

Source : Ret SNCF

(verso)

5070

Définitions des normales et codes - Währungsbezeichnungen und Codes - Indicazione delle valute e codici											
120	121	122	123	124	125	126	127	128	129	130	131
132	133	134	135	136	137	138	139	140	141	142	143
144	145	146	147	148	149	150	151	152	153	154	155
156	157	158	159	160	161	162	163	164	165	166	167
168	169	170	171	172	173	174	175	176	177	178	179
180	181	182	183	184	185	186	187	188	189	190	191
192	193	194	195	196	197	198	199	200	201	202	203
204	205	206	207	208	209	210	211	212	213	214	215
216	217	218	219	220	221	222	223	224	225	226	227
228	229	230	231	232	233	234	235	236	237	238	239
240	241	242	243	244	245	246	247	248	249	250	251
252	253	254	255	256	257	258	259	260	261	262	263
264	265	266	267	268	269	270	271	272	273	274	275
276	277	278	279	280	281	282	283	284	285	286	287
288	289	290	291	292	293	294	295	296	297	298	299
300	301	302	303	304	305	306	307	308	309	310	311
312	313	314	315	316	317	318	319	320	321	322	323
324	325	326	327	328	329	330	331	332	333	334	335
336	337	338	339	340	341	342	343	344	345	346	347
348	349	350	351	352	353	354	355	356	357	358	359
360	361	362	363	364	365	366	367	368	369	370	371
372	373	374	375	376	377	378	379	380	381	382	383
384	385	386	387	388	389	390	391	392	393	394	395
396	397	398	399	400	401	402	403	404	405	406	407
408	409	410	411	412	413	414	415	416	417	418	419
420	421	422	423	424	425	426	427	428	429	430	431
432	433	434	435	436	437	438	439	440	441	442	443
444	445	446	447	448	449	450	451	452	453	454	455
456	457	458	459	460	461	462	463	464	465	466	467
468	469	470	471	472	473	474	475	476	477	478	479
480	481	482	483	484	485	486	487	488	489	490	491
492	493	494	495	496	497	498	499	500	501	502	503
504	505	506	507	508	509	510	511	512	513	514	515
516	517	518	519	520	521	522	523	524	525	526	527
528	529	530	531	532	533	534	535	536	537	538	539
540	541	542	543	544	545	546	547	548	549	550	551
552	553	554	555	556	557	558	559	560	561	562	563
564	565	566	567	568	569	570	571	572	573	574	575
576	577	578	579	580	581	582	583	584	585	586	587
588	589	590	591	592	593	594	595	596	597	598	599
600	601	602	603	604	605	606	607	608	609	610	611
612	613	614	615	616	617	618	619	620	621	622	623
624	625	626	627	628	629	630	631	632	633	634	635
636	637	638	639	640	641	642	643	644	645	646	647
648	649	650	651	652	653	654	655	656	657	658	659
660	661	662	663	664	665	666	667	668	669	670	671
672	673	674	675	676	677	678	679	680	681	682	683
684	685	686	687	688	689	690	691	692	693	694	695
696	697	698	699	700	701	702	703	704	705	706	707
708	709	710	711	712	713	714	715	716	717	718	719
720	721	722	723	724	725	726	727	728	729	730	731
732	733	734	735	736	737	738	739	740	741	742	743
744	745	746	747	748	749	750	751	752	753	754	755
756	757	758	759	760	761	762	763	764	765	766	767
768	769	770	771	772	773	774	775	776	777	778	779
780	781	782	783	784	785	786	787	788	789	790	791
792	793	794	795	796	797	798	799	800	801	802	803
804	805	806	807	808	809	810	811	812	813	814	815
816	817	818	819	820	821	822	823	824	825	826	827
828	829	830	831	832	833	834	835	836	837	838	839
840	841	842	843	844	845	846	847	848	849	850	851
852	853	854	855	856	857	858	859	860	861	862	863
864	865	866	867	868	869	870	871	872	873	874	875
876	877	878	879	880	881	882	883	884	885	886	887
888	889	890	891	892	893	894	895	896	897	898	899
900	901	902	903	904	905	906	907	908	909	910	911
912	913	914	915	916	917	918	919	920	921	922	923
924	925	926	927	928	929	930	931	932	933	934	935
936	937	938	939	940	941	942	943	944	945	946	947
948	949	950	951	952	953	954	955	956	957	958	959
960	961	962	963	964	965	966	967	968	969	970	971
972	973	974	975	976	977	978	979	980	981	982	983
984	985	986	987	988	989	990	991	992	993	994	995
996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007
1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019
1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031
1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043
1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055
1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067
1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079
1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091
1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103
1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115
1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127
1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139
1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151
1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163
1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175
1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187
1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199
1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211
1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223
1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235
1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247
1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259
1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271
1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283
1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295
1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307
1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319
1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331
1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343
1344	1345	1346	1347	1348	1349	1350	1351	1352	135		

### WORDING OF THE CONSIGNMENT NOTE (CIM)

The consignment note must contain the following particulars:

- a) the place at which and the day on which it is made out;
- b) the name and address of the consignor;
- c) the name and address of the carrier who has concluded the contract of carriage;
- d) the name and address of the person to whom the goods have effectively been handed over if he is not the carrier referred to in letter c);
- e) the place and the day of taking over of the goods;
- f) the place of delivery;
- g) the name and address of the consignee;
- h) the description of the nature of the goods and the method of packing, and, in case of dangerous goods, the description provided for in the Regulation concerning the International Carriage of Dangerous Goods by Rail (RID);
- i) the number of packages and the special marks and numbers necessary for the identification of consignments in less than full wagon loads;
- j) the number of the wagon in the case of carriage of full wagon loads;
- k) the number of the railway vehicle running on its own wheels, if it is handed over for carriage as goods;
- l) in addition, in the case of intermodal transport units, the category, the number or other characteristics necessary for their identification;
- m) the gross mass or the quantity of the goods expressed in other ways;
- n) a detailed list of the documents which are required by customs or other administrative authorities and are attached to the consignment note or held at the disposal of the carrier at the offices of a duly designated authority or a body designated in the contract;
- o) the costs relating to carriage (the carriage charge, incidental costs, customs duties and other costs incurred from the conclusion of the contract until delivery) in so far as they must be paid by the consignee or any other statement that the costs are payable by the consignee;
- p) a statement that the carriage is subject, notwithstanding any clause to the contrary, to these Uniform Rules.



**Distribution of copies:**

1 copy (Consignment Note Original)	is handed over to the consignee when the goods have reached their destination
2 copy (Way Bill)	for the destination carrier for his data collection
3 copy (Acknowledgment of Acceptance)	for the station of destination
4 copy (Consignment Note Duplicate)	is handed over to the sender after the carrier has received the goods
4a copy	is a special copy for the sender
5 copy (Dispatch note)	for the dispatch carrier for his data collection.

The carrier must certify the taking over of the goods on the duplicate of the consignment note in an appropriate manner and return the duplicate to the consignor. The consignment note shall not have effect as a bill of lading. That means it can not be traded. Nevertheless it can serve as a document which proves the delivery of goods and facilitates payment.

A consignment note must be made out for each consignment. In the absence of a contrary agreement between the consignor and the carrier, a consignment note may not relate to more than one wagon load.

The consignment note and its duplicate may be established in the form of electronic data registration which can be transformed into legible written symbols. The procedure used for the registration and treatment of data must be equivalent from the functional point of view, particularly so far as concerns the evidential value of the consignment note represented by those data.

**Exercise CIM (fill in an “x” in the field CIM 1, please use for this exercise CIM exercise.ppt)**

A rail carrier Railion Deutschland AG (58) agrees on a contract for the transport of cement “Bonus” in 50kg-paper sacks at Euro-pallettes; 30 Palettes NHM code 25631 (fill in the field 21) (gross weight 30.000 kg (25) from Bonus GmbH, 10245 Berlin, Germany (1) (V.A.T. number - DE 1234567890, number 2541 (2)) to Bud sp. z o. o., ul. 3 maja, 6, 53124 Chełm, Poland (4) at 12.04.2006 (16). The order number is 403.2005 (7) to contract No. 12458 from 01.01.2005 (15). An invoice is also attached to this CIM. (9). The wagon number is 21/51 153 0099 – 2 (18). The rail carrier for transportation in Poland is PKP (57).

The station of dispatch is Berlin Nordost (10). Please give a number of the station of dispatch in the field (12). Use for this the table of DIUM, see below. The board crossing is planned In Frankfurt(oder)/Kunowice (13). Please give a number of the station of board crossing in the field (14). Use for this the table of DIUM. The station of destination is Chełm, Poland (16). Please give a number of the station of destination in the field (17). Use for this the table of DIUM .

The identification number of shipment is 80 03237-5 2180 77777-7 (62).

**Please fill in the information above into the correct fields of the form on the following page.**

<input checked="" type="checkbox"/> A remplir par l'expéditeur / Varski Avazovnik wazavnik <input checked="" type="checkbox"/> Delivered par voie ferrée / Zehnfarbner ankommen (Code - Partie 30, 32, 33, 34, 35, 36)			
Lettre de voiture CIM <input type="checkbox"/> <b>Frachtblauf CIM</b> Lettre wagon CUV <input type="checkbox"/> <b>Wagenbrief CUV</b>			
Expéditeur / Absender: <b>Bonus GmbH</b> Berlin Germany DE 1234567890 Bud sp. z o. o., Ul. 3 maja, 6 53124 Cheim		2541	Date de l'expédition / Expeditionsdatum: 04 12 06 Destinataire / Empfänger: <b>Order No. 403.2005</b> Adresse / Adresse: <b>VAM, Invoice</b>
Lieu d'origine / Ursprung: <b>Berlin Nordost</b> Code de l'origine / Ursprungscode: <b>80 03237-5</b>		Date de l'arrivée / Ankunftsdatum: 04 12 06 Lieu de destination / Bestimmungsort: <b>Cheim, Poland</b> Code de destination / Bestimmungsortcode: <b>51 05090-6</b>	
Conditions commerciales / Handelsbedingungen: <b>687 Frankfurt(Oder)/Kunowice</b> Référence / Referenz: <b>contract No. 12458 from 01.01.2005</b>		Numéro de wagon / Wagen-Nr.: <b>21/51 153 0099 - 2</b> Type de wagon / Wagentyp: <b>EXW</b> Incoterms: <input checked="" type="checkbox"/> EXW	
Description des marchandises / Beschreibung der Waren: <b>Cement "Bonus"</b> 50kg-paper sacks at Euro-pallettes 30 Pallettes		Poids net / Nettogewicht: <b>25631</b> Poids brut / Bruttogewicht: <b>30.000</b> RID <input type="checkbox"/>	
A: 80 03237-5      EUR 5.000 B: 8087017      88      EUR 15.000 C: 51 687      723		Code de l'origine / Ursprungscode: 80 Code de destination / Bestimmungsortcode: 03237-5 Code de l'origine / Ursprungscode: 51 Code de destination / Bestimmungsortcode: 05090-6	
Expéditeur / Absender: <b>PKP</b> Adresse / Adresse: <b>PKP</b>		Date de l'arrivée / Ankunftsdatum: <b>80</b> Code de destination / Bestimmungsortcode: <b>03237-5</b> Code de l'origine / Ursprungscode: <b>2180</b> Code de destination / Bestimmungsortcode: <b>77777-7</b>	
Expéditeur / Absender: <b>Railion Deutschland AG</b> Adresse / Adresse: <b>Railion Deutschland AG</b>		Code de l'origine / Ursprungscode: <b>1</b> Code de destination / Bestimmungsortcode: <b>1</b>	

**Please calculate charges for this transportation.**

INCOTERM are used for definition of transportation charges (20): Ex work (EXW).

The DB-Tariff No. 8087017 (A 75) is used for the destination from Berlin Nordost to Frankfurt(Oder)/Kunowice. Please insert the numbers of the stations in fields (A 70) (80 03237-5 , 80 09853-3). Use for this the table of DIUM. Please check a destination between the stations (in the field (A 76) – 88 km). Use for this the table of DIUM. The charge is EUR (A 73) 5.000 (A 74).

The PKP-Tariff No. 58965 (B 75) is used for the destination from Frankfurt(Oder)/Kunowice to Chelm. Please insert the numbers of the stations in fields (B 70) (51 687, 51 05090-6). Use for this the table of DIUM. Please check a destination between the stations (in the field (B 76) – 723 km). Use for this the table of DIUM. The charge is EUR (B 73) 15.000 (B 74).

DIUM for Germany (Excerpt)

				DE (80)												
Número de code Kode- nummer Code- number Numero di codice	de von da	ou vice versa oder umgekehrt o vice versa	a nach zi	DK (80)		SE (74)			LT(24)		PL (51)					
				Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance	Flensburg Penzance
				406	021	022	107	109	896	690	688	687	686	684	681	
04361	2	Baruth (Mark)	4,10	243	522	704	396	361	335	169	113	128	123	132	179	221
14433	7	Basel Bad Gbf	3,4,10	461	1015	1197	1159	880	1098	906	876	891	922	952	999	1041
491		Basel Bad Gbf	1,11	461	1015	1197	1159	880	1098	906	876	891	922	952	999	1041
14242	2	Basel Bad Gbf Ubf	3,4,10	461	1015	1197	1159	880	1098	906	876	891	922	952	999	1041
05245	6	Battenberg	4,8,10	112	640	822	784	505	723	586	556	571	602	614	654	683
25290	8	Baumholder	4,8,10	141	841	1023	988	709	927	735	705	720	751	781	828	870
48205	9	Baunatal	4,10	111	511	693	655	376	594	457	427	442	473	485	525	564
06099	6	Bautzen	4,10	272	699	871	561	528	500	73	153	168	219	260	344	386
14867	6	Bebitz	4,8,10	253	457	679	493	343	432	264	234	249	251	255	295	337
05605	1	Bebra	3,4	111	531	713	675	396	614	420	390	405	436	466	513	563
35519	8	Bebra leere Laes-Wagen	4	111	531	713	675	396	614	420	390	405	436	466	513	563
51708	6	Beckedorf	4	032	297	479	464	185	403	459	420	420	373	389	396	395
51723	5	Becklingen	4,10	032	283	465	450	171	389	473	424	434	367	383	410	403
57258	6	Beckum	4	071	467	649	652	356	591	569	539	554	514	510	537	564
57259	4	Beckum Ost	4,10	071	468	650	653	357	592	568	538	553	515	511	538	565
51607	0	Beedenbostel	4,10	032	337	519	475	196	414	439	403	403	355	352	375	374
03299	5	Beeskow	4,10	242	542	724	414	381	353	163	107	84	37	78	194	236
05008	8	Beiseförth Ubf	4,10	111	534	716	678	399	617	443	413	428	459	489	535	577
57273	5	Belecke	4,10	103	521	703	683	404	622	567	537	552	539	535	562	589
14966	9	Bendorf (Rhein)	4,8,10	132	693	885	868	572	867	703	673	688	713	726	753	780
10370	5	Benninghausen	4,8,10	103	500	682	662	383	601	546	516	531	518	514	541	568
56623	2	Benzen	4,8,10	032	295	477	464	184	403	489	426	426	399	395	422	421
472		Berg (Pfalz) Grenze	1,11	142	847	1029	991	712	930	738	708	723	754	784	831	873
51719	3	Bergen (b Celle)	4	032	291	473	458	179	397	465	425	425	373	375	402	401
51720	1	Bergen (Celle) Lagerbahnhof	4,8,10	032	294	476	461	182	400	468	423	423	382	376	405	404
15639	8	Bergisch Gladbach	4,8,10	095	610	792	755	439	734	639	609	604	607	603	680	700
10009	9	Bergkamen	4,8,10	083	496	678	681	385	620	599	569	584	543	539	566	593
22473	3	Bergheimfeld	4,8,10	182	704	886	777	569	718	482	452	467	498	528	575	612
03237	5	Berlin Nordost	3,4,8,10	221	480	662	336	319	275	196	140	135	88	78	119	161
03355	5	Berlin Osthafen	4,10	221	476	658	343	315	282	195	139	134	87	82	126	168
59501	7	Berlin Teltowkanal	4	221	471	653	359	310	298	197	141	141	94	97	142	184
03095	7	Berlin Westhafen	4,8,10	221	460	642	353	299	292	214	158	153	106	101	136	178
03371	2	Berlin-Grünau	4,8,10	221	480	662	352	319	291	180	124	131	84	88	135	177
03231	8	Berlin-Lichtenberg	4,8,10	221	475	657	341	314	280	196	140	135	88	78	124	166
03065	0	Berlin-Lichterfelde West	4,8,10	221	468	650	368	307	307	206	150	150	103	106	151	193
03085	8	Berlin-Marienfelde	4,8,10	221	468	650	366	307	305	204	148	148	101	104	149	191
03093	2	Berlin-Moabit	4,10	221	456	638	349	295	288	210	154	149	102	97	132	174
03018	9	Berlin-Neukölln	4,8,10	221	467	649	355	306	294	193	137	137	90	93	138	180
03078	3	Berlin-Reinickendorf	4,8,10	221	466	648	345	305	284	206	150	145	98	93	128	170
59504	1	Berlin-Rudow Nord	4,8,10	221	477	659	365	316	304	203	147	147	100	103	148	190
03117	9	Berlin-Ruhleben	4,8,10	221	448	630	348	287	287	212	156	156	109	105	140	182
03146	8	Berlin-Rummelsburg	4,8,10	221	475	657	342	314	281	191	135	130	83	82	125	167
59602	3	Berlin-Spandau Johannesstift	4,8,10	221	458	640	358	297	297	222	166	166	119	115	150	192
59601	5	Berlin-Spandau OstHE	4,8,10	221	452	634	352	291	291	216	160	160	113	109	144	186
03107	0	Berlin-Treptow	4,8,10	221	457	649	355	306	294	193	137	137	90	93	138	180
03586	5	Berlin-Wilhelmsruh	4,8,10	221	502	684	358	341	297	238	182	177	130	120	141	183
24184	4	Bernburg	4,10	253	498	670	492	334	431	268	238	253	263	254	294	336
24405	3	Bernburg Zementwerk	4,8,10	253	491	663	458	327	435	275	245	250	257	251	301	343
06350	3	Berthelsdorf (Erzgeb)	4,8,10	274	636	832	566	524	505	176	185	200	247	288	349	391
08518	3	Bestwig	4,10	103	560	742	708	429	647	558	528	543	564	560	587	614

21  
01.01.2006

			DE (80)														
Número de code Kode- nummer Code- number Numero di codice	de von fra	ou vice versa oder umgekehrt eller omvendt	a nach til	DK (86)		SE (74)			LT24		PL (51)						
				Flensburg Pudborg	Flensburg Malmö Stora Belt	Sassnitz See Trelleborg	Mitte See Libeck Malmö Trelleborg	Stettin Klaipeda	Flensburg Białystok	Frankfurt Zielona Gora	Guben Gubin	Frankfurt Kunowice	Kielce Kielce	Tarnobrzeg Tarnobrzeg	Granow Granow		
				1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11	1, 11
29514	7	Fellbach	4, 10	162	865	1047	1001	730	349	701	676	691	722	752	799	841	
03488	4	Ferch-Lienewitz	4	243	469	651	369	308	308	230	178	181	134	138	174	213	
08338	6	Ferndorf (Kr Siegen)	4, 8, 10	104	613	795	798	502	737	632	602	617	522	553	583	630	672
22336	2	Feucht	4, 10	184	796	978	832	661	771	532	507	522	553	583	630	672	
29585	7	Fichtenberg	4, 8, 10	161	832	1014	954	697	893	654	629	644	675	705	752	794	
08267	7	Finnentrop	4, 8, 10	104	577	759	762	466	701	666	636	651	624	620	647	674	
04328	1	Finsterwalde (Niederlausitz)	4	244	584	766	458	423	397	126	70	85	128	169	241	283	
02204	6	Fischach (Schwab)	4, 8, 10	202	915	1097	979	780	918	679	654	669	700	730	777	819	
20180	6	Fischbach (Inn)	4, 8, 10	206	1030	1212	1038	895	977	721	702	717	748	789	836	878	
08171	1	Flandersbach	4, 8, 10	092	577	759	764	466	703	692	652	677	642	635	685	692	
24048	1	Flechtingen	4, 10	252	396	578	483	250	422	315	285	300	275	278	312	339	
406		Flensburg Grenze	1, 11	011	0	196	483	185	422	660	604	604	557	553	538	456	
021		Flensburg Großer Belt Grenze	1, 11	011	196	0	665	367	604	842	786	786	739	735	720	638	
01425	8	Flensburg Weiche	4, 8, 10	011	7	189	476	178	415	653	597	597	550	546	531	449	
11120	3	Flörsheim (Main)	4, 8, 10	123	716	898	860	581	799	607	577	592	623	653	700	743	
22132	5	Forchheim (Oberfr)	4, 10	183	786	968	780	646	719	485	455	470	501	531	578	620	
04044	4	Forst (Lausitz)	4, 10	244	602	784	474	441	413	102	2	61	112	153	257	299	
690		Forst (Lausitz) Grenze	1, 11	244	604	786	476	443	415	104	0	63	114	155	259	301	
24541	5	Forsthaus Eiche	4, 8, 10	252	417	599	481	271	423	308	278	293	268	271	307	339	
20220	0	Forsting	4, 10	206	1003	1185	1003	868	942	686	667	682	713	754	801	843	
05310	8	Frankenberg (Eder)	4, 10	112	628	810	772	493	711	574	544	559	590	602	642	671	
06308	1	Frankenberg (Sachs)	4, 8, 10	274	652	834	572	498	511	210	204	219	253	294	355	397	
11073	4	Frankfurt (Main) Hgbf	3, 4, 8, 10	123	696	878	840	561	779	587	557	572	603	633	680	722	
11081	7	Frankfurt (Main) Ost	3, 4	123	690	872	834	555	773	581	551	566	597	627	674	716	
11069	2	Frankfurt (Main) Ost Ubf	4, 10	123	690	872	834	555	773	581	551	566	597	627	674	716	
11085	8	Frankfurt (Main) Osthafen	2, 3, 4, 8, 10	a,m	123	690	872	834	555	773	581	551	566	597	627	674	716
11079	1	Frankfurt (Main) Westhafen	2, 3, 4, 8, 10	a,m	123	699	881	843	564	782	590	560	575	606	636	683	725
09853	3	Frankfurt (Oder) Grenze	1, 11	242	557	739	394	396	333	170	114	55	0	49	165	207	
03173	2	Frankfurt (Oder) Oderbrücke	4, 10	242	555	737	392	394	331	168	112	53	2	47	163	205	
39420	5	Frankfurt (Oder) Pbf	4, 8, 10	242	553	735	390	392	329	166	110	51	4	45	161	203	
71772	8	Frankfurt (Oder) Ubf	4, 8, 10	f	242	553	735	390	392	329	166	110	51	4	45	161	203
11097	3	Frankfurt-Griesheim	4, 10	123	699	881	843	564	782	590	560	575	606	636	683	725	
11001	5	Frankfurt-Griesheim Industriepark	4, 8, 10	123	699	881	843	564	782	590	560	575	606	636	683	725	
11101	3	Frankfurt-Höchst	3, 4, 10	123	703	885	847	568	786	594	564	579	610	640	687	729	
05061	7	Frankfurt-Höchst Industr.-p. KV-Wg	4, 8, 10	123	703	885	847	568	786	594	564	579	610	640	687	729	
11102	1	Frankfurt-Höchst Industriepark	4, 8, 10	123	703	885	847	568	786	594	564	579	610	640	687	729	
22165	5	Frauenaurach	4, 8, 10	184	789	971	799	654	738	504	474	489	520	550	597	639	
48005	3	Frechen	4, 10	a,m	095	522	591	307	511	755	711	58	636	683	685	692	719
58574	5	Fredenbeck	4, 10	a	031	251	433	438	140	377	542	488	458	441	437	464	411
06349	5	Freiberg (Sachs)	4, 10	274	675	857	561	519	500	171	180	195	242	283	344	386	
14352	9	Freiburg (Breisgau) Gbf	3, 4	171	954	1136	1098	819	1037	845	815	830	861	891	938	980	
26188	3	Freihöls	4, 8, 10	192	633	1021	804	685	743	487	468	483	514	555	602	644	
20110	3	Freilassing	4, 8, 10	206	1060	1242	1025	906	964	708	689	704	735	776	823	865	
06342	0	Freital-Hainsberg	4, 10	273	649	831	530	488	469	140	149	164	211	252	313	355	
06340	4	Freital-Potschappel	4, 10	273	646	828	527	485	466	137	146	161	208	249	310	352	
13230	8	Frellstedt	4, 8, 10	a,m	051	400	582	512	254	461	330	300	315	290	293	329	361
51202	0	Frickenhäuser	4, 10	162	891	1073	1027	756	965	732	702	717	748	778	825	867	
29260	7	Fridingen (b Tuttlingen)	4, 8, 10	172	1008	1190	1112	873	1051	812	787	802	833	863	910	952	
11381	1	Friedberg (Hess)	3, 4	123	663	845	807	528	746	595	565	580	611	631	677	708	
15575	4	Friedrich Wilhelmshütte	4, 8, 10	095	521	603	305	510	745	710	580	695	685	684	691	718	

## DIUM for Poland

## (Excerpt)

PL(51)

Numero de code Kode- nummer Code number Numer kodowy	de von from Numer od	ou vice versa oder umgekehrt or vice versa lub odwrotnie	à nach a fro do	CZ(54)				DE(80)			
				GLUCHOLAZY MIKULOVCE 11	MIEDZYLESIE LICHKOV 11	MIEROSZÓW MEZIMESTI 11	ZAMIDÓW FRYDLANT V ČECHÁCH 11	BIELAWA DOLNA HORKA 11	ZASIEKI FORST (LAUSITZ) 11	GUBIN GUBEN 11	KUNOWICE FRANKFURT/ODER 11
				824	823	822	820	696	690	688	687
02723-5	BUK		10,B	335	338	295	264	229	220	145	144
07420-3	BUKOWNO		8,K	179	284	312	408	373	410	440	464
06400-6	BUSKO ZDRÓJ		A	331	412	439	525	490	527	557	581
06134-1	BYCZYNA KLUCZBORSKA		A	162	243	212	295	260	297	327	342
01676-6	BYDGOSZCZ EMILIANOWO		3,A,F	421	424	381	410	375	366	316	315
01840-8	BYDGOSZCZ GŁÓWNA		3,A,E,F,H	430	433	390	419	384	375	325	301
01678-2	BYDGOSZCZ LĘGNOWO		8,10	437	440	397	426	391	382	332	312
01671-7	BYDGOSZCZ WSCHÓD		3,A,F,H	433	436	393	422	387	378	328	308
05739-8	BYSTRZYCA KŁODZKA PRZEDMIEŚCIE		10,B	106	23	93	203	208	273	331	355
05062-5	BYSTRZYCA KOŁO LUBLINA		A	513	594	621	707	672	683	668	667
02755-7	BYTNICA		10,B	323	326	251	193	158	149	74	52
07230-6	BYTOM		3,A,H,K	133	238	266	362	327	364	394	418
07255-3	BYTOM BOBREK		3,8,10,K	130	235	263	359	324	361	391	415
07241-3	BYTOM KARB		3,A,K	131	236	264	360	325	362	392	416
07242-1	BYTOM KARB B		3,8,K	131	236	264	360	325	362	392	416
07243-9	BYTOM KARB C		3,8,K	131	236	264	360	325	362	392	416
00555-3	BYTÓW		A	560	563	520	529	494	485	435	375
01632-9	BZOWO GORAJ		8	392	395	352	356	321	312	262	261
03894-3	CELESTYNÓW		10,B	438	519	513	596	561	563	520	519
07870-9	CHABÓWKA		A	269	374	402	506	471	508	538	562
06790-0	CHAŁUPKI		3,A,H,K	128	233	261	365	330	367	397	421
825	CHAŁUPKI GR		11,K					332	369	399	423
06460-0	CHARSZNICA		10,B	225	330	358	454	419	456	486	510
05090-6	CHEŁM		3,A,H	569	650	677	763	728	739	724	723
05106-0	CHEŁM CEMENTOWNIA		3,8	573	654	681	767	732	743	728	727
07732-1	CHEŁM ŚLĄSKI		10,A,K	167	272	300	396	361	398	428	452
05105-2	CHEŁM WSCHODNI		3,10,A	571	652	679	765	730	741	726	725
01921-6	CHELMCE		A	377	413	370	399	364	355	305	304
07794-1	CHEŁMEK		8,10	184	289	317	413	378	415	445	469
02016-4	CHEŁMZA		A,E,F	448	451	408	437	402	393	343	342
06426-1	CHMIELNIK		A	320	401	428	514	479	516	546	570
06570-6	CHMIELÓW KOŁO TARNOBRZEGU		8	394	475	502	588	553	590	620	644
06571-4	CHMIELÓW KOŁO TARNOBRZEGU B		8	394	475	502	588	553	590	620	644
03028-8	CHOCICZA		A	281	284	241	286	251	242	228	227
01956-2	CHOCIW ŁASKI		A	228	309	322	405	370	378	387	392
01618-8	CHODZIEŻ		A	381	384	341	345	310	301	251	235
01333-4	CHOJNA		A	434	437	362	304	269	260	185	95
01560-2	CHOJNICE		3,A,E,H	482	485	442	451	416	407	357	297
05400-7	CHOJNÓW		A	188	191	116	103	68	123	198	222
08154-7	CHORZELÓW		10,A	373	478	506	602	567	604	634	658

Numero de code Kode- nummer Code number Numer kodowy	de von Code from Numer od	ou vice versa oder umgekehrt or vice versa or vice versa lub odwrotnie	á nach a fro do	CZ(54)				DE(80)						
				GLUCHOLAZY MIKULOVCE 11	MIEDZYLESIE LICHKOV 11	MIEROSZÓW MEZIMESTI 11	ZAWIDÓW FRYDLANT V ČECHÁCH 11	BIELAWA DOLNA HORKA 11	ZASIEKI FORST (LAUSITZ) 11	GUBIN GUBEN 11	KUNOWICE FRANKFURT/ODER 11			
				824	823	822	820	696	690	688	687			
687	KUNOWICE GR		11	375	378	303	245							
04925-4	KUNÓW		8	369	450	477	563	528	565	589	594			
04346-3	KURZAGÓRA		8,10	264	267	224	228	193	184	193	198			
03220-1	KUTNO		3,A	363	442	399	444	409	400	357	356			
06888-2	KUŹNIA RACIBORSKA		A,K	92	197	225	329	294	331	361	385			
02500-7	KUŹNICA BIAŁOSTOCKA		3,10,A	643	724	718	801	766	768	725	724			
844	KUŹNICA BIAŁOSTOCKA GR		11	647	728	722	805	770	772	729	728			
02310-1	KWIDZYN		3,A,H	526	529	486	515	480	471	421	416			
02311-9	KWIDZYN B		3,8,F	526	529	486	515	480	471	421	416			
01291-4	LAS SUWALSKI		8	719	800	785	814	779	770	720	719			
01720-2	LASKOWICE POMORSKIE		A	484	487	444	473	438	429	379	355			
04287-9	LASOCICE		8,10	242	245	198	192	157	148	157	176			
03650-9	LEGIONOWO		A	424	505	499	582	547	547	504	503			
05300-9	LEGNICA		3,A	171	174	99	121	86	123	180	204			
06875-9	LEKARTÓW		A,K	116	221	249	353	318	355	385	409			
06806-4	LESZCZYNY		8,10,K	127	232	260	364	329	366	396	420			
04260-6	LESZNO		3,A,E,F,H	235	238	195	199	164	155	164	169			
04128-5	LESZNO GÓRNE		A	218	221	146	119	84	75	154	178			
06213-3	LEWIN BRZESKI		A	96	177	158	244	209	246	276	300			
08322-0	LEŻAJSK		A,H	446	551	579	675	640	677	707	731			
00525-6	ŁĘBORK		3,A	630	633	590	594	559	550	500	434			
07743-8	ŁĘDZINY		8,K	167	272	300	397	361	399	428	452			
00935-7	ŁĘGAJNY		8	600	603	560	589	554	545	495	494			
07790-9	LIBIAŻ		8	190	295	323	419	384	421	451	475			
02261-6	LIDZBARK		8,10	541	544	501	530	495	486	436	435			
08220-6	LIMANOWA		A,H	316	421	449	553	518	555	585	609			
06523-5	LIPA		A	443	524	551	637	602	639	669	693			
01552-9	LIPKA KRAJEŃSKA		A	457	460	417	421	386	377	327	267			
02002-4	LIPNO		A,E	474	477	434	463	428	419	369	368			
08478-0	LUBACZÓW		A	478	583	611	707	672	709	739	763			
05250-6	LUBAŃ ŚLĄSKI		A,E	237	196	110	30	35	100	195	219			
05060-9	LUBARTÓW		A	524	605	632	718	683	694	679	678			
01631-1	LUBASZ KOŁO CZARNKOWA		10,B	388	391	348	352	317	308	258	257			
05550-9	LUBAWKA		10,B	173	132	46	126	131	196	278	302			
05328-0	LUBIN GÓRNICZY		A	193	196	121	143	108	145	158	182			
05050-0	LUBLIN		3,A,F,H	496	577	604	690	655	666	651	650			
05040-1	LUBLIN TATARY		3,A,F	499	580	607	693	658	669	654	653			
05137-5	LUBLIN ZEMBORZYCE		10,A	505	586	613	699	664	675	660	659			
04657-3	LUBLINEK		8,10	288	369	332	415	380	388	397	402			
07140-7	LUBLINIEC		3,A,H,K	132	213	240	328	291	328	358	382			



After receiving the goods, the manager of the Bud sp. z o. o. signs the consignment note. Who should receive the first, second, third and fourth copy of the consignment note? Please indicate the correct answer.

1 copy (Consignment Note Original)	the consignee
2 copy (Way Bill)	the destination carrier
3 copy (Acknowledgment of Acceptance)	the station of destination
4 copy (Consignment Note Copy)	the sender
5 copy (Dispatch note)	the dispatch carrier

For more information about CIM consignment note please read the following:

The Convention concerning International Transport by Rail (COTIF) contains the "Uniform Rules concerning the transport of goods by Rail, RU-CIM". The transport document is a unified form, the Rail consignment note.

Railways often do not assume liability for the quantity of goods handed over unless this quantity has been checked. It is therefore in the best interests of the shipper to ask that weighting take place. They can do this by writing the request on the waybill, a service for which they will pay a supplementary charge. The shipper cannot ask for a verification of the number of parcels. The right of disposal of the shipper stops:

- Upon delivery
- When the consignee asserts their right to the goods
- When the goods enter the country of destination, except in the case of a carriage forward shipment or when the shipper refuses the consignee's right of disposal of the goods by means of a specific clause. The railway carries out Customs formalities during the trip, unless requested not to do so, and upon departure and arrival if requested to do so.

Carriage forward shipments are generally accepted, except for certain goods. The carriage charges and the ancillary charges can be paid by the shipper either integrally or only up to a point on the border.

The liability of the railways is tacitly understood to exist, but follows rules of exemption much like the CMR. General clauses of exemption are: the fault of the claimant, inherent vice of the goods or through "circumstances which the railway could not avoid and the consequences of which it was unable to prevent". Specific causes of exemption are nine in number and if it is established that the damage could have occurred through one of these nine cases, it is up to the contractor to prove that this was not the case.

Reimbursement covering material damage is limited to a rate per kg gross weight, to which are added carriage costs and other ancillary charges. Immaterial loss is not reimbursed except in the case of a specific delivery declaration (the declaration of value not being considered as proof). The time limit for claims is one year. Willful negligence or default suspends this limit.

The rules concerning assessment of damage or loss upon arrival are very strict. It is necessary to request that an assessment be drawn up by the railway agents (they being the only

ones who are qualified to do so) on a document called a damage or loss report (process-verbal). In the case of disagreement an Independent assessor may be needed. Either this person is mutually agreed upon by the parties involved or they can be named by a judge. It can be dangerous to accept without common agreement a damage and loss report which places the blame upon the shipper.

## 6.11 Tariffs in Railway Transport

### **Learning objectives:**

The applicant should be aware of tariffs in railway transport, of Uniform Distance Table for International Freight Traffic. The applicant should be able to use DIUM in praxis.

In many instances, the railways freight tariffs are those devised in a monopoly-era or in an era where the railways were not subjected to competitive forces similar to the ones that they are facing now. Consequently, the related rate-making procedures applied, and to a large extent still apply, very often to groups of commodities for which single freight rates are set in relation to the length of haul. Such systems do not have the flexibility needed to quickly adjust to the competitive nature of the container business environment.

Two types of problems are imposed by the existing tariff-setting systems: institutional and methodological. Institutional problems are those which adversely affect the relationship between the railway systems and their customers in matters of tariff negotiation, while methodological problems impair the ability of the railway systems to be competitive in terms of price.

## 6.12 Uniform Distance Table for International Freight Traffic (DIUM)

### Learning objectives:

The applicant should be aware of Uniform Distance Table for International Freight Traffic. The applicant should be able to use DIUM in praxis.

The DIUM contains the tariff distances between the internal stations and frontier points of the participating railways. They are applicable when calculating carriage charges for all international freight and livestock consignments, in so far as the through international tariffs make reference to the DIUM. For the tables DIUM for main countries see <http://www.uic.asso.fr/fret/DIUM,60.html>.

Numero de code Kode-nummer Code number Numer kodowy	de von from od	ou vice versa oder umgekehrt or vice versa lub odwrotnie	à nach a fro do	CZ(54)				DE(80)			
				GLUCHOLAZY MIKULOVICE 11	MIEDZYLESIE LICHKOV 11	MIEROSZÓW MEZIMESTI 11	ZAWIDÓW FRYDLANT V ČECHÁCH 11	BIELAWA DOLNA HORKA 11	ZASIEKI FORST (LAUSITZ) 11	GUBIN GUBEN 11	KUNOWICE FRANKFURT/ODER 11
				824	823	822	820	696	690	688	687
02150-1	ALEKSANDRÓW KUJAWSKI		A	442	445	402	431	396	387	337	336
07627-3	ANDRYCHÓW		10,A,H,K	205	310	338	442	407	444	474	498
04601-1	ANTONIN		10,B	217	260	217	300	265	273	282	287
01296-3	AUGUSTÓW		A,F,H	694	775	769	839	804	795	745	744
01917-4	BABIAK		10,B	343	420	377	422	387	378	335	334
02616-1	BABIMOST		10,B	319	322	263	205	170	161	86	103
06724-9	BABORÓW		A,K	134	239	267	371	336	373	403	427
04739-9	BABY		10,B	272	353	380	466	431	451	460	465
01963-8	BARCIN		10,B	403	406	363	392	357	348	298	297
00936-5	BARCZEWO		8,10	606	609	566	595	560	551	501	500
05648-1	BARDO PRZYŁĘK		A	74	55	83	193	198	241	299	323
03321-7	BARŁOGI		10,B	326	401	358	403	368	359	316	315
01353-2	BARNÓWKO		8,10	412	415	340	282	247	238	163	73
04842-1	BARTODZIEJE		10,A	389	470	497	583	548	559	544	543

The stations / terminals included in the left-hand column are listed alphabetically, the frontier points being shown in heavy type. The frontier points mentioned in the headings of the distance columns are listed in country order in line with the abbreviated designation and the country code of the neighbouring country.

---

Only the regulations in the internal tariffs of the individual railways are legally binding.

Similarly, all restrictions and information regarding the technical equipment of the stations are subject to the authorities embodied in the internal tariffs of the individual railways.

### Test Questions

*Please indicate whether the statements below are right / wrong:*

- a. The DIUM are tables of tariffs for international railway transportation (wrong)
- b. The DIUM are applicable when calculating carriage charges for all international freight and livestock consignments. (right)
- c. Destination between Barczewo (51 00936-5) to the board crossing to Germany in Guben (688) is 306 km (wrong)

### 6.13 Outline of Tariff Setting Methods Applied by Railways in CIS

<b>Learning objectives:</b>
-----------------------------

The applicant should be aware of common tariffs in the CIS countries.
---

Most of the railway systems operating in the TRACECA corridor are members of OSJD, which has provided a forum through which its members can harmonize their approaches to tariff setting. In practice, however, it has not fully operated in this way since an “*additive tariff*” concept, whereby individual railway systems apply their own tariff portions to the moving in the corridor, has most often been the norm with these tariff portions being loosely based on “common” transit tariff rates applied to the system’s share of the through haulage distance. In reality, therefore, there is no through transit tariff, as such.

Such a fragmented and additive approach to tariff application usually encourages individual railway systems to maximize their revenue from international traffic opportunities, irrespective of whether the resulting tariff rates are competitive with those of competing modes, e.g. shipping lines.

Most OSJD railways use two International Transit Tariff scales:

- the ETT tariff, which is intended to be applied to rail freight traffic between two OSJD member countries, which must transit through the territory of a third, or more, member countries; and

- the MTT tariff, which is intended to be applied to rail freight traffic between two OSJD member countries, but which is not required to transit through the territory of any other member country.

It is understood that the two tariffs have overlapping areas in their respective sphere of application and that they were not established in the first place with due attention given to cost recovery. With this in mind, and also the fact that the intersection of rates of both scales were raising problems in the choice of scale to apply to specific traffic, OSJD has been taking actions since 1997 to bring both scales closer together.

The tariff scales appear to be based on long - discredited costing methodologies dating from the central planning era. The MTT scales allow heavy discounts, which compensate somewhat for the lack of rational costing and allow some commercial flexibility. In general high transit tariffs appear to cross - subsidise domestic traffic.

In practical terms, member countries of OSJD have the possibility to apply discretionary discounted rates either individually, or collectively, in order to be competitive on some routes or traffic segments. Such practices tend to indicate that the OSJD tariff constitutes a maximum -or ceiling- charge from which individual members may discount their own charges. In this regard, new tariff alliance among OSJD members may also indicate that the OSJD tariff system may gradually be fading out.

Finally, although the idea of through tariff for international movements relating to some specific types of traffic still has to be accepted by many countries, there is a growing trend in some other countries that such tariff practices are being put in place. Such a trend is noticeable, for example, on Kazakhstan Railways, Mongolian Railways as well as Russian Railways. However, the indication is that such through tariffs are determined as the average of national tariffs as well as tariff distances on each individual railway, while the primary determinant of railway tariff levels in a competitive environment should be the level of charges of competitors.

Following is an example to price calculation for transportation from Offenbach, Germany to Almaty, Kazakhstan:

By looking at an example of price components for a 20' Container transport from Offenbach (Germany) to Almaty, price calculation can be clarified:

Clients order:

Pick-up at shippers location in Offenbach and delivering in free terminal Almaty (including availability of a rental container).

Cost elements:

- Positioning empty container at shipper's premises
- Pick up loaded container at shipper's premises
- Transshipment to terminal at Frankfurt / Main - Ost
- Terminal fee at Frankfurt / Main - Ost
- Train transportation Frankfurt / Main - Ost to Berlin
- Train composition for appropriate destinations and quality control in Berlin
- Train transport Berlin to Malaszewicze / Brest
- Border fee and re-forwarding at Brest
- Transshipment in Brest
- Train transportation to Almaty

Almaty - Brest (4,920 km) - Three Rail Operators involved (KTZh, RZD, BC).

- A rail owned 20' container transport cost is around 1,000 USD.
- One ton of crude oil transport cost is around 100 USD.
- One ton of other bulk (or non-bulk) commodity transport cost is approximately 40% of the equivalent oil transport.

In general

- Cost of a 20' container : 0.15 - 0.20 USD per km
- Cost of a 1 ton of oil : 0.15 - 0.20 USD per km (10 t consignment)
- Cost of a 1 ton of bulk : 0.05 - 0.10 USD per km (10 t consignment)

It is estimated that in total rail transport cost (door-to-door) the various cost elements are contributing, as follows:

- Pure transport cost : approximately 60%
- Return of empty container : approximately 20%
- Road transport to / from terminals : 15% - 20%
- Terminal / customs costs : 5% - 10%

Freight rates are not fixed and vary considerably. Containers transport is cheaper than general cargo. The freight rate per km between Almaty and Moscow is approximately 50% lower of that between Almaty and Berlin. A container transported within Europe costs approximately the double than TranSiberian rate, whilst a container transported in Central Asia costs even

more. Lower rates apply in intra - CIS transports in comparison to transit via CIS.

Due to differences in the type of unit being transported in rail route, it is difficult to compare the costs. According to transport operators in Kazakhstan, the cost of transportation by rail between Istanbul and Almaty (via rail ferry to Novorossiysk, Volgograd, Astrakhan) is in the US \$ 1,435 to US \$ 2,000 range for a 20-foot container, and is US \$ 2,385 for a 40-foot container. According to Uzbek transport operators, the cost of a wagon between Kapikule and Tashkent (via rail ferry Varna - Ilyichevsk, Russia, Kazakhstan) is in the range of US \$ 7,500 - US \$ 8,000, depending on the commodity. It appears that the ferry / rail option of Istanbul - Novorossiysk - Almaty has a significant cost advantage over the other routes, even taking into account the fact that the quote is for up to Almaty. For both rail and road, the transport costs also include a portion for the empty return of the container to the depot. A reduction in costs would be possible if the import and export of container transport was better balanced.

### Test Questions

*Please indicate whether the statements below are right/wrong:*

- a. Most OSJD railways use the ETT tariff, which is intended to be applied to rail freight traffic between two OSJD member countries, which must transit through the territory of a third, or more, member countries. (right)
- b. Member countries of OSJD have the possibility to apply discretionary discounted rates in order to be competitive on some routes or traffic segments. (right)

## 6.14 References - Further Reading

### Web Sites

<b>CER</b> (Community of European Railway and Infrastructure Companies)	<b>Link:</b> <a href="http://www.cer.eu">www.cer.eu</a>
<b>CIT</b> (International Railway Transport Committee)	<b>Link:</b> <a href="http://www.cit-ra.org">www.cit-ra.org</a>
<b>CLECAT</b> (European Association for Forwarding)	<b>Link:</b> <a href="http://www.clecat.org">www.clecat.org</a>
<b>ECMT</b> (European Conference of Ministers of Transport)	<b>Link:</b> <a href="http://www1.oecd.org">www1.oecd.org</a>
<b>EIA</b> (European Intermodal Association)	<b>Link:</b> <a href="http://www.eia-ng.org">www.eia-ng.org</a>



<b>EIM</b> (European Rail Infrastructure Managers)	<b>Link:</b> <a href="http://www.eimra.com">www.eimra.com</a>
<b>ERA</b> (European Railway Agency)	<b>Link:</b> <a href="http://www.era.europa.eu">www.era.europa.eu</a>
<b>ERFA</b> (European Rail Freight Association)	<b>Link:</b> <a href="http://www.erfa.com">www.erfa.com</a>
<b>ERFCP</b> (European Rail Freight Customers' Platform)	<b>Link:</b> <a href="http://www.erfc.com">www.erfc.com</a>
<b>European Commission</b>	<b>Link:</b> <a href="http://europa.eu">europa.eu</a>
<b>European Railway Review</b>	<b>Link:</b> <a href="http://www.russellpublishing.com/railway/index.html">www.russellpublishing.com/railway/index.html</a>
<b>ICF</b> (Intercontainer - Interfrigo)	<b>Link:</b> <a href="http://www.icfonline.com">www.icfonline.com</a>
<b>OSJD</b> (Organisation of Railways Cooperation)	<b>Link:</b> <a href="http://www.rail-net.org">www.rail-net.org</a>
<b>OTIF</b> (Intergovernmental Organisation for International Carriage by Rail)	<b>Link:</b> <a href="http://www.otif.org">www.otif.org</a>
<b>RFG</b> (Rail Freight Group)	<b>Link:</b> <a href="http://www.rfg.com">www.rfg.com</a>
<b>UIC</b> (International Union of Railways)	<b>Link:</b> <a href="http://www.uic.com">www.uic.com</a>
<b>UIP</b> (International Union of Private Wagons)	<b>Link:</b> <a href="http://www.uipra.com">www.uipra.com</a>
<b>UIRR</b> (Int'l Union of Combined Road - Rail Transport Companies)	<b>Link:</b> <a href="http://www.uirr.com">www.uirr.com</a>
<b>UNECE</b> (United Nations Economic Commission for Europe)	<b>Link:</b> <a href="http://www.unece.org">www.unece.org</a>
<b>UNESCAP</b> (UN Economic & Social Commission for Asia & Pacific)	<b>Link:</b> <a href="http://www.unescap.org">www.unescap.org</a>
<b>UNIFE</b> (Union of the European Railway Industries)	<b>Link:</b> <a href="http://www.unife.com">www.unife.com</a>

### Legal Documents

- Convention concerning International Carriage by Rail of 9/5/1980, version applicable as from 1/11/1996 (COTIF).
- Uniform Rules concerning the Contract for International Carriage of Goods by Rail (CIM) - Appendix B of COTIF.
- Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) - Annex I of CIM.
- Regulations concerning the International Haulage of Private Owners' Wagons by Rail (RIP) - Annex II of CIM.

- Regulations concerning the International Carriage of Containers by Rail (RiCo) - Annex III of CIM.
- Regulations concerning the International Carriage of Express Parcels by Rail (RIEx) - Annex IV of CIM.
- Amendment Protocol (Vilnius Protocol - 3/6/1999) for revised COTIF 1999.
- UNECE International Convention to facilitate the crossing of frontiers for goods carried by Rail (1952).
- UNECE International Convention on the Harmonization of Frontier Controls of Goods (1982).
- UNECE European Agreement on Main International Railway Lines / AGC (1985).
- UNECE European Agreement on Important International Combined Transport Lines and related Installations / AGTC (1999).
- E.C. Infrastructure Directives (91/440, 95/18, 95/19, 2001/12, 2001/13, 2001/14).
- E.C. Interoperability Directives (96/48, 2001/16).

### **Selected Studies and Reports**

#### E.C. / TACIS Technical Assistance projects (TRACECA region)

- TRACECA Trade Facilitation, 1998.
- Joint Venture for Trans - Caucasian Railways, 1998.
- Railways Tariffs and Timetable, 1998.
- Intermodal Services Implementation and Training, 2000.
- Harmonisation of Border Crossing Procedures, 2003.
- Unified Policy on Transit Fees and Tariffs, 2003.
- Common Legal Basis for Transit Transportation, 2004.

#### UN-ESCAP Studies and Reports

- Development of Asia - Europe Rail Container Transport through Block Trains, Northern Corridor of TAR, 1999.
- Development of Trans-Asian Railway (TAR), Southern Corridor, 1999.
- Development of Trans-Asian Railway (TAR), North - South Corridor, 2001.
- Transit Transport Issues in Landlocked and Transit Developing Countries, 2003.

UIC: Global Rail Freight Corridors (Europe - Asia) Traffic Study, 2000.

E.C. With Paper: European Transport Policy for 2010, 2001.

## Annex 1 Best Practices

### BEST PRACTICES BUT ALSO MALFUNCTIONS IN RAIL OPERATIONS

#### Rail Freight Group in U.K.

RFG has over 150 member companies including customers, logistics providers, suppliers, terminal operators, freight train operators and port operators.

Maersk shipping line handles some 20% of the UK's total deep-sea container traffic, some 160,000 containers, to inland destinations by rail. Maersk's customers represent a substantial number of established household and industry names, all dependent on efficient supply links to ports supported by rail.



One of the UK's major road hauliers, the Malcolm Group started using rail in February 2001. Since then the number of trains they operate has risen more than three-fold. ASDA is amongst many customers Malcolm's has attracted to rail, saving the supermarket retailer 4 million road vehicle miles per annum.

Three out of four Jaguar cars built at Castle Bromwich, and 90% of those for export, leave the factory by rail. Trains from Castle Bromwich use a brand new £10 million rail loading facility opened in March 2003. Rail freight delivers savings on plant operation and delivery times.

Three quarters of the French wine sold in Marks & Spencer stores comes to the UK by rail. Marks & Spencer have been using rail to import beer, wine and spirits from the EU for over two years. 40% of total intake into their national distribution centre arrives on rail. Marks & Spencer also make deliveries to their Scottish RDC using rail, taking 350 vehicles a year off the UK roads. The company is currently looking at ways to expand their use of rail in Scotland.



Associated British Ports (ABP) is the UK's largest port operator. The company has a policy of promoting and facilitating the use of rail, and more than 20 million tonnes is delivered to or

from ABP ports by rail each year. To give more port users the opportunity of using rail, ABP's logistics division acquired the Hams Hall Rail Terminal operation in the Midlands in 2002. Since then, the terminal has been extended and throughput has increased dramatically.

Rosebys, the UK's largest home textile retailer, operates a rail-connected regional distribution centre in Selby through a joint partnership with The Potter Group. GB Railfreight provides a daily rail service for Medite Shipping Co (UK) Ltd from the Port of Felixstowe to supply the centre. The goods supplied by rail include towels, duvet covers, bed linen, pillow-cases and ready-made curtains.



In excess of 90% of the newsprint supplied to Stora Enso to publishers News International, Trinity Mirror and Associated News uses rail freight in some part of the supply chain. Rail freight offers an economically efficient solution and the reliability needed to keep the printing presses running.

ASDA use rail to carry food, general merchandise and clothing between Daventry and Scotland. This rail saves ASDA 4 million lorry miles and 314,00 gallons of diesel fuel every year, equivalent to taking 6,140 lorries off the roads. ASDA have recently expanded their use of rail and now use services connecting the Port of Felixstowe and Daventry, and between Grangemouth and Aberdeen.



Each year rail freight keeps almost 4 million tonnes of freight off the roads in the Peak District National Park. This equates to around 200,000 lorry movements. Many businesses important for local jobs and supporting the local economy depend on rail freight to reduce their environmental impact.

**Intercontainer - Interfrigo (ICF)**

ICF operates regular rail services across Europe and the CIS, mostly non-stop. Most operations comprise block trains and shuttles on dedicated European routes for rail / road container, swap body and trailer transports. If volumes fall short of the regular block train threshold they use hub-and-spoke systems.

Mean transport distances are in excess of 1,100 km (long haul). ICF runs approximately 1,000 own trains per month, which connect Europe's major seaports and economic centres. Value added services comprise electronic reservation, electronic booking, on line tracking and tracing, terminal services, road feeder services and supply of containers. ICF carries both general and special consignments (e.g. dangerous goods).

**The E.C. PACT Intermodal Program Success (1992 - 2000)**

- New combined rail / sea link Sweden - Germany / Austria - Italy.  
Carries around 500,000 t / year and reduces journey times by 48 h.
- Rail / air services between Amsterdam and Milan airports.  
First year of operation : 45 air freight pallets / week.
- Rail / sea service between Spain and Germany.  
Carries approximately 6,500 trailers / year.

**Manufacturing Companies Becoming Rail Freight Operators in E.U.**

- BASF (chemicals) set up a joint venture for freight operations.
- IKEA (consumer goods), sets up a separate company to manage transport of its own goods. Estimates to increase rail transport share from 18% to 40% by 2006 (equivalent to around 500 trains / week).

**Russian Railways**

Russian railways offer container block train operations for international and transit transports, ensuring safety (TransSiberian rail operations are accompanied by armed guard) and simplified customs procedures for transit (a copy of the Railway Bill is equivalent to customs declaration). Official transit times for selected international / transit routes:

- Moscow - Beijing : 8 days
- Moscow - Berlin : 4 days
- East Nakhodka / Vostochny port - Brest : 12,5 days
- East Nakhodka / Vostochny port - Chop : 17,5 days

Transit times via the TransSiberian rail line are estimated to be 15 - 17 days less than deep sea transport. The rail line (approximately 10,000 km long) has a carrying capacity of 100 mil tons / year (and 200,000 TEUs / year).

#### Examples of Malfunction in Rail Operations

- **Companies can't count:** Some rail companies admit that they would not be able to say how many locomotives or wagons they have available or give the precise location of trains. So sometimes trains which are scheduled (usually freight) have to be cancelled because there is no locomotive, or no driver, or because the driver has not been told.
- **Trains don't run properly:** It takes 30 - 40 minutes to replace the locomotive on a freight train and to check that the train is in proper working order (changing the locomotive, filling out the composition form, checking the brakes, changing over the driver and crew, inspecting the train, carrying out checks on dangerous materials, checking documents, making up the train, labelling the wagons, train report, checking the rear light). All this work is obviously wasted if the locomotive and crew are not ready on time. According to UIRR, of 20,000 full combined international transport trains investigated, only half were on time in 2000.
- **Missing information:** At borders, one network hands over the train to another. They exchange information on loads, destinations, and train composition. Computer links between systems do exist, but are not used systematically because they are not particularly reliable, or information is often exchanged on paper. This information may arrive too late or it may not be accurate, and will need to be checked.
- **"Ghost trains":** A freight train stops to change locomotive, but it may then be held up even longer while waiting for a train path to become free on the neighbouring network. A locomotive may have to wait for a train: a train may have to wait for a locomotive. Often there is no information on when they will arrive, which just makes matters worse.
- With all the various delays, the average speed of international rail haulage is only 18 km / hour, which is slower than an icebreaker opening up a shipping route through the Baltic Sea!

Source: E.C. White Paper, 2001

Annex 2 CIM

The form is a complex document with the following sections:

- Top Left:** Sender information including name, address, and telephone number.
- Top Right:** Receiver information including name, address, and telephone number.
- Middle Left:** Details of the carriage, including type, number, and weight.
- Middle Right:** Details of the goods, including description, weight, and volume.
- Bottom Left:** A large table with columns for 'Description of Goods', 'Weight', 'Volume', and 'Number of Packages'. It contains several rows of data.
- Bottom Right:** Additional administrative fields, including dates, times, and signatures.

A large diagonal watermark reading "SPECIMEN" is printed across the center of the form. The text "ORIGINAL DE LA LETTRE DE VOYAGE" and "ORIGINAL DELLA LETTERA DI VOYAGE" is also visible.

Source : Fret SNCF.

1/10





Annex 3  
Frachtbrief CIM SMGS RU-ENG

<b>1. НАИМЕНОВАНИЕ ЦИМ/СМГС</b> <b>CIM/SMGS Consignment Note</b> Original of the consignment note		<b>1</b> 1. НАИМЕНОВАНИЕ ДОСТАВКИ Name of the consignment 2. КОД ДОСТАВКИ Consignment code 3. КОД ДОСТАВКИ Consignment code 4. КОД ДОСТАВКИ Consignment code	10. КОД ДОСТАВКИ Consignment code 11. КОД ДОСТАВКИ Consignment code 12. КОД ДОСТАВКИ Consignment code
<b>2. АДРЕС ДОСТАВЩИКА</b> Consignor's name, address, country		<b>5. ПОДПИСЬ ДОСТАВЩИКА</b> Signature 6. АДРЕС ДОСТАВЩИКА Consignor's name, address, country	<b>7. АДРЕС ПОЛУЧАТЕЛЯ</b> Consignee's name, address, country <b>8. КОД ПОЛУЧАТЕЛЯ</b> Consignee code <b>9. КОД ПОЛУЧАТЕЛЯ</b> Consignee code
<b>3. УКАЗАНИЕ НА МЕСТО ДОСТАВКИ</b> Delivery point		<b>13. КОД ДОСТАВКИ</b> Consignment code <b>14. КОД ДОСТАВКИ</b> Consignment code	<b>15. КОД ДОСТАВКИ</b> Consignment code <b>16. КОД ДОСТАВКИ</b> Consignment code
<b>4. АДРЕС ПОЛУЧАТЕЛЯ</b> Destination station <b>5. КОД ПОЛУЧАТЕЛЯ</b> Consignee code		<b>17. КОД ДОСТАВКИ</b> Consignment code <b>18. КОД ДОСТАВКИ</b> Consignment code	<b>19. КОД ДОСТАВКИ</b> Consignment code <b>20. КОД ДОСТАВКИ</b> Consignment code
<b>6. НАИМЕНОВАНИЕ И ОПИСАНИЕ ТОВАРОВ</b> Description of the goods 2. КОД ДОСТАВКИ Consignment code 3. КОД ДОСТАВКИ Consignment code		<b>10. КОД ДОСТАВКИ</b> Consignment code <b>11. КОД ДОСТАВКИ</b> Consignment code	<b>12. КОД ДОСТАВКИ</b> Consignment code <b>13. КОД ДОСТАВКИ</b> Consignment code
<b>7. КОД ДОСТАВКИ</b> Consignment code <b>8. КОД ДОСТАВКИ</b> Consignment code		<b>14. КОД ДОСТАВКИ</b> Consignment code <b>15. КОД ДОСТАВКИ</b> Consignment code	<b>16. КОД ДОСТАВКИ</b> Consignment code <b>17. КОД ДОСТАВКИ</b> Consignment code
<b>9. КОД ДОСТАВКИ</b> Consignment code <b>10. КОД ДОСТАВКИ</b> Consignment code		<b>11. КОД ДОСТАВКИ</b> Consignment code <b>12. КОД ДОСТАВКИ</b> Consignment code	<b>13. КОД ДОСТАВКИ</b> Consignment code <b>14. КОД ДОСТАВКИ</b> Consignment code
<b>11. КОД ДОСТАВКИ</b> Consignment code <b>12. КОД ДОСТАВКИ</b> Consignment code		<b>13. КОД ДОСТАВКИ</b> Consignment code <b>14. КОД ДОСТАВКИ</b> Consignment code	<b>15. КОД ДОСТАВКИ</b> Consignment code <b>16. КОД ДОСТАВКИ</b> Consignment code

73. Трaнспoртнaя тpaншe - Traffic		80. Клaссификация груза - Item no.	81. Категория груза - Class	82. Категория груза - Unit charge	83. Код тарифа - Chargeable weight tag	88. Сумма тарифов - Charges to be paid by the consignor		89. Сумма тарифов - Charges to be paid by the consignee	
						90. Тариф - Amount	91. Тариф - Amount	92. Тариф - Amount	93. Тариф - Amount
74. Место назначения груза - Carriage from	84. Место назначения груза - Carriage to	85. Место назначения груза - Carriage from	86. Место назначения груза - Carriage to	87. Место назначения груза - Carriage from	88. Место назначения груза - Carriage to	94	95	96	
75. Место назначения груза - Carriage from	84. Место назначения груза - Carriage to	85. Место назначения груза - Carriage from	86. Место назначения груза - Carriage to	87. Место назначения груза - Carriage from	88. Место назначения груза - Carriage to	94	95	96	
76. Место назначения груза - Carriage from	84. Место назначения груза - Carriage to	85. Место назначения груза - Carriage from	86. Место назначения груза - Carriage to	87. Место назначения груза - Carriage from	88. Место назначения груза - Carriage to	94	95	96	
77. Место назначения груза - Carriage from	84. Место назначения груза - Carriage to	85. Место назначения груза - Carriage from	86. Место назначения груза - Carriage to	87. Место назначения груза - Carriage from	88. Место назначения груза - Carriage to	94	95	96	
78. Место назначения груза - Carriage from	84. Место назначения груза - Carriage to	85. Место назначения груза - Carriage from	86. Место назначения груза - Carriage to	87. Место назначения груза - Carriage from	88. Место назначения груза - Carriage to	94	95	96	
99. Акт о приеме-передаче груза - Exchange note		99. Акт о приеме-передаче груза - Exchange note		99. Акт о приеме-передаче груза - Exchange note		102. Grand total	103. Grand total	104. Grand total	105. Grand total
101. Сумма тарифов - Amount concerning charging		102. Сумма тарифов - Amount concerning charging		103. Сумма тарифов - Amount concerning charging		107. Сумма тарифов - Amount concerning charging		108. Сумма тарифов - Amount concerning charging	
109. Сумма тарифов - Amount concerning charging		110. Сумма тарифов - Amount concerning charging		111. Сумма тарифов - Amount concerning charging		112. Сумма тарифов - Amount concerning charging		113. Сумма тарифов - Amount concerning charging	
114. Сумма тарифов - Amount concerning charging		115. Сумма тарифов - Amount concerning charging		116. Сумма тарифов - Amount concerning charging		117. Сумма тарифов - Amount concerning charging		118. Сумма тарифов - Amount concerning charging	







73	80	81	82	83	84	85
74	80	81	82	83	84	85
75	80	81	82	83	84	85
76	80	81	82	83	84	85
77	80	81	82	83	84	85
78	80	81	82	83	84	85
79	80	81	82	83	84	85
80	80	81	82	83	84	85
81	80	81	82	83	84	85
82	80	81	82	83	84	85
83	80	81	82	83	84	85
84	80	81	82	83	84	85
85	80	81	82	83	84	85
86	80	81	82	83	84	85
87	80	81	82	83	84	85
88	80	81	82	83	84	85
89	80	81	82	83	84	85
90	80	81	82	83	84	85
91	80	81	82	83	84	85
92	80	81	82	83	84	85
93	80	81	82	83	84	85
94	80	81	82	83	84	85
95	80	81	82	83	84	85
96	80	81	82	83	84	85
97	80	81	82	83	84	85
98	80	81	82	83	84	85
99	80	81	82	83	84	85
100	80	81	82	83	84	85
101	80	81	82	83	84	85
102	80	81	82	83	84	85
103	80	81	82	83	84	85
104	80	81	82	83	84	85
105	80	81	82	83	84	85
106	80	81	82	83	84	85
107	80	81	82	83	84	85
108	80	81	82	83	84	85
109	80	81	82	83	84	85
110	80	81	82	83	84	85
111	80	81	82	83	84	85
112	80	81	82	83	84	85
113	80	81	82	83	84	85
114	80	81	82	83	84	85
115	80	81	82	83	84	85
116	80	81	82	83	84	85
117	80	81	82	83	84	85
118	80	81	82	83	84	85
119	80	81	82	83	84	85
120	80	81	82	83	84	85
121	80	81	82	83	84	85
122	80	81	82	83	84	85
123	80	81	82	83	84	85
124	80	81	82	83	84	85
125	80	81	82	83	84	85
126	80	81	82	83	84	85
127	80	81	82	83	84	85
128	80	81	82	83	84	85
129	80	81	82	83	84	85
130	80	81	82	83	84	85
131	80	81	82	83	84	85
132	80	81	82	83	84	85
133	80	81	82	83	84	85
134	80	81	82	83	84	85
135	80	81	82	83	84	85
136	80	81	82	83	84	85
137	80	81	82	83	84	85
138	80	81	82	83	84	85
139	80	81	82	83	84	85
140	80	81	82	83	84	85
141	80	81	82	83	84	85
142	80	81	82	83	84	85
143	80	81	82	83	84	85
144	80	81	82	83	84	85
145	80	81	82	83	84	85
146	80	81	82	83	84	85
147	80	81	82	83	84	85
148	80	81	82	83	84	85
149	80	81	82	83	84	85
150	80	81	82	83	84	85
151	80	81	82	83	84	85
152	80	81	82	83	84	85
153	80	81	82	83	84	85
154	80	81	82	83	84	85
155	80	81	82	83	84	85
156	80	81	82	83	84	85
157	80	81	82	83	84	85
158	80	81	82	83	84	85
159	80	81	82	83	84	85
160	80	81	82	83	84	85
161	80	81	82	83	84	85
162	80	81	82	83	84	85
163	80	81	82	83	84	85
164	80	81	82	83	84	85
165	80	81	82	83	84	85
166	80	81	82	83	84	85
167	80	81	82	83	84	85
168	80	81	82	83	84	85
169	80	81	82	83	84	85
170	80	81	82	83	84	85
171	80	81	82	83	84	85
172	80	81	82	83	84	85
173	80	81	82	83	84	85
174	80	81	82	83	84	85
175	80	81	82	83	84	85
176	80	81	82	83	84	85
177	80	81	82	83	84	85
178	80	81	82	83	84	85
179	80	81	82	83	84	85
180	80	81	82	83	84	85
181	80	81	82	83	84	85
182	80	81	82	83	84	85
183	80	81	82	83	84	85
184	80	81	82	83	84	85
185	80	81	82	83	84	85
186	80	81	82	83	84	85
187	80	81	82	83	84	85
188	80	81	82	83	84	85
189	80	81	82	83	84	85
190	80	81	82	83	84	85
191	80	81	82	83	84	85
192	80	81	82	83	84	85
193	80	81	82	83	84	85
194	80	81	82	83	84	85
195	80	81	82	83	84	85
196	80	81	82	83	84	85
197	80	81	82	83	84	85
198	80	81	82	83	84	85
199	80	81	82	83	84	85
200	80	81	82	83	84	85



<p><b>113</b> <small>Уведомление о прибытии груза в станцию назначения</small> - Railway arrival notification</p>																						
<p><b>114</b> <small>Сведения о сообщении о прибытии груза в станцию назначения</small> - SMGS arrival report</p> <p>                 Номер сообщения о прибытии груза <input type="text"/> ДТ <input type="text"/>                  Номер сообщения о прибытии груза <input type="text"/>                  Станция прибытия груза <input type="text"/>                  Причина прибытия груза <input type="text"/>                  Подпись <input type="text"/> </p>	<p><small>Степень ответственности</small> New stamp</p>	<p><b>117</b> <small>Уведомление о прибытии груза в станцию назначения</small> - Notification to the consignee of the arrival of the goods</p> <p><b>118</b> <small>Подпись грузополучателя</small> - Signature of the consignee</p>																				
<p><b>115</b> <small>Таблица сведений о грузах в сообщении о прибытии груза в станцию назначения</small> - SMGS extension of arrival period</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">№ груза</th> <th style="width: 35%;">Наименование груза</th> <th style="width: 15%;">Тяга</th> <th style="width: 35%;">Наименование груза</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>                 Подпись <input type="text"/> </p>			№ груза	Наименование груза	Тяга	Наименование груза																
№ груза	Наименование груза	Тяга	Наименование груза																			
<p><b>116</b> <small>Сведения о грузах в сообщении о прибытии груза в станцию назначения</small> - Frontier station stamp</p> <table border="1" style="width: 100%; border-collapse: collapse; height: 150px;"> <tr> <td style="width: 33%;"></td> <td style="width: 33%;"></td> <td style="width: 33%;"></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table>																						
<p><b>119</b> <small>Сведения о грузах в сообщении о прибытии груза в станцию назначения</small> - Frontier station stamp</p> <p>                 Подпись <input type="text"/> </p>	<p><b>119</b> <small>Степень ответственности</small> - Stamp of the weighing station</p> <p>Подпись <input type="text"/></p>	<p><b>119</b> <small>Степень ответственности</small> - Stamp of the weighing station</p> <p>Подпись <input type="text"/></p>																				





<p><b>13</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p>				
<p><b>14</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p> <p>Formal report no. _____ Date _____</p> <p>Station making out _____</p> <p>Reason for making out _____</p> <p>Signature _____</p>		<p>Секция по перевозке грузов Date stamp</p>		
<p><b>15</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p> <table border="1"> <tr> <td> <p>City (Station) _____</p> <p>From _____ To _____</p> <p>Date _____</p> </td> <td> <p>City (Station) _____</p> <p>From _____ To _____</p> <p>Date _____</p> </td> </tr> </table>			<p>City (Station) _____</p> <p>From _____ To _____</p> <p>Date _____</p>	<p>City (Station) _____</p> <p>From _____ To _____</p> <p>Date _____</p>
<p>City (Station) _____</p> <p>From _____ To _____</p> <p>Date _____</p>	<p>City (Station) _____</p> <p>From _____ To _____</p> <p>Date _____</p>			
<p><b>16</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p>				
<p><b>17</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p>				
<p><b>18</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p>				
<p><b>19</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p>		<p><b>20</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p> <p>Signature _____</p>		
<p><b>21</b> <b>Справка о выполнении работ по перевозке грузов по железной дороге</b></p>				



73 - Carriage Details		80 - Carriage Item no.	81 - Carriage Class	82 - Carriage Unit charge	83 - Carriage weight (kg)	84 - Carriage Charges to be paid by the assignee				85 - Carriage Charges to be paid by the assignee				
						84 - System - Amount	85 - System - Amount	86 - System - Amount	87 - System - Amount	88 - System - Amount	89 - System - Amount	90 - System - Amount	91 - System - Amount	92 - System - Amount
74	Carriage item no. Carriage from					94	95	96						
	Carriage item no. Carriage from					98	99	100						
84	Carriage item no. Carriage from					102	103	104	105					
75	Carriage item no. Carriage from					94	95	96						
	Carriage item no. Carriage from					98	99	100						
84	Carriage item no. Carriage from					102	103	104	105					
76	Carriage item no. Carriage from					94	95	96						
	Carriage item no. Carriage from					98	99	100						
84	Carriage item no. Carriage from					102	103	104	105					
77	Carriage item no. Carriage from					94	95	96						
	Carriage item no. Carriage from					98	99	100						
84	Carriage item no. Carriage from					102	103	104	105					
78	Carriage item no. Carriage from					94	95	96	97					
	Carriage item no. Carriage from					98	99	100	101					
84	Carriage item no. Carriage from					102	103	104	105					
88 - Grand total						106	107	108	109					
89 - Remarks concerning charging						107 - Total amount to be raised from the assignee (in words)				108 - Signature				
						109 - Total amount to be raised from the assignee (in words)				109 - Signature				
112 - To be raised additionally from the assignee														
<p>111 - Carriage item no. Carriage from</p> <p>112 - Carriage item no. Carriage from</p> <p>113 - Carriage item no. Carriage from</p> <p>114 - Carriage item no. Carriage from</p> <p>115 - Carriage item no. Carriage from</p> <p>116 - Carriage item no. Carriage from</p> <p>117 - Carriage item no. Carriage from</p> <p>118 - Carriage item no. Carriage from</p> <p>119 - Carriage item no. Carriage from</p> <p>120 - Carriage item no. Carriage from</p> <p>121 - Carriage item no. Carriage from</p> <p>122 - Carriage item no. Carriage from</p> <p>123 - Carriage item no. Carriage from</p> <p>124 - Carriage item no. Carriage from</p> <p>125 - Carriage item no. Carriage from</p> <p>126 - Carriage item no. Carriage from</p> <p>127 - Carriage item no. Carriage from</p> <p>128 - Carriage item no. Carriage from</p> <p>129 - Carriage item no. Carriage from</p> <p>130 - Carriage item no. Carriage from</p> <p>131 - Carriage item no. Carriage from</p> <p>132 - Carriage item no. Carriage from</p> <p>133 - Carriage item no. Carriage from</p> <p>134 - Carriage item no. Carriage from</p> <p>135 - Carriage item no. Carriage from</p> <p>136 - Carriage item no. Carriage from</p> <p>137 - Carriage item no. Carriage from</p> <p>138 - Carriage item no. Carriage from</p> <p>139 - Carriage item no. Carriage from</p> <p>140 - Carriage item no. Carriage from</p> <p>141 - Carriage item no. Carriage from</p> <p>142 - Carriage item no. Carriage from</p> <p>143 - Carriage item no. Carriage from</p> <p>144 - Carriage item no. Carriage from</p> <p>145 - Carriage item no. Carriage from</p> <p>146 - Carriage item no. Carriage from</p> <p>147 - Carriage item no. Carriage from</p> <p>148 - Carriage item no. Carriage from</p> <p>149 - Carriage item no. Carriage from</p> <p>150 - Carriage item no. Carriage from</p> <p>151 - Carriage item no. Carriage from</p> <p>152 - Carriage item no. Carriage from</p> <p>153 - Carriage item no. Carriage from</p> <p>154 - Carriage item no. Carriage from</p> <p>155 - Carriage item no. Carriage from</p> <p>156 - Carriage item no. Carriage from</p> <p>157 - Carriage item no. Carriage from</p> <p>158 - Carriage item no. Carriage from</p> <p>159 - Carriage item no. Carriage from</p> <p>160 - Carriage item no. Carriage from</p> <p>161 - Carriage item no. Carriage from</p> <p>162 - Carriage item no. Carriage from</p> <p>163 - Carriage item no. Carriage from</p> <p>164 - Carriage item no. Carriage from</p> <p>165 - Carriage item no. Carriage from</p> <p>166 - Carriage item no. Carriage from</p> <p>167 - Carriage item no. Carriage from</p> <p>168 - Carriage item no. Carriage from</p> <p>169 - Carriage item no. Carriage from</p> <p>170 - Carriage item no. Carriage from</p> <p>171 - Carriage item no. Carriage from</p> <p>172 - Carriage item no. Carriage from</p> <p>173 - Carriage item no. Carriage from</p> <p>174 - Carriage item no. Carriage from</p> <p>175 - Carriage item no. Carriage from</p> <p>176 - Carriage item no. Carriage from</p> <p>177 - Carriage item no. Carriage from</p> <p>178 - Carriage item no. Carriage from</p> <p>179 - Carriage item no. Carriage from</p> <p>180 - Carriage item no. Carriage from</p> <p>181 - Carriage item no. Carriage from</p> <p>182 - Carriage item no. Carriage from</p> <p>183 - Carriage item no. Carriage from</p> <p>184 - Carriage item no. Carriage from</p> <p>185 - Carriage item no. Carriage from</p> <p>186 - Carriage item no. Carriage from</p> <p>187 - Carriage item no. Carriage from</p> <p>188 - Carriage item no. Carriage from</p> <p>189 - Carriage item no. Carriage from</p> <p>190 - Carriage item no. Carriage from</p> <p>191 - Carriage item no. Carriage from</p> <p>192 - Carriage item no. Carriage from</p> <p>193 - Carriage item no. Carriage from</p> <p>194 - Carriage item no. Carriage from</p> <p>195 - Carriage item no. Carriage from</p> <p>196 - Carriage item no. Carriage from</p> <p>197 - Carriage item no. Carriage from</p> <p>198 - Carriage item no. Carriage from</p> <p>199 - Carriage item no. Carriage from</p> <p>200 - Carriage item no. Carriage from</p>						<p>107 - Total amount to be raised from the assignee (in words)</p> <p>108 - Signature</p> <p>109 - Total amount to be raised from the assignee (in words)</p> <p>109 - Signature</p> <p>112 - To be raised additionally from the assignee</p>				<p>110 - Stamp of the weighing station</p> <p>110 - Signature</p>				

## Annex 4

### Forwarding Case

#### Solve a complex forwarding case

- Situation:

Considerable volumes of Scotch whisky are exported from warehouses in Scotland to the rest of the world. It is carried in containers and, as a dead-weight cargo; the containers can be loaded to their maximum gross capacity by weight.

In the U.K. the maximum gross vehicle weight permitted on the road at the time of this case was 38 tonnes, which gave a vehicle payload of approximately 25 tonnes of cargo carrying capacity. With the weight of a 20 foot (6 m.) container approximately 2 tonnes, this resulted in a net payload of 23 tonnes.

At the same time, the maximum weight permitted on British Railways was the same as the individual container maximum permitted gross weight and this was approximately 28 tonnes. Each manufacturer's containers are of different construction and as such each has a slightly different gross weight thus affecting the capacity.

It can be seen that a container moved by the rail system can therefore be loaded to a heavier weight than a container moved by a road vehicle.

One significant market for Scotch whisky is the Far East and this route is serviced by a number of major shipping lines. One of these lines wished to break into this lucrative whisky traffic but did not have any ships calling directly at any of the U.K. ports. Other shipping lines involved in the Europe / Far East trade guard this very profitable trade jealously and to minimize inland transport costs utilize rail services to either Felixstowe or Southampton for the deep-sea connection.

The new line investigated the potential also of utilizing the rail system to carry the heavier containers, but to transship them across the North Sea by ferry or feeder vessel, and deliver them to their ocean ship in port at Rotterdam. The preferred route would be by rail from the warehouse in Scotland to the North Sea Ferry terminal in the north of England, where it would be loaded directly on to the ferry for transfer to Rotterdam. On arrival at Rotterdam it would be moved within the port limits on a transfer trailer and loaded on the deep-sea ship for the Far East.

Although the overland distance in the U.K. was less than normal for economic rail transport it was felt that with the increased payload, the operation could be financially effective.

When the company approached the British Railways container handling operating company "Freightliner", it was advised that due to the restrictions in the rail network operating system, the Freightliner trains that carry the container traffic in the U.K. could not travel directly from Scotland to the specified port in England.

Freightliner was willing to accept the additional freight, but would not be in a position to guarantee the delivery of the containers by the next day, as the routing was outside the accepted normal Freightliner rail paths. It would be necessary first to transport the containers from Scotland to London (650 km) and then after being transferred to another train, would be moved onward to the port for shipment (another 390 km). Therefore the containers would travel a distance in excess of 1000 km in order to cover a distance of 270 km. The shipping company was advised that the time taken to transport the containers would be at least two days (not guaranteed) and that the charges would be based on distance plus the additional handling charge for train transfer at the London terminal.

The road haulage option guaranteed delivery within 6 hours and at a rate based on the 270 km distance. The haulage operating companies also indicated that additional discounts would be available for large volumes of container movements.

- Results:

*Environmentally the preferred transport route was by rail, but from all practical, operational and financial aspects the only sensible option was to move the containers by road transport. However as the containers could not be stowed to their full potential gross weight, the overall economic viability was lost and the potential traffic never materialized.*

*The resultant was a potential carrier was unable to submit a proposal to a client due to the inflexibility of the state owned, at that time, British Railways. Since that time the rail operating companies have been privatized and there is a more flexible and entrepreneurial approach to prospective customers.*