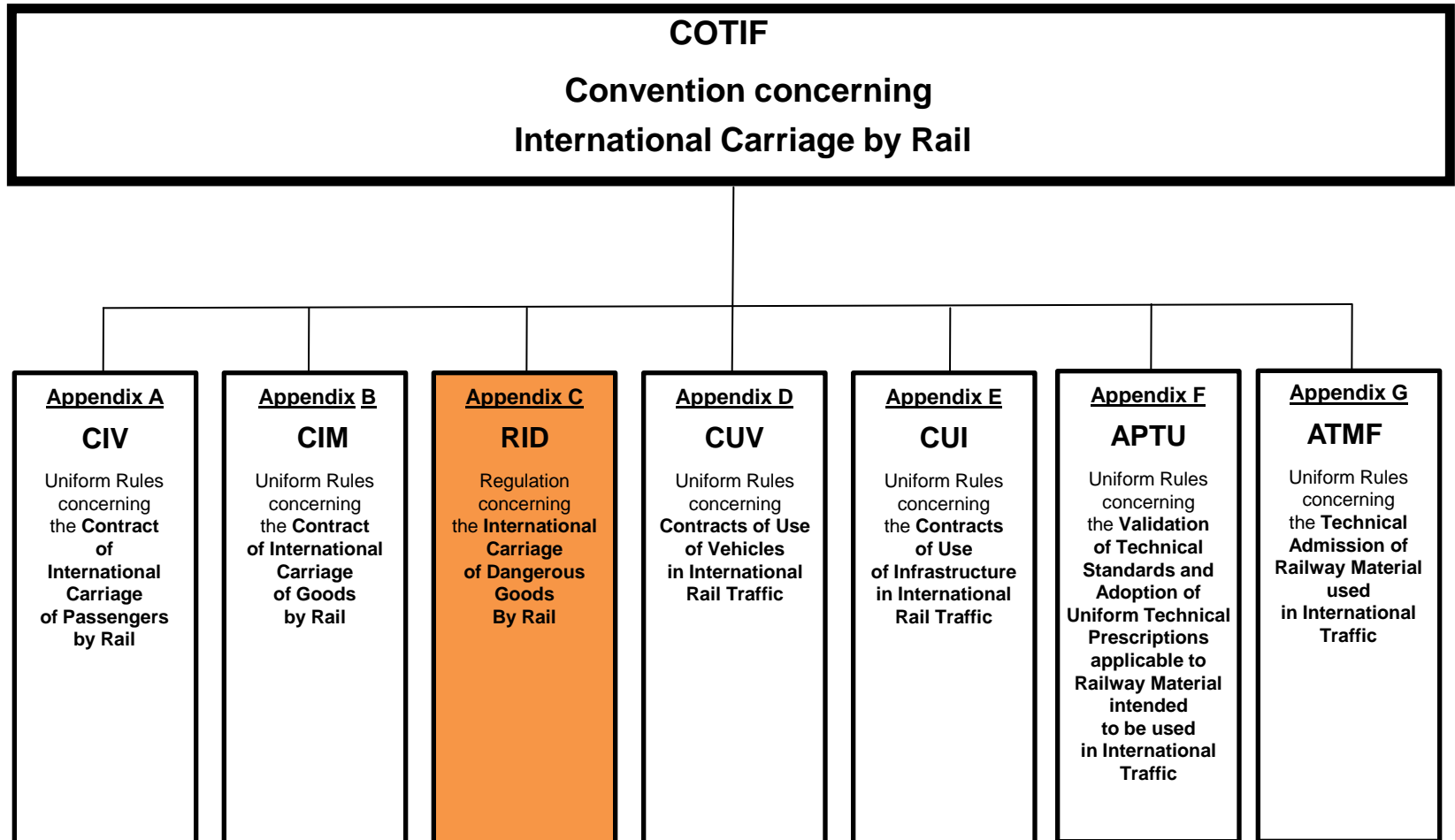




ORGANISATION INTERGOUVERNEMENTALE POUR LES TRANSPORTS INTERNATIONAUX FERROVIAIRES
ZWISCHENSTAATLICHE ORGANISATION FÜR DEN INTERNATIONALEN EISENBahnVERKEHR
INTERGOVERNMENTAL ORGANISATION FOR INTERNATIONAL CARRIAGE BY RAIL

Regulations for the Transport of Dangerous Goods

Jochen Conrad
Head of RID section

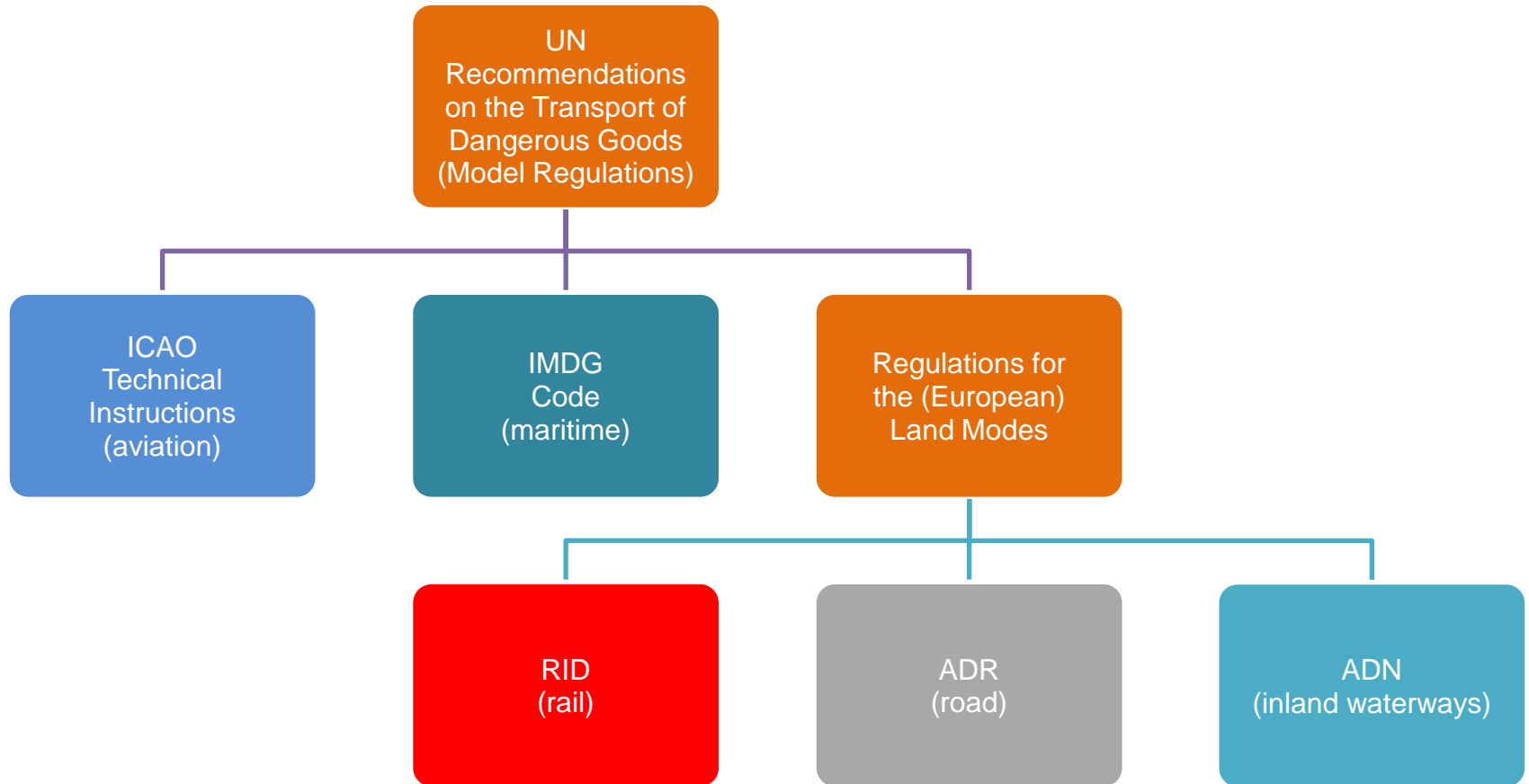




- Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Appendix C to COTIF 1999
- since 1893
- RID Committee of Experts
- first restructured edition 1 July 2001
- revision every two years

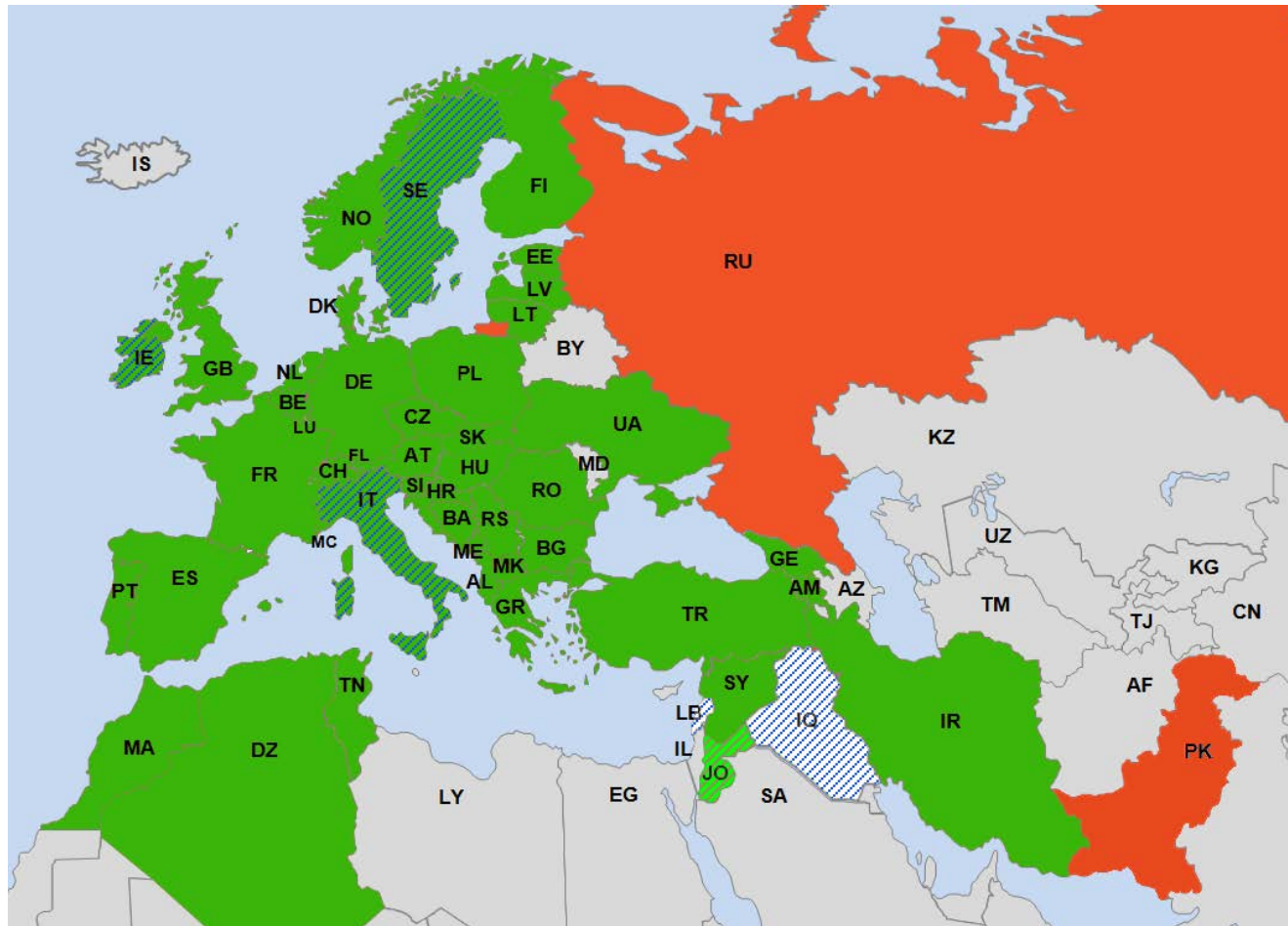







Regulations for the Transport of Dangerous Goods





Scope of application of RID (as at 01.09.2013)



-  RID (41)
-  Without RID (2)
-  COTIF 1999 not yet ratified (3)
-  Associate member (1)
-  Membership suspended (2)



- Twice a year (March and September) Joint RID/ADR/ADN Meeting
- Once a year (November) standing working group of the RID Committee of Experts/twice a year WP.15
- Every two years just before the notification of the new amendments RID Committee of Experts meeting
- Every two years, amendments to RID/ADR/ADN with 6 month notification period



- Adoption of amendments to the UN Model Regulations in December of year X (e.g. December 2014)
- Examined at the RID/ADR/ADN Joint Meeting in September of year X+1 (e.g. September 2015)



- Adopted for
 - Rail transport at the RID Committee of Experts in May of year X+2 (e.g. May 2016)
 - Road transport at WP.15 in May of year X+2 (e.g. May 2016)
- Amendments notified at latest by 30 June of year X+2 (e.g. 30 June 2016)



- The amendments to RID/ADR/ADN enter into force on 1 January of year $X+3$ (e.g. 1 January 2017)
- Usually with a 6 month transitional period (e.g. 30 June of year $X+3$)
- From 1 July of year $X+3$ (e.g. 1 July 2017), the new RID/ADR/ADN must be applied



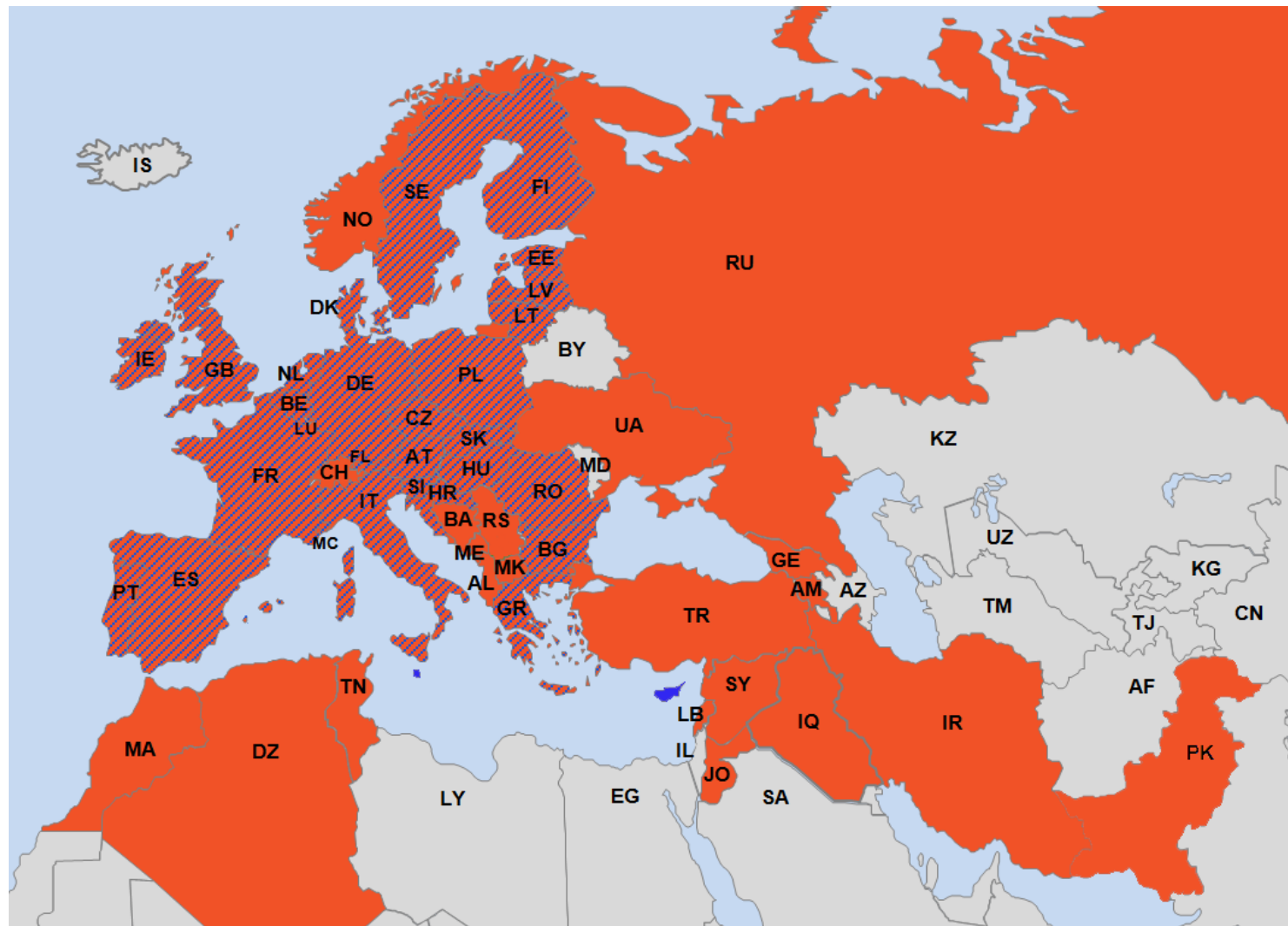
- Regulations concerning the international carriage of dangerous goods by rail in OSJD Member States
- harmonised with RID





- Alignment of Annex 2 to SMGS with the structure of RID 2001
- Quicker incorporation of amended RID provisions into SMGS
- Simplification of traffic between COTIF and SMGS Member States
- Start of wider harmonisation procedure in November 2012



OTIF/EU Member States (as at 1.9.2013)



-  OTIF (23)
-  OTIF + EU (26)
-  EU (2)

OTIF membership

COTIF 1999 not yet ratified :
Italia, Ireland, Sweden

Membership suspended :
Iraq / Lebanon

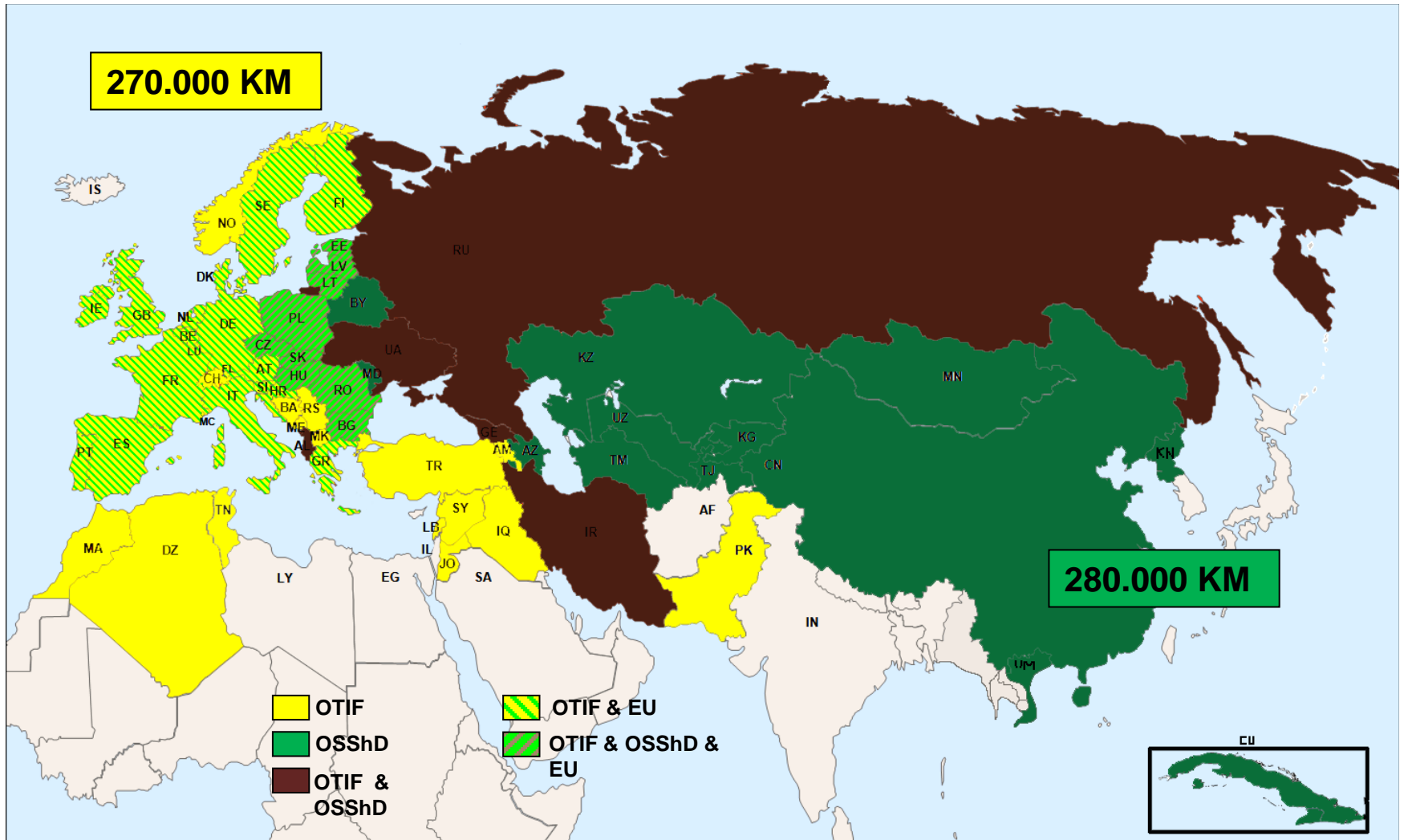
Associate member state :
Jordan

Regional economic integration organisation (OTIF member) :

European Union (EU)



OTIF - OSJD Member States





Part 1 - General requirements

- **1.1 Scope and applicability**
 - Structure
 - Scope
 - Exemptions
 - Applicability of other regulations
- **1.2 Definitions**
 - Units of measurement
- **1.3 Training of persons involved in the carriage of dangerous goods**
- **1.4 Safety obligations of the participants**
 - Main participants: consignor, carrier, consignee
 - Other participants: loader, packer, filler, tank container operator, tank-wagon operator, railway infrastructure manager, unloader



Part 1 - General requirements

- **1.5 Derogations**
 - Temporary derogations (multilateral special agreement)
- **1.6 Transitional measures**
- **1.7 General provisions concerning radioactive material**
- **1.8 Checks and other support measures to ensure compliance with safety requirements**
- **1.9 Restrictions on carriage imposed by the competent authorities**
- **1.10 Security provisions**
- **1.11 Internal emergency plans for marshalling yards**



Part 2 - Classification

- Class 1: Explosive substances and articles (e.g. fireworks)
- Class 2: Gases (e.g. butane, propane)
- Class 3: Flammable liquids (e.g. diesel fuel, gasoline)
- Class 4.1: Flammable solids, self-reactive substances and solid desensitized explosives (e.g. sulphur)
- Class 4.2: Substances liable to spontaneous combustion (e.g. phosphorus)
- Class 4.3: Substances which, in contact with water, emit flammable gases (e.g. lithium)
- Class 5.1: Oxidizing substances (e.g. perchloric acid)
- Class 5.2: Organic peroxides



Part 2 - Classification

- Class 6.1: Toxic substances (e.g. strychnine, nicotine)
- Class 6.2: Infectious substances (e.g. clinical waste)
- Class 7: Radioactive material (e.g. uranium)
- Class 8: Corrosive substances (e.g. sulphuric acid)
- Class 9: Miscellaneous dangerous substances and articles (e.g. lithium batteries, asbestos)



Part 3 - Dangerous goods lists, special provisions and exemptions related to limited and excepted quantities

- Table A: List of dangerous goods in UN number order
- Table B: Alphabetical list of dangerous goods
- 3.3 Special provisions applicable to certain articles or substances
- 3.4 Dangerous goods packed in limited quantities
- 3.5 Dangerous goods packed in excepted quantities



Table A: List of dangerous goods in UN number order

12_Table_A_E_RID - Microsoft Excel

Sicherheitswarnung Makros wurden deaktiviert. Optionen...

UNNo.	Name and description	Class	Classification code	Packing group	Labels	Special provisions	Limited and excepted quantities	Packaging	Portable tanks and bulk containers	RID Tanks	Transport category	Special provisions for carriage			Colis (express parcels)	Hazard identification No.				
								Packing instructions	Special packing provisions	Mixed packing provisions	Instructions	Special provisions	Tank code	Special provisions	Packages	Bulk	Loading, unloading and handling			
1202	GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT (flash-point not more than 60 °C)	3	F1	III	3	363 640K	5 L E1	P001 IBC03 LP01 R001		MP19	T2	TP1	LGBF		3	W12			CE4	30
1202	DIESEL FUEL complying with standard EN 590:2009 + A1:2010 or GAS OIL or HEATING OIL, LIGHT with a flash-point as specified in EN 590:2009 + A1:2010	3	F1	III	3	363 640L	5 L E1	P001 IBC03 LP01 R001		MP19	T2	TP1	LGBF		3	W12			CE4	30
1202	GAS OIL or DIESEL FUEL or HEATING OIL, LIGHT (flash-point more than 60 °C and not more than 100 °C)	3	F1	III	3	363 640M	5 L E1	P001 IBC03 LP01 R001		MP19	T2	TP1	LGBV		3	W12			CE4	30
1203	MOTOR SPIRIT or GASOLINE or PETROL	3	F1	II	3	243 363 534	1 L E2	P001 IBC02 R001	BB2	MP19	T4	TP1	LGBF	TU9	2				CE7	33
1204	NITROGLYCERIN SOLUTION IN ALCOHOL with not more than 1% nitroglycerin	3	D	II	3	601	1 L E0	P001 IBC02	PP5	MP2					2				CE7	33

Tabelle A

Bereit 120% 18:09 17.10.2014



Table B: Alphabetical list of dangerous goods

14_Table_B_RID - Microsoft Excel

	A	B	C	D
1	Name and description	UN No.	Note	NI
877	DICHLOROSILANE	2189		28
878	1,2-DICHLORO-1,1,2,2-TETRAFLUOROETHANE	1958		29
879	DICYCLOHEXYLAMINE	2565		29
880	DICYCLOHEXYLAMMONIUM NITRITE	2687		29
881	DICYCLOPENTADIENE	2048		29
882	1,2-DI-(DIMETHYLAMINO) ETHANE	2372		29
883	DIDYMIUM NITRATE	1465		28
884	DIESEL FUEL	1202		27
885	1,2-Diethoxyethane: see	1153		29
886	DIETHOXYMETHANE	2373		29
887	3,3-DIETHOXYPROPENE	2374		29
888	DIETHYLAMINE	1154		29
889	2-DIETHYLAMINOETHANOL	2686		29
890	3-DIETHYLAMINOPROPYLAMINE	2684		29

Seite 14

200% 18:11 17.10.2014



Part 4 - Packing and tank provisions

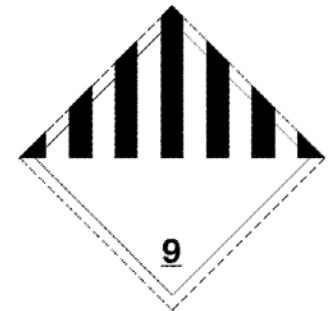
- 4.1 Use of packagings, including intermediate bulk containers (IBCs) and large packagings
- 4.2 Use of portable tanks and UN multiple-element gas containers (MEGCs)
- 4.3 Use of tank-wagons, demountable tanks, tank-containers and tank swap bodies with shells made of metallic materials, and battery-wagons and multiple-element gas containers (MEGCs)
- 4.4 Use of tank-containers including tank swap bodies with shells made of fibre-reinforced plastics (FRP)
- 4.5 Use of vacuum-operated waste tanks



- 5.1 General provisions
- 5.2 Marking and labelling
- 5.3 Placarding and marking
- 5.4 Documentation
- 5.5 Special provisions

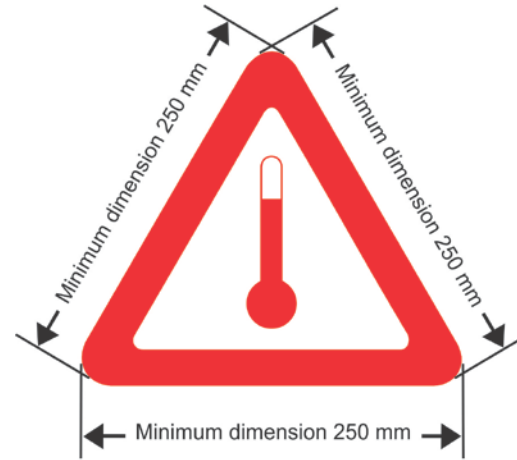
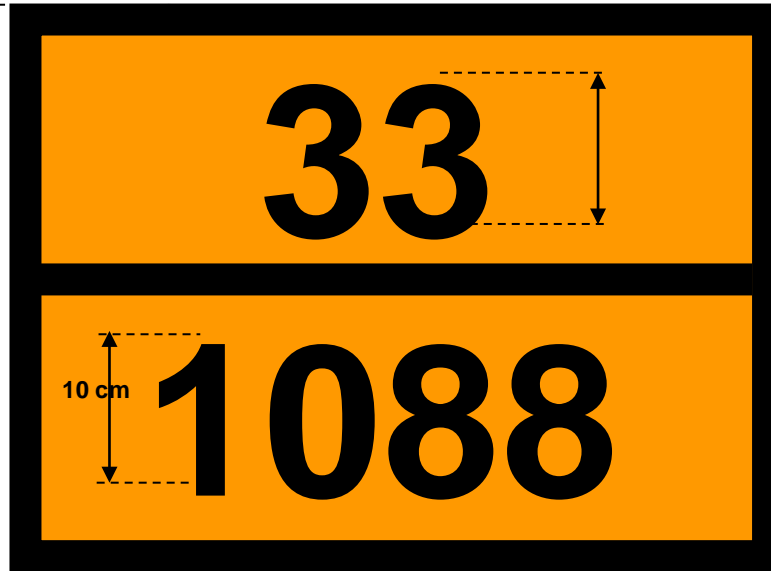


Danger labels





Orange-coloured plate, elevated temperature substance mark





Part 6 - Requirements for the construction and testing of packagings, intermediate bulk containers (IBCs), large packagings and tanks

- 6.1 Requirements for the construction and testing of packagings
- 6.2 Requirements for the construction and testing of pressure receptacles, aerosol dispensers, small receptacles containing gas (gas cartridges) and fuel cell cartridges containing liquefied flammable gas
- 6.3 Requirements for the construction and testing of packagings for class 6.2 infectious substances of Category A
- 6.4 Requirements for the construction, testing and approval of packages for radioactive material and for the approval of such material
- 6.5 Requirements for the construction and testing of intermediate bulk containers (IBCs)
- 6.6 Requirements for the construction and testing of large packagings



Part 6 - Requirements for the construction and testing of packagings, intermediate bulk containers (IBCs), large packagings and tanks

- 6.7 Requirements for the design, construction, inspection and testing of portable tanks and UN multiple element gas containers (MEGCs)
- 6.8 Requirements for the construction, equipment, type approval, inspections and tests, and marking of tank-wagons, demountable tanks and tank-containers and tank swap bodies, with shells made of metallic materials, and battery-wagons and multiple element gas containers (MEGCs)
- 6.9 Requirements for the design, construction, equipment, type approval, testing and marking of fibre-reinforced plastics (FRP) tank-containers including tank swap bodies
- 6.10 Requirements for the construction, equipment, type approval, inspection and marking of vacuum-operated waste tanks
- 6.11 Requirements for the design, construction, inspection and testing of bulk containers



Part 7 - Provisions concerning the conditions of carriage, loading, unloading and handling

- 7.1 General provisions
- 7.2 Provisions concerning carriage in packages
- 7.3 Provisions concerning carriage in bulk
- 7.4 Provisions concerning carriage in tanks
- 7.5 Provisions concerning loading, unloading and handling
- 7.6 Provisions for carriage as colis express (express parcels)
- 7.7 Piggyback transport in mixed trains (combined passenger and freight transport)



ORGANISATION INTERGOUVERNEMENTALE POUR LES TRANSPORTS INTERNATIONAUX FERROVIAIRES
ZWISCHENSTAATLICHE ORGANISATION FÜR DEN INTERNATIONALEN EISENBahnVERKEHR
INTERGOVERNMENTAL ORGANISATION FOR INTERNATIONAL CARRIAGE BY RAIL

Thank you very much for your attention!

Tel. (+41) 31 – 359 10 17
Fax (+41) 31 – 359 10 11
jochen.conrad@otif.org
www.otif.org