

## CEF PSA UBS WORKSHOP

## AMOC & UIC

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## AMoC (Acceptable Means of Complience)

Interoperability as foreseen in TSI-OPE is hindered by many national rules Removal of operational barriers is the key objective

AMOCs should be accepted throughout the EU by Member States and National Safety Authorities as examples of good practice.

As AMOCs are non-binding opinions issued by the Agency to define ways of establishing compliance with the essential requirements, the RUs are free to decide whether to apply the AMOC/part of the AMOC, or not.

Nevertheless, the RUs are responsible for managing their operational risks.

## AMoC (Acceptable Means of Complience)

The basis for the development of AMOC (Acceptable means of compliance) s is EU Regulation 2019/773, paragraph 4.4 which requires ERA to produce AMOCs on a number of topics. These are:

- Safety of load
- Checks and tests before departure, including brakes and checks during operation
- Safety of Passengers
- Train departure
- Degraded operation.

## AMoC (Acceptable Means of Complience)

 Technical Opinion concerning the Acceptable Means Of Compliance (AMOC) was sent to the European Commission on 20 December 2021 and today the documents have also been published on the ERA website



### UIC IRSs/Leaflets REFERENCED IN TSIs

#### **LOC&PAS:** 2 UIC leaflets

4	End coupling – manual UIC type – lateral location of brake pipe and cocks	4.2.2.2.3	UIC 648:Sept 2001	relevant cl. (1)		
5	Rescue coupling — interface with recovery unit	4.2.2.2.4	UIC 648:Sept 2001	relevant cl. (1)		
114	Physical interface between units for the signal trans mission	6.2.7a	UIC 558, January 1996	Plate 2		



#### WAG TSI: 3 UIC leaflets

Running gear for manual change of wheelsets	4.2.3.6.7				
	6.2.2.5	UIC leaflet 430-1:2012	Annexes B, H, I		
		UIC 430-3:1995	Annex 7		
Service brake	4.2.4.3.2.1	UIC 544-1:2014	all		

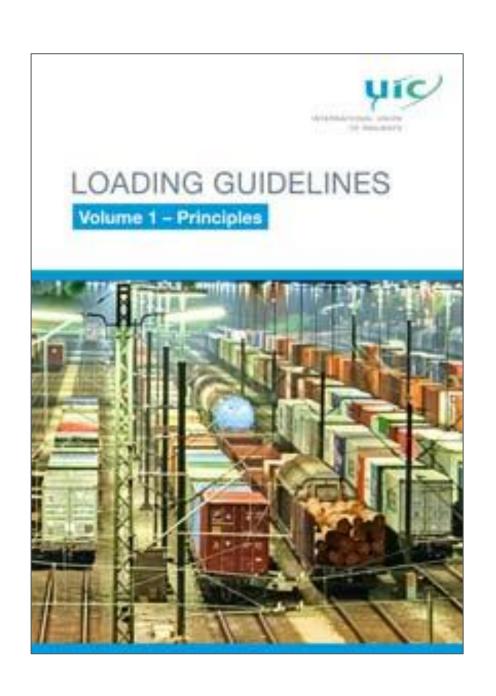
#### Appendix C of the WAG TSI: 6 UIC leaflets

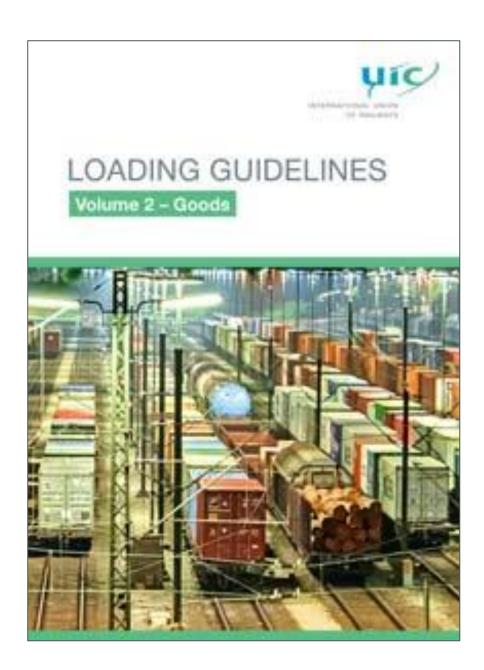
UIC brake	C.9	UIC 540:2014	all	
		UIC 544-1:2014	all	
		UIC 542:2015	all	
		UIC 541-4:2010	all	
Tow hooks	C.16	UIC 535-2:2006	1.4	
Protective devices on protruding parts	C.17	UIC 535-2:2006	1.3	
Label holders and attachment devices for rear end signal	C.18	UIC 575:1995	1	

#### Appendix G of the WAG TSI: 2 UIC documents

9th edition of the UIC "Design rules for composite brake blocks (K)":2013 10th edition of the UIC "Usage guidelines for composite (LL) brake blocks":2013

## AMoC / Safety of Load





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2.5.	EN Standard 16860	
2.6.	UIC Loading Guidelines - Code of Practice for Loading and Securing Cargo on Vehicles in Rail Freight Traffic - Volume 1 - Principles and Volume 2 - Goods	
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The UIC Guidelines are published every year in April – ISBN identification

## IRSs AND TECHNICAL DOCUMENTS as AMoCs

## UIC DOCUMENTS TO BE "STAMPED" AS AMoCs (by the end 2021) "safety of loads" and "tests and checks before departure"

- UIC Loading Guidelines Code of Practice for Loading and Securing Cargo on Vehicles in Rail Freight Traffic:
  Volume 1 Principles
  Volume 2 Goods
- IRS 40471-3: Inspection of dangerous goods consignments (inspection before train movement)
- IRS 40453: Procedures for air brake tests effected with a traction unit: Brake tests for conventional freight train (wagons)
- IRS 40421: Rules for the consist of and braking of international freight trains: rules for freight train brake settings as well as the content and format of the brake sheet and wagon list for use in freight traffic
- IRS 40472: Braking sheet, consist list for locomotive drivers and requirements for the exchange of data necessary to the operations of freight rail services
- ATTI-GCU appendixes 9 et 11 for:
  - Inspections before train movement
  - Quality assurance procedure,
  - Managing defects and irregularities

#### **UIC PRIMARY IDEAS FOR FUTURE "AMoCs"**

IRS 40421 (future edition): Rules for the consist of and braking of international freight trains - Brake settings - Content and format of the unified brake sheet in freight traffic

Leaflet 474: Catalogue of harmonised train procedures for crossborder freight operations

IRS 40454: Operating rules for securing trains and train components to prevent rolling away on open track with due consideration of holding force

\* IRS 40474 catalog of harmonised procedures for cross-border freight operations (Incl. IRS 40476)

New IRS 40472

TrainDy study for artiuclated wagons

## International Brake Sheet / Wagon List

International brake sheet and wagon list							E	5. Country code									
<u> </u>					ιar	and wagon list			ši 🗆								
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4a. Valid from station 4b. 1			/alid to station			7.	7. v <sub>max</sub> , km/h:										
Train p	arameters											<u> </u>					
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23. Gro	ss weight, t																
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2																	
3																	
5																	
38. Date of issue 39. Time			39. Time o	f issue	40. Issued b			by									
41. Date of review 42. Time			42. Time o	f review	43.	Reviev	wed by	ved by			44.Ren	nark					

# SPECIFICATION / STANDARDISATION HOW UIC WORKS WITH THE SECTOR

- ➤ UIC continues to cooperate with all relevant stakeholders, developing documents with a focus on:
  - Functional concepts and operational principles
  - Functional Requirements and Specifications
  - Integration in the railway system architecture
  - Tests
  - Operations
- ➤ On the basis of the above, the UBS alignment process was proposed as an AMOC (Acceptable Means of Compliance)



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Thank you for your kind attention.