**Economic Commission for Europe**

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Inland Transport Committee

**Working Party on the Transport of Dangerous Goods**

**Joint Meeting of the RID Committee of Experts and the**

**Working Party on the Transport of Dangerous Goods 27 June 2017**

Geneva, 17–27 September 2019

Item 5 (b) of the provisional agenda

**Proposals for amendments to RID/ADR/ADN:
new proposals**

**IRS 50592**

1st edition, 2019-1

**Intermodal Transport Units (other than semi-trailers) for vertical transhipment and suitable for carriage on wagons - Minimum requirements**

**Normative references**

The following referenced documents are indispensable for the application of this document.

For dated references, only the edition cited applies.

For undated references, the latest edition of the referenced document (including any amendments) applies.

1. UIC Leaflets

International Union of Railways (UIC)

*UIC Leaflet 592-3: Large containers (CT), swap bodies (CM) and transport frames for horizontal transhipment (CA) - Standard report on acceptance tests,* 2nd edition, January 1998

2. International Railway Solution (IRS)

International Union of Railways (UIC)

*IRS 50571-4: Wagons for combined transport - Vertical transhipment - Characteristics,* 1st edition, April 2018

*IRS 50596-6: Conditions for coding intermodal loading units in combined transport, combined transport lines and wagons,* 1st edition, July 2018

3. European Standards European Committee for Standardization (CEN)

*EN 283: Swap bodies - testing*, 1991 *EN 284: Swap bodies. Non-stackable swap bodies of class C. Dimensions and general*

*requirements*, 2006 *EN 452:* Swap bodies. Swap bodies of Class A. Dimensions and general requirements, 1995

*EN 1432: Swap bodies. Swap tanks. Dimensions, requirements, test methods, operating conditions*, 1997

*EN 12195-1: Load restraint assemblies on road vehicles. Safety. Part 1: Calculation of lashing forces*, 2010

*EN 12406: Swap bodies. Thermal swap bodies of class C. Dimensions and general requirements*, 1999

*EN 12410: Swap bodies. Thermal swap bodies of class A. Dimensions and general requirements,* 1999

*EN 12640: Securing of cargo on road vehicles. Lashing points on commercial vehicles for goods transportation. Minimum requirements and testing*, 2000

*EN 12641-1: Swap bodies and commercial vehicles. Tarpaulins. Part 1: Minimum requirements*, 2005

*EN 12641-2: Swap bodies and commercial vehicles. Tarpaulins. Part 2: Minimum requirements for curtainsiders*, 2006

*EN 12642: Securing of cargo on road vehicles. Body structure of commercial vehicles. Minimum requirements*, 2016

*EN 13044-2: Intermodal loading units. Marking. Part 2: Markings of swap bodies related to rail operation*, 2011

*EN 13853: Swap bodies for combined transport - Stackable swap bodies type C 745- S16 - Dimensions, design requirements and testing,* 2003

*EN 14993: Swap bodies for combined transport - Stackable swap bodies type A 1371 - Dimensions, design requirements and testing,* 2005

4. International Standards International Organization for Standardization (ISO)

*ISO 668: Series 1 freight containers - Classification, dimensions and ratings,* 2013 *ISO 1161: Series 1 freight containers - Corner fittings - Specification,* 2016

*ISO 1496-1: Series 1 freight containers - Specification and testing - Part 1: General cargo containers for general purposes,* 1990

*ISO 1496-2: Series 1 freight containers - Specification and testing - Part 2: Thermal containers,* 2008

*ISO 1496-3: Series 1 freight containers - Specification and testing - Part 3: Tank containers for liquids, gases and pressurized dry bulk,* 1995

*ISO 1496-4: Series 1 freight containers - Specification and testing - Part 4: Non- pressurized containers for dry bulkc,* 1991

*ISO 1496-5: Series 1 freight containers - Specification and testing - Part 5: Platform and platform-based containers,* 1991

*ISO 6346: Freight containers - Coding, identification and marking,* 1995

 Introduction

The present leaflet lists all the intermodal transport units (ILUs) other than semi-trailers which may be carried by rail.

It lists the references for standardised ILUs and sets minimum requirements for specific ILUs.

**Inventory of ILUs**

The following table lists the standards and requirements to be complied with for each type of ILU (see Glossary; for references to standards see Bibliography and points in the present leaflet).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Type** | **Dimensions and maximum loads** | **Markings** | **Strength**a |
| **1.1.** | **ISO container** | ISO 668 **with maximum load equal or less 36t** | ISO 6346 | ISO 1496-1 to 5 |
| **1.2.** | **Class C ILUs** | Point 5 | Point 10 | UIC Leaflet 592 |
| **1.3.** | **Stackable class C ILUs** | EN 13853 | Point 10 | EN 13853, UIC Leaflet 592 |
| **1.4.** | **Refrigerated class C ILUs** | EN 12406 | Point 10 | EN 12406, UIC Leaflet 592 |
| **1.5.** | **Class A ILUs** | EN 452 | Point 10 | EN 452, UIC Leaflet 592 |
| **1.6.** | **Stackable class A ILUs** | EN 14993 | Point 10 | EN 14993, UIC Leaflet 592 |
| **1.7.** | **Refrigerated class A ILUs** | EN 12410 | Point 10 | EN 12410, UIC Leaflet 592 |
| **1.8.** | **Tank ILUs** | EN 1432 / point 5.3 **with maximum load equal or less 36t** | Point 10 | EN 1432 |
| **1.9.** | **Intermediate frame**  | Bilateral/multilateral agreement | Bilateral/multilateral agreement | UIC Leaflet 592 |
| **1.10.** | **ILUs which do not fall under points 1.2 to 1.9 but whose dimensions allow them to be coded on the basis of *UIC Leaflet 596-6*** | Must be suitable for carriage on wagons with compatibility code C | Point 10 | UIC Leaflet 592 |
| **1.11.** | **ILUs with a base width > 2600 mm** | Appendix A | Point 10b | UIC Leaflet 592 |
| **1.12.** | **ILUs which, due to their dimensions or weight, may not be freely loaded onto carrying wagons with compatibility code C** | Appendix B | Point 7 | UIC Leaflet 592 |
| **1.13** | **Hybrid ILUs****Non-ISO ILUs with upper corner fittings but no grab-handling grooves** | Appendix HPoint 7 | Point 10 | UIC Leaflet 592 |
| **1.14.** | **Non-standardised ILUs carried stacked** | Appendix J | Point 10 | UIC Leaflet 592 |
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a. Demonstration of strength is recognised by means of a CSC plate and/or code plate.

b. Specific marking.