# ECONOMIC COMMISSION FOR EUROPE INLAND TRANSPORT COMMITTEE

<u>Joint Meeting of the RID Safety Committee and the</u> Working Party on the Transport of Dangerous Goods

(Bern, 26-30 March, 2007) Item 3 of the agenda

## **STANDARDS**

# Report of the Standards Working Group (8<sup>th</sup> meeting)

- 1. The Standards Working Group (WG) met outside the plenary sessions of the Joint Meeting under the chairmanship of Mr K. Wieser. The WG was tasked by the Plenary Meeting to
  - prepare a proposal on the future split of requirements on the chemical compatibility proof for plastics packagings and IBC's, following the discussion by plenary on document ECE/TRANS/WP.15/AC.1/2007/12;
  - clarify the options of a mutual use of EN/ EN ISO standards and ISO standards for UN pressure receptacles and non-UN pressure receptacles following the discussion of ECE/TRANS/WP.15/AC.1/2007/18;
  - to consider the consolidated comments on the standards submitted to the delegates of the Joint Meeting as distributed by INF.18, Rev.1;
- 2. The proposal on the first item (chemical compatibility) was distributed as INF. 50.
- 3. Proposals on the second item (mutual use of standards) were distributed as INF. 44.
- 4. The comments and recommendations from the members of the WG on INF.18, Rev.1 were addressed and consolidated in **Annex 2** to this document, which will be made available on the CEN website.
- 5. The proposals to adopt the reference to standards that are at stage 3 (Formal vote) are summarised in **Annex 1** (there is one item only).
- 6. The comments on the standards that were not adopted as reference documents and the comments on the standards that are at Public Enquiry stage will be transmitted to the relevant Technical Committees of CEN.

## Annex 1

# Proposals to amend ADR/RID

 $\underline{Proposal} : modify the \ \underline{existing} \ reference \ to \ the \ indicated \ standard \ in \ the \ table \ of \ 6.2. \ 2 \ of \ ADR/RID \ when \ the \ amendment \ is \ published:$ 

Title of document	Applicable sub- sections and para- graphs
ion	
Transportable gas cylinders - Refillable welded steel gas cylinders - Design and construction - Part 2: Stainless steel	unchanged
	ion  Transportable gas cylinders - Refillable welded steel gas cylinders -

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## Standards Working Group of the Joint Meeting ADR/RID 8th meeting, Bern, 26-30 March, 2007

## Consolidated comments on standards submitted by CEN before the meeting and as result of the discussion by the Working Group

## A. Standards at Stage 2: Submitted for Public Enquiry

Dispatch from CEN dated 22 November 2006

Ref	Reference Title of document		Where to refer in ADR/RID	Applicable sub-sections and paragraphs			
prEN13082rev		Tanks for transport of dangerous goods - Service equipment - Vapour transfer valve		6.8.3			
Comment	Comments from members of the Joint Meeting:						
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards		
D	6.3.2.3	There is no clause A.2.4 in EN 12266-1:2003 (in the German version).	proposed change: change A.2.4 in A.2.3	Comment refers to existing standard, not to A1:2006	Reference to be corrected in EN 13081, 13082 and 13083		

## Dispatch from CEN dated 20 December 2006

		Where to refer in ADR/RID	Applicable sub-sections and paragraphs
and tes	cylinders — Refillable seamless steel gas cylinders - Design, construction testing — Part 1: Quenched and tempered steel cylinders with tensile ngth less than 1 100 MPa (ISO/DIS 9809-1: 2006)	6.2.2 and 6.2.5	

## **Comments from members of the Joint Meeting:**

Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK	1. Note 1	The note provides the possibility of using this standard for the construction of tubes of up to 500 litres water capacity. Will such use be permitted by RID/ADR? The phrase "may be used as a guide" suggests that full compliance with the standard is not expected above 150 l.	Clarify in the reference for which pressure receptacles the standard can be used.	Reference shall require full compliance for volumes >150 l, or shall be subject to the agreement by the CA.	This Note would require an expert judgement on which parts of the standard shall really be followed. It is neither user-friendly nor compliant with the scope of the standard. The significant increase in volume from 150 to 500l would interfere in the scope of and the requirements on tubes.

					The Note should be removed.
UK	6.1.1	The first sentence limits the application of its requirements to cylinders in international service, when, in fact service in national service is also possible. Recommend adding "national" as shown	gas cylinders intended for national and international service.	Scope of service need to be declared elsewhere; delete "intended for international service".	Clause 6.1.1 is not the place to declare the field of application.  It's recommended that " intended for international service" is deleted.
UK	Forward; 9.2 Note; Bibliogra- phy	Update the reference to the 15th Revision of the UN Model Regulations	Replace document designation by ST/SG/AC.10/1/Rev.15	Agree; additional reference to ADR/RID approval procedure recommended.	The WG recommends to replace the issue-number of the UN Model Regulation by a term "as valid at the time of application", or similar.
СН	7.3	As stated by the consultant the F factor is extended to 0.85 instead of 0.77. The explanation is not traceable. What is a global safety Factor of 0.65?		"At the STD WG meeting of the September session of the Joint Meeting it was accepted that a F factor at 0.85 ensures a global safety factor of 0.65 between the membrane stress at test pressure and the UTS and that coupled with a burst ratio of minimum 1.6 satisfied by test, it offers an equivalent level of safety."  4.1.3.6 does not apply – it relates to receptacles for liquids and solids.	Despite the documented result of the last WG meeting on this subject, the WG agrees that the statement of an equivalent overall safety is not traceable and that a document should be prepared by CEN to demonstrate the equivalency.
СН	11.2.2	Volumetric expansion test with permanent deformation is not allowed (ADR 6.2.1.5.1 (g)	Exclude this point in the standard table 6.2.2 of ADR	Agree with .CH suggestion.	The WG agrees that plastic deformation as a result of the volumetric expansion test would not be compliant with ADR/RID and clause 11.2.2 should be removed.  Alternatively, CEN could exclude it's use in the European Annex.

UK	Annex NA; Annex A	Annex A in the standard is already normative, so this requirement is unnecessary	Delete "Annex A shall be taken as normative."	Agree; heading "Annex A" to be deleted as well.	The WG agrees that this sentence is superfluous and should be deleted together with the heading.
UK	Annex NA; B.2 Note	The meaning of "certification of the personnel should be reciprocated" is unclear.	Replace by "certification according to either standard should be accepted"	Agree to find better wording.	The wording of UK was agreed as to a better wording which should be used in the standard.
СН		This standard should only be mentioned in the ADR if the EN 1964-1 is retracted		Grandfathering to be discussed; however, existing	The WG agrees that the transition issue need to be addressed by the Joint Meet-
UK	General	While the long term intention is to withdraw EN 1964-2 some overlap time will be required by cylinder manufacturers to get their type approvals converted to EN ISO 9809-2.	Retain the reference to EN 1964-2 when the reference to EN ISO 9809-2 is introduced.	type approval should not be touched, unless the safety requirements have been significantly increased.	ing with the further use of cylinders, and the further manufacture of cylinders built in acc. with type approvals based on the former version of the standard.

Ref	erence	Title of document		Where to refer in ADR/RID	Applicable sub-sections and paragraphs
prEN ISO 9809-2		Gas cylinders - Refillable seamless steel gas cylinders - Design, construction and testing - Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1100 MPa (ISO/DIS 9809-2)		6.2.2 and 6.2.5	
Comments	from member	rs of the Joint Meeting:			
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK	1. Note 1	The note provides the possibility of using this standard for the construction of tubes of up to 500 litres water capacity. Will such use be permitted by RID/ADR? The phrase "may be used as a guide" suggests that full compliance with the standard is not expected above 150 l.	Clarify in the reference for which pressure receptacles the standard can be used.	Reference to require full compliance for volumes >150 l, subject to the agreement by the CA in NOTE.	This Note would require an expert judgement on which parts of the standard shall really be followed. It is neither user-friendly nor compliant with the scope of the standard. The significant increase in volume from 150 to 500l would interfere in the scope of and the requirements on tubes.  The Note should be removed.

UK	6.1.1	The first sentence limits the application of its requirements to cylinders in international service, when, in fact service in national service is also possible. Recommend adding "national" as shown	gas cylinders intended for <b>national and</b> international service	Scope of service need to be declared elsewhere; delete "intended for international service".	Clause 6.1.1 is not the place to declare the field of application.  It's recommended that the term " intended for international service" is deleted.
UK	Forward; 9.2 Note; Bibliography	Update the reference to the 15 <sup>th</sup> Revision of the UN Model Regulations	Replace document designation by ST/SG/AC.10/1/Rev.15	Agree; additional reference to ADR/RID approval procedure recommended.	The WG recommends to replace the issue-number of the UN Model Regulation by a term "as revised."
UK	Annex NA; Annex A	Annex A in the standard is already normative, so this requirement is unnecessary	Delete "Annex A shall be taken as normative."	Agree; heading "Annex A" to be deleted as well.	The WG agrees that this sentence is superfluous and should be deleted together with the heading.
UK	Annex NA; B.2 Note	The meaning of "certification of the personnel should be reciprocated" is unclear.	Replace by "certification according to either standard should be accepted"	Agree to find better wording.	The wording of UK was agreed as to a better wording which should be used in the standard.
UK	General	While the long term intention is to withdraw EN 1964-1 some overlap time will be required by cylinder manufacturers to get their type approvals converted to EN ISO 9809-3.	Retain the reference to EN 1964-1 when the reference to EN ISO 9809-3 is introduced.	Grandfathering to be discussed; however, existing type approval should not be touched.	The WG agrees that the transition issue need to be addressed by the Joint Meeting with the further use of cylinders, and the further manufacture of cylinders built in acc. with type approvals based on the former version of the standard.
СН		This standard should only be mentioned in the ADR if the EN 1964-2 is retracted		Parallel use should be allowed to give time for adaptation of processes.	
СН	11.2.2	Volumetric expansion test with permanent deformation is not allowed (ADR 6.2.1.5.1 (g)	Exclude this point in the standard table 6.2.2 of ADR	Agree with .CH suggestion.	The WG agrees that plastic deformation as a result of the volumetric expansion test would not be compliant with ADR/RID and clause 11.2.2 should be removed.
					Alternatively, CEN could exclude it's use in the European Annex.

Reference	Title of document	Where to refer in ADR/RID	Applicable subsections and paragraphs
prEN ISO 9809-3	Gas cylinders - Refillable seamless steel gas cylinders - Design, construction	6.2.2 and 6.2.5	

		and testing - Part 3: Normalized steel cylinders			
Comments	s from membe	rs of the Joint Meeting:			
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards
UK	1. Note 1	The note provides the possibility of using this standard for the construction of tubes of up to 500 litres water capacity. Will such use be permitted by RID/ADR? The phrase "may be used as a guide" suggests that full compliance with the standard is not expected above 150 l.	Clarify in the reference for which pressure receptacles the standard can be used.	Reference to require full compliance for volumes >150 l, subject to the agreement by the CA in NOTE.	This Note would require an expert judgement on which parts of the standard shall really be followed. It is neither user-friendly nor compliant with the scope of the standard. The significant increase in volume from 150 to 500l would interfere in the scope of and the requirements on tubes.  The Note should be removed.
UK	6.1.1	The first sentence limits the application of its requirements to cylinders in international service, when, in fact service in national service is also possible. Recommend adding "national" as shown	gas cylinders intended for national and international service.	Scope of service need to be declared elsewhere; delete "intended for international service".	Clause 6.1.1 is not the place to declare the field of application.  It's recommended that " intended for international service" is deleted.
UK	Forward; 9.2 Note; Bibliogra- phy	Update the reference to the 15th Revision of the UN Model Regulations	Replace document designation by ST/SG/AC.10/1/Rev.15	Agree; additional reference to ADR/RID approval procedure recommended.	The WG recommends to replace the issue-number of the UN Model Regulation by a term "as valid at the time of application", or similar.
UK	Annex NA; Annex A	Annex A in the standard is already normative, so this requirement is unnecessary	Delete "Annex A shall be taken as normative."	Agree; heading "Annex A" to be deleted as well.	The WG agrees that this sentence is superfluous and should be deleted together with the heading.
UK	Annex NA; B.2 Note	The meaning of "certification of the personnel should be reciprocated" is unclear.	Replace by "certification according to either standard should be accepted"	Agree to find better wording.	The wording of UK was agreed as to a better wording which should be used in the standard.
UK	General	While the long term intention is to withdraw EN 1964-1 some overlap time will be required by cylinder manufacturers to get their type approvals converted to EN ISO 9809-3.	Retain the reference to EN 1964-1 when the reference to EN ISO 9809-3 is introduced.	Grandfathering to be discussed; however, existing type approval should not be touched.	The WG agrees that the transition issue need to be addressed by the Joint Meeting with the further use of cylinders, and the further manufacture of cylinders

СН		This standard should only be mentioned in the ADR if the EN 1964-1 is retracted		Parallel use should be allowed to give time for adaptation of processes.	built in acc. with type approvals based on the former version of the standard.
СН	7.2	As stated by the consultant the F factor is extended to 0.85 instead of 0.77. The explanation is not traceable. What is a global safety Factor of 0.65?  The burst ratio pb/ph is not as mentioned by the consultant 1.6. With the formula in 7.2 it could be even less than 1.5 as recommended in ADR 4.1.3.6.1	A minimum burst ratio of 1.6 has to be added in the standard table 6.2 .2 of ADR	"At the STD WG meeting of the September session of the Joint Meeting it was accepted that a F factor at 0.85 ensures a global safety factor of 0.65 between the membrane stress at test pressure and the UTS and that coupled with a burst ratio of minimum 1.6 satisfied by test, it offers an equivalent level of safety."  4.1.3.6 does not apply – it relates to receptacles for liquids and solids.	Despite the documented result of the last WG meeting on this subject, the WG agrees that the statement of an equivalent overall safety is not traceable and that a document should be prepared by CEN to demonstrate the equivalency.
СН	11.2.2	Volumetric expansion test with permanent deformation is not allowed (ADR 6.2.1.5.1 (g)	Exclude this point in the standard table 6.2.2 of ADR	Agree with .CH suggestion.	The WG agrees that plastic deformation as a result of the volumetric expansion test would not be compliant with ADR/RID and clause 11.2.2 should be removed.  Alternatively, CEN could exclude it's use in the European Annex.
СН	13	The second clause is not in accordance with ADR, there is no temperature indication foreseen and either the standard or the type approval may be mentioned.	Exclude this point in the standard table 6.2.2 of ADR	6.2.1.7.5 and 6.2.5.8.5 do allow additional marking.  However, reference to "marking requirements of the countries of <u>use</u> " may be misleading in context with a standard on transportable gas cylinders.	This clause is seen to be covered by 6.2.1.7.5 which allows the application of additional marking under certain technical conditions and provided they do not conflict with the legal marking, which is not seen.  No change is required.

Reference		Title of document		Where to refer in ADR/RID	Applicable subsections and paragraphs			
prEN 155	51	Railway applications – Freight wagons – Buffers		6.8.4 b)	TE22			
Comment	Comments from members of the Joint Meeting:							
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards			
В		Les tampons à course de 75 mm et les tampons à plateaux circulaires ne sont pas repris dans ce projet de norme. Or ces types de tampon sont admis selon les fiches UIC 526-3 et 527-2 et existent toujours. La norme devrait donc être complétée pour tenir compte de ce type de matériel.		PW: The requirements of 6.8.4 TE22 and UIC 473 are adequately covered by the requirements of Annex I.	The WG agrees that the standard need not consider types of buffers which have been specified elsewhere.			
		(Other types of Buffers, which are allowed and used should also be included in the standard)		KW: The application of standards referenced in RID does not preclude other solutions in line with the legal requirements. Old solutions may be grandfathered.				
UK	Contents and Clause 9	Change heading of Clause 9 "Crash buffers"	"Crashworthy buffers with crashworthy com- ponents compliant with RID"	Comments have been subject to meeting for preparation of comment resolution of CEN/TC 256 PTA buffers and draw gears – 2122.3.07 in Brussels and may have already been accepted.	These comments were considered as editorial, subject to the further treatment of the standard.			
UK	Contents and Annex H	Change "crash buffers" in heading of Annex H to read "crashworthy buffers"						
UK	1, Scope 6 <sup>th</sup> paragraph	Change the paragraph reading "It also defines the requirements of buffers integrated crash element for tank wagons according to RID"	It also defines the requirements for buffers with integrated crash elements (crashworthy buffers) for tank wagons according to RID.					

UK	9, 1 <sup>st</sup> para- graph	Change the first word "Crash"	" <u>Crashworthy</u> buffers		
UK	9, last para- graph	Change as shown	Crashworthy components compliant with RID sub-section 1.6.3.27 and section 6.8.4 shall comply with the provisions of Annex I		
UK	Annex H, Note	Change "crash buffers" to "crashworthy buffers"			
UK	Annex I	To avoid any confusion over the dates of application of this standard particularly the period between 1 January 2005 and the date of implementation of the standard, the heading of I.1.2 "For new wagons" should be changed.	I.1.2 For wagons built after 31 December 2004	Agree; would also comply with comparable ADR/RID clauses.	The WG agrees with the UK comment and recommends that absolute instead of relative dates are given.

# B. Standards at Stage 3: Submitted for Final Voting

Dispatch from CEN dated 25 August 2006

Reference		Title of document		Where to refer in ADR/RID	Applicable sub-sections and paragraphs		
EN 13222-2:2003/prA1		Transportable gas cylinders - Refillable welded steel gas cylinders - Design and construction - Part 2: Stainless steel		6.2.2	6.2.1.1 and 6.2.1.5		
Comments	Comments from members of the Joint Meeting:						
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards		
				PW: This small amendment (1 page) modifies the requirements for radiographic examination of table A1for joggle joints in order to be more practical for two pieces cylinders and in line with figure A1 (and not B1 as noted in the amendment) for three pieces.	The WG agrees with the assessment by the consultant.		
Decision of the Standards Working Group:		Accepted	Comments: None				

# Dispatch from CEN dated 22 November 2006

Reference		Title of document		Where to refer in ADR/RID	Applicable sub-sections and paragraphs	
prEN 14894fv		LPG Equipment and accessories -Cylinder and drum marking		6.2.2	6.2.1.7	
Comments from members of the Joint Meeting:						
Country	Clause No.	Comment (justification for change)	Proposed change	Comment from CEN Consultant	Comment from WG Standards	
UK	Whole standard	It is perfectly possible from reading the regulations to know whether a pressure receptacle is correctly	Do not reference this stan- dard in the regulations	PW: The comments made in the assessment at the enquiry	The WG can follow that documents are developed on specific legal requirements	

		stamped or not. This standard is a useful guide for the industry, but adds no value to the regulations.		stage have all been adequately addressed.	to facilitate its understanding and to support compliance.
				KW: No contradiction with ADR/RID;	The WG also don't see any contradiction to the ADR/RID marking provisions.
				A new entry on marking in the table under 6.2.2- would be required in case of referencing.	However, because of the risks of the overlap of ADR/RID and standard text which may lead – sooner or later – to inconsistencies, a referencing to this standard is not supported.
UK	Table 1 and Table 3	The footnote is misleading. The UN Model Regulations do not specify the marks to be used – in fact they say no more than the standard i.e. "as indicated by the distinguishing signs of motor vehicles in international traffic;"	Delete both footnotes	Agree with UK	The WG agrees that the notes should better directly refer to "the distinguishing signs of motor vehicles in international traffic".
Decision of the Stan- dards Working Group:		Refused	<b>Comments:</b> Despite the judgement that there is no conflict with ADR/RID a reference to this standard is not supported, because it duplicates the marking requirements in full.		