

OTIF



ORGANISATION INTERGOUVERNEMENTALE POUR
LES TRANSPORTS INTERNATIONAUX FERROVIAIRES

ZWISCHENSTAATLICHE ORGANISATION FÜR DEN
INTERNATIONALEN EISENBAHNVERKEHR

INTERGOVERNMENTAL ORGANISATION FOR INTER-
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Joint Meeting of the RID Committee of Experts and the
Working Party on the Transport of Dangerous Goods
(Geneva, 17-21 September 2012)

Item 6 of the provisional agenda: Reports of informal working groups

Report (draft) of the informal Working Group on Fire Extinguishers
(Bonn, 13 June 2012)

Transmitted by the Government of Germany

1. In accordance with paragraphs 18 and 19 of the report of the Joint Meeting (see document OTIF/RID/RC/2012-A - ECE/TRANS/WP.15/AC.1/126), Germany had invited interested countries and international organisations to the meeting of the Working Group to Bonn, Germany. The Meeting took place on 13 June 2012 (afternoon session) after the meeting of the informal Working Group on the periodicity of testing cylinders (see draft report provided by EIGA).

Attendees

2. The meeting was attended by representatives from the competent authorities of Germany, Poland, Sweden, Switzerland and the United Kingdom. In addition, there were representatives from the Federal Institute for Materials Research and Testing (BAM), the British Compressed Gases Association (BCGA), European Cylinder Makers Association (ECMA), the European Industrial Gases Association (EIGA) and the European Committee of the Manufacturers of Fire Protection Equipment and Fire Fighting Vehicles (EUROFEU) – including its German member, the Federal Association for Fire Protection Technology (BVFA).

For reasons of cost, only a limited number of copies of this document have been made. Delegates are asked to bring their own copies of documents to meetings. OTIF only has a small number of copies available.

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3. The meeting was chaired by G. Oberreuter of the Federal Ministry of Transport, Building and Urban Development of Germany (BMVBS) who was supported by A.Webb of EIGA acting as the meeting secretary.
4. EUROFEU confirmed that it would apply for consultative status for RID/ADR meetings.

Introduction

5. A tour de table was held.

Background information

6. The chair outlined that the new TPED directive (2010/35/EU) had entered into force in 2010 and that the new directive had excluded fire extinguishers fairly clearly from its scope. The exclusion, however, had not solved all problems as it still had to be determined how to deal with them in RID/ADR.
7. SP 594 of RID/ADR currently permits transport of fire extinguishers in a “strong outer packaging” and exempts them from RID/ADR only under this condition. This was discussed at the national level in Germany at the BMVBS Class 2 working group with representatives from BAM and BVFA. As a result of this meeting, Germany presented INF.19 to the Joint Meeting in March 2012.
8. The main issues that arose were:
 - Which of the various types of fire extinguishers are covered by UN 1044, only portable ones or also others?
 - How should larger fire extinguishers and related equipment be dealt with and how should the requirement of a “strong outer packaging” be implemented, considering that there are doubts whether some of the types are really suitable for packaged transport?
9. At the Joint Meeting of March 2012, it was agreed that the issue should be discussed at the informal Working Group on the periodicity of testing cylinders.

Display of fire extinguishers

10. Outside the meeting room, BVFA and the German manufacturer Minimax presented several examples of fire extinguishers so that the participants were able to get an impression of the variety of types concerned. The WG appreciated this very much and thanked BVFA and Minimax.

Presentation

11. An overview of EUROFEU outlining the objectives of the organisation was distributed to the members.
12. EUROFEU gave a presentation on the different types of fire extinguishers. This presentation detailed where fire extinguishers and its components like cylinders and cartridges fitted into the frameworks of the PED and TPED and where fire extinguishers fitted into RID/ADR. It should be noted that RID/ADR does not define what is covered by the term ‘fire extinguisher’, nor do the UN Model Regulations on the Transport of Dangerous Goods. Although portable fire extinguishers for manual handling and operation might have been the focus when the UN entry was created years ago, it was pointed out that portable fire extinguishers as well as larger but movable fire extinguishing equipment had undergone extensive technical development.

13. The difficulty here is to decide how fire extinguishers should be dealt with within RID/ADR and that SP 594 can no longer be deemed to be up to date as many of the various types of fire extinguishers are not suitable for packaged transport and may require other means of protection for their valves and equipment for safe transport.
14. The working group was asked to comment on the presentation.
15. It was clarified that at EU level cylinders can only be pi or CE marked. This might be different for valves as they may be used for transportable pressure equipment as well as for permanently installed equipment.
16. There was a discussion on linguistic differences between the English and German versions of PED regarding term 2.2a, which is „portable” in English and “tragbar” in German. According to the PED-CEN-consultant, the German version means “movable”, but according to dictionaries it could also be translated as “portable”. It was clarified that the group was not permitted to solve this issue and could only identify it.
17. EUROFEU showed that four types of extinguishers were covered by UN1044 and added that, from their point of view, the wording of SP594 did not appear to be relevant nor suitable for large cartridge type extinguishers that are mounted on wheels.
18. BAM introduced document INF.19 presented by Germany at the Joint Meeting in Bern and summarised that the aim was to achieve an overall definition of fire extinguishers which is suitable for transport according to RID/ADR (or even world-wide) and TPED/PED at the European level and might result in a change in the applicable PED guidelines.
19. BMVBS stated that the solution for classification and general packing requirements needed to be agreed at UN level, and that after that, all the other issues should cascade into RID/ADR and European legislation.
20. Comments from the table:
 - ECMA underlined that it was clear in their view what was a fire extinguisher that should be packaged under P003, and they supported the approach of initially addressing the issue at UN level. Moreover, cylinders should fulfil the transport requirements of RID/ADR (chapter 6.2) when filled and transported as cylinders.
 - Switzerland wanted to take a pragmatic approach but understood the problem of the users. However, it supported the approach of initially addressing the issue at UN level.
 - Poland felt that the situation should be simplified and that a clear assignment to PED or TPED should be achieved.
 - The UK was of the opinion that this complex issue needed resolving and that its clarification at UN level was probably the best approach. Component parts of fire extinguishers as well as discharged cylinders should be addressed and not necessarily considered as fire extinguishers.
 - Sweden saw benefit in adding to the requirements of P003 to permit e.g. unpacked transport of certain types of fire extinguishers.
 - EUROFEU supported the UN approach.
21. Overall, the meeting felt it would be easier to start at UN level. For the discussion at UN level, it should be taken into account that at European level portable fire extinguishers are covered by EN 3, some other types are covered by EN 1866, and some types are not covered by any

existing EN standard. At UN level, reference could only be made to national requirements as no specific ISO standards are available.

22. BMVBS was of the opinion that for transport as a dangerous good fire extinguishers should be regarded as dangerous articles and not as cylinders for the transport of gases.
23. BMVBS added that for the wheeled versions P003 might not be sufficient, but that PP32 might serve as an example for a new PPxx within P003 to cover these versions. It was suggested to also include additional requirements in 4.1.3.8 and 4.1.3.6.8 in this context. Wheeled units that could be drawn by a vehicle or large units that could be loaded onto a vehicle needed to be considered, for example as regards their classification.
24. It was discussed whether all types of portable and movable fire extinguishers should be covered by the existing UN 1044 or whether a new entry should be proposed to cover large fire extinguishing equipment.
25. Clarification should be provided for fire extinguishers components attached to a chassis for transport as compared to manually portable units.
26. The definition of UN 1044 could include pressure equipment constructed for the use in fire fighting installations.
27. Where cylinders are filled and transported e.g. in frames for use in fixed fire extinguishing installations, it was considered that the cylinders needed to comply with 6.2 of the UN Model Regulations as well as RID/ADR. But it was noted that this may currently be the case in some countries (like Germany), but not necessarily in all European countries or elsewhere.
28. The WG ultimately agreed to propose to the UN Sub Committee that all kinds of portable and movable extinguishers and their components should be treated as one under UN 1044, which would make it necessary to split this entry into four lines in table A.
29. Initially, this matter will be submitted for consideration of the UN level. Germany offered to submit an INF.-paper for the forthcoming UN Sub Committee session. As it might not be possible to circulate the document to the WG due to time constraints, Germany has the support of the group for the paper.
30. If the UN Sub Committee agrees in principle, a formal proposal to incorporate the clarified UN entry 1044 into the next edition of the Model Regulations should be submitted for adoption at the December session of the UN Sub Committee. Incorporation into the RID/ADR should then follow in 2015. Depending on the result of the UN meeting, this may be addressed at the meeting of the Harmonisation Working Group of the Joint Meeting in 2013.
31. The Chair thanked the participants for their contributions, and BVFA and Minimax for showing the different types of fire extinguishers, and expressed his confidence that with the support of the participating countries and organisations an appropriate and practical solution could be achieved.

Note: With the support of the WG, the Expert from Germany submitted INF.59 to the UN Sub Committee for the 41st session; a copy of this document is attached.

Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods

22 June 2012

Forty-first session

Geneva, 25 June – 4 July 2012

Item 3 (b) of the provisional agenda

Listing, classification and packing: miscellaneous

Assignment of fire extinguishers to UN No. 1044

Transmitted by the expert from Germany

Document relating to ST/SG/AC.10/C.3/2012/44 and UN/SCETDG/41/Inf.7

Introduction

1. Germany had initiated a discussion of the Joint Meeting RID/ADR/ADN in March 2012 on questions on the classification of fire extinguishers of UN 1044 and on related packaging and transport problems (see report ECE/TRANS/WP.15/AC.1/126 §§ 18 and 19).
2. As first consequence, the Expert from Germany submitted documents ST/SG/AC.10/C.3/2012/44 and UN/SCETDG/41/Inf.7 to the Sub Committee.
3. The Working Group, mentioned in § 19 of the report of the Joint Meeting RID/ADR/ADN, met on 13th of June in Bonn (Germany) and discussed the question of classification and related issues. It was agreed, that the Expert from Germany shall submit an additional Inf. Paper to the Sub Committee to further support the discussion and to propose the following draft principles:
 - a) UN Number 1044 should be used for all transportable and movable fire extinguishers transported for fire extinguishing purposes whether being a completed fire extinguisher on its own or a part or spare part for installation in local fire extinguishing equipment; it should not be used for transport of gas cylinders installed in frames for installation in local fire extinguishing equipment, such cylinders should be transported as required for the gas contained, e.g. CO₂ or N₂;
 - b) The group identified groups of fire extinguishers which are handled and transported differently and require different packaging provisions – including some types of being transported unpackaged – as follows:
 1. Portable fire extinguishers for manual handling and operation, transported packaged or with suitable means of protection for valves and other equipment mounted on the fire extinguisher;
 2. Fire extinguishers mounted on wheels for manual handling, transported packaged or unpacked with suitable means of protection for valves and other equipment mounted on the fire extinguisher;

3. Fire extinguishing equipment/machinery mounted on wheels or wheeled platforms transported unpacked and similar to (small) trailers;
4. Fire extinguishers composed of a non-rollable pressure drum and equipment, transported unpacked and handled e.g. by fork lift or crane when loaded or unloaded.
 - c) Fire extinguishers should be manufactured, tested, approved and labelled according to the provisions of the country of manufacture; nevertheless on the European level there are applicable standards (EN 3 and EN 1566).
4. The Sub Committee is invited to discuss these principles and decide as appropriate. The Expert from Germany offers to submit a formal proposal for adoption for the next session of the Sub Committee. However, a first draft of such a proposal can be found in the annex.

Annex to UN/SCETDG/41/Inf.xx

Draft proposal

Amend the entry for UN 1044 to read

(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)
1044	FIRE EXTINGUISHER with compressed or liquefied gas, portable for manual handling	2.2			225	120ml	E0	P003	PPxx			
1044	FIRE EXTINGUISHER with compressed or liquefied gas, mounted on wheels or wheeled platforms/units	2.2			225	LQ0	E0	P003	PPyy			
1044	LARGE FIRE EXTINGUISHING EQUIPMENT with compressed or liquefied gas, mounted on wheels or a wheeled platform/unit	2.2			225	LQ0	E0	P003	PPzz			
1044	LARGE FIRE EXTINGUISHING EQUIPMENT with compressed or liquefied gas, composed of a pressure drum and equipment	2.2			225	LQ0	E0	P003	PPzz			

Amend SP 225 to read:

“225 Fire extinguishers under this entry may include installed actuating cartridges (cartridges, power device of Division 1.4C or 1.4S), without changing the classification of Division 2.2 provided the total quantity of deflagrating (propellant) explosives does not exceed 3.2 g per extinguishing unit. *Fire Extinguishers shall be manufactured, tested, approved and labelled according to the provisions of the country of manufacture. A copy of these provisions shall be provided by the manufacturer on request of the competent authority of the country of use. Fire extinguishers under this entry comprise:*

1. Portable fire extinguishers for manual handling and operation, transported packaged or with suitable means of protection for valves and other equipment mounted on the fire extinguisher;
2. Fire extinguishers mounted on wheels for manual handling, transported packaged or unpacked with suitable means of protection for valves and other equipment mounted on the fire extinguisher;
3. Fire extinguishing equipment/machinery mounted on wheels or wheeled platforms/units transported unpacked and similar to (small) trailers;
4. Fire extinguishers composed of a non-rollable pressure drum and equipment, transported unpacked and handled e.g. by fork lift or crane when loaded or unloaded”

Add new PPxx, PPy and PPzz to read:

“PPxx The provisions of 4.1.6.1.8 shall be applied.

PPy The provisions of 4.1.6.8 shall be applied. Fire extinguishers of this entry may be transported unpacked if the requirements of 4.1.3.8 (a) to (e) are met.

PPzz The provisions of 4.1.6.1.8 (b), (c) or (d) shall be applied. Fire extinguishers of this entry may be transported unpacked if the requirements of 4.1.3.8 (a) to (e) are met.”

Assign PPxx, PPy and PPzz to UN 1044 as shown in the table above.
