



**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****Fiftieth session**

Geneva, 28 November – 6 December 2016

Item 2 (f) of the provisional agenda

**Recommendations made by the Sub-Committee on its forty-seventh,
forty-eighth and forty-ninth sessions and pending issues: miscellaneous pending issues****Dangerous goods in machinery, apparatus or articles, N.O.S.****Submitted by the expert from Germany¹****Introduction**

1. At the forty-second session of the Sub-Committee it was agreed to place the issue of articles containing various quantities of dangerous goods on the programme of work for the biennium 2013-2014 and the issue has continued to be discussed at each meeting since then and is now in the work programme for this biennium.
2. At the forty-ninth session it became apparent that there were still a number of diverging views on several aspects of this issue and that it was not clear whether there is any chance to reach an agreement by the end of the year.
3. New entries for dangerous goods in machinery, apparatus or articles could help to improve the hazard communication for articles with different dangerous goods and the assignment of articles, in particular if they cannot be shipped under the entry for the contained dangerous substance. Furthermore, new provisions would overcome existing problems with the current special provision 301 which limits the scope of UN 3363.
4. The expert from Germany supports the continuation of further discussions. However, an intermediate solution with regard to special provision 301 should be considered if no final solution can be found during this biennium.

¹ In accordance with the programme of work of the Sub-Committee for 2015–2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15).

5. Special provision 301 contains several constraints for the use of UN 3363:
- If the machinery or apparatus has its own proper shipping name, that must be used rather than UN 3363;
 - The dangerous substance contained must either be a residue or an integral element of the apparatus or machinery;
 - There can be more than one dangerous substance contained within the machinery or apparatus providing they are not capable of reacting dangerously with one another;
 - The dangerous substance can only be one which is authorized as a limited quantity;
 - The dangerous substance shall not exceed the limited quantity threshold for the substance in question, the competent authority may authorize larger quantities.
6. According to these constraints UN 3363 may not be used for substances with “0” assigned in column 7a. For example butane (UN 1011) cannot qualify since it is not permitted in limited quantities whilst compressed argon (UN 1006) can qualify since it has a limited quantity threshold of 120 ml. Consequentially there is no legal possibility to classify articles containing dangerous goods that are not allowed in limited quantities. However, in practice many approvals are also issued for such articles irrespective of the wording of special provision 301.

Proposal

7. It is proposed to include a possibility for approvals of articles containing dangerous goods not permitted in limited quantities until new entries applicable to these articles will be created in future. This will harmonize the current different practises of competent authorities and will not harm safety, as competent authorities may specify further requirements within their approvals.
8. In this context special provision 301 should be amended so as to use the term ”dangerous goods” consistently, to clarify that dangerous reactions may be also prevented by the enclosure of the dangerous goods and to update the reference for orientation arrows..
9. Amend SP 301 to read as follows:

This entry only applies to machinery or apparatus containing dangerous ~~substances~~ goods as a residue or an integral element of the machinery or apparatus. It shall not be used for machinery or apparatus for which a proper shipping name already exists in the Dangerous Goods List of Chapter 3.2. Machinery and apparatus transported under this entry shall only contain dangerous goods which are authorized to be transported in accordance with the provisions of Chapter 3.4 (Limited quantities). The quantity of dangerous goods in machinery or apparatus shall not exceed the quantity specified in Column 7a of the Dangerous Goods List of Chapter 3.2 for each item of dangerous goods contained. If the machinery or apparatus contains more than one item of dangerous goods, the individual substances shall be enclosed as to prevent not be capable of reacting dangerously with one another (see 4.1.1.6). When it is required to ensure liquid dangerous goods remain in their intended orientation, package orientation labels meeting the specifications of ~~ISO 780:1997~~ 5.2.1.7.1 shall be affixed on at least two opposite vertical sides with the arrows pointing in the correct direction.

The competent authority may exempt from regulation machinery or apparatus which would otherwise be transported under this entry. The transport of dangerous goods in machinery or apparatus where the dangerous goods are not authorized to be transported in accordance with the provisions of Chapter 3.4 or where the quantity of dangerous goods exceeds the quantity specified in Column 7a of the Dangerous Goods List of Chapter 3.2 is authorized when approved by the competent authority, except where special provision 363 applies.
