

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

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Item 5 (a) of the provisional agenda

Miscellaneous proposals for amendments to the Model Regulations on the Transport of Dangerous Goods: fuels in machinery or equipment

Comments on Documents ST/SG/AC.10/C.3/2013/67 and UN/SCETDG/44/INF.7

Transmitted by the expert from Switzerland

Introduction

1. We understand the hesitations and the need for clarification expressed in document ST/SG/AC.10/C.3/2013/67. It should be admitted that during the introduction of the special provision 363 (SP363) all details and the inconsistencies which still hid in the regulation were not raised. This SPS363 has just come into force in 2013 in the various modes of transport and its range and its scope are by far not yet completely understood by all those concerned by the dangerous goods. As in any innovation it takes a certain time of adaptation to evaluate the range and the advantages of this one. This special provision is introduced through the provision special 301 (DS301) with respect to the entry UN 3363 DANGEROUS GOODS IN MACHINERY. In the last paragraph of the DS301 it is indicated that the transport of dangerous goods in machinery and apparatus for quantities exceeding the quantity specified in Column 7a of the Dangerous Goods List (LQ) can also be done according to SP363. Finally the SP363 is assigned for entries with UN-Numbers 1202, 1203, 1223, 1268, 1863 and 3475.

2. The reading of the arguments of the industry enabled us to understand that according to the approach preexistent with the introduction of the SP363 and which seems to still prevails in the air and sea modes, the machinery and apparatus containing an internal combustion engine had to be classified under UN 3166. Always according to this approach, UN 3363 could not be used for machinery containing an internal combustion engine owing to the fact that the special provision 301 (DS301) specifies that UN 3363 should not be used for machinery or apparatus for which a proper shipping name already exists. Moreover as the SP301 was before applicable only to quantities which do not exceed the limited quantities of Column 7a of the Dangerous Goods List, the only practical way to transport machinery was to assign them to the UN 3166. Put aside that it seems difficult to admit that the term "internal combustion engine" in the name of UN 3166 could be assimilated as a proper shipping name for a machine or apparatus, if this approach remained valid today it would invalidate the possibility to use the SP363 for the machinery containing an internal combustion engine, which precisely applies to the machinery and apparatus containing UN 1202, 1203, 1223, 1268, 1863 and 3475.

3. It seems to us that the various modes of transport should better take into account the existence of the new SP363 and its scope, otherwise it will exist three different manners to transport the machinery and apparatus containing a combustion engine: one according to UN 3166, a second according to UN 3363 and the third according to UN entries to which

SP363 has been assigned to. Such a diversity in interpretation is not acceptable for a system which wants to be multimodal and worldwide applied.

Discussion on Document UN/SCETDG/44/INF.7

4. Concerning the problems mentioned in document UN/SCETDG/44/INF.7 we have the following comments:

The fact that until now the majority of the modes tried to solve the question of the machinery containing combustion engines through the UN 3166 is comprehensible but this should not be any more necessary since the SP363 came into force in the various modes. It may still take a certain time of adaptation to the various modes to catch the exact scope of this innovation. It is at least the difficulty we observe for the interpretation of the scope of SP363 in land transport in Europe.

5. **B. third indent: SP363 creates a conflict in that it applies when more than LQ of fuel is present and would require machinery to be carried under entries UN 1202, 1203, etc.**

We believe that the fact that the SP363 does only apply above LQ should not result to problems because the SP363 is in complement with the SP301 which applies under the LQ quantities. It is true that if one wants to benefit from the exemption contained in the SP363 it is necessary to consider the type of fuel and that it is through the assignment to a fuel entry that the exemption is permitted. Let us note however that this will have an incidence only in the transport document where the name is required. If there is a misunderstanding this could be easily solved by requiring to have the mention "Transport according to the special provision 363" like this was adopted for the RID-ADR-ADN.

6. **B. fourth indent. SP363 does not address other dangerous goods that are integral to machinery so that certain safety issues are not addressed.**

It can be answered that other dangerous goods as fuels were not in the scope of SP363 but the problem could be solved in SP363 itself. In that case it should not be forgotten to give the same information in front of the relevant entries which are not machinery or vehicles.

7. **D. Question 1. Status of UN3166 and SP363 in the regulations?** It should be

It should be possible in the IMDG code to preserve the same entries like the Model Regulations and at the same time to introduce into the SP363 any additional provision. There would be a threshold of 60 l for the RID-ADR and another of 250 L for the IMDG-code in the same SP363. This would be less difficult to manage than changes of names and assignment of the SP363.

8. **D. Question 2, first indent. What is the basis for including (or excluding) machinery from UN3166?**

Despite that some regulations believe UN3166 was until now the dedicated entry for the actual risk, it seems to us that class 9 and UN3166 does not reproduce the actual danger of the engine with fuel in machinery. It is for this reason that SP363 is assigned to UN 1202, UN1203, etc. We don't see the advantages to change names in function of the quantities.

9. **D. Question 2, second indent.** Regarding how is machinery regulated in ADR/RID, to be precise, owing to the fact that the machinery and apparatus which contain fuels are exempted according to SP363, they are not exempted anymore according to 1.1.3.1 (b). The vehicles which are used on the roads profit from a total exemption in 1.1.3.3 (a) as far as the transport unit (towing vehicle and trailer) do not contain more than 1500 l for their propulsion and the operation of their equipment. Thus it is not possible to find on the roads

transport units which contain more than 1500 l. Furthermore all the means of transport (vehicles, boats, etc.) carried as a loading on a transport unit are exempted according to 1.1.3.3 (b) without limitation of quantity.

10. **D. Question 5:** We don't believe UN 3166 corresponds to the actual hazard of machinery so machinery should not be assigned to UN 3166. The word "machinery" should not be introduced in UN3166. By not taking account of the existence of UN 3363, of the SP301 and SP363, and by continuing to insist on the fact that the UN 3166 is the entry dedicated to the machinery and apparatus, we will not only maintain a system which was justified only from an historical point of view, but the existence of SP363 will not be justified anymore (see 2. above). In doing so, all the work of explanation which followed the introduction of SP363 in the land transport, and which is far from being finished, would have been for nothing and should be started again. The introduction of SP363 in land transport in Europe has the big advantage to harmonize the interpretations of the exemptions for fuels in machinery and apparatus which was before regulated under 1.1.3.1 b) in very different ways. It is necessary to bring to completeness the application of SP363 in all the modes of transport before seeking other solutions which add to the confusion which already exists because of the innovation.

11. **D. Question 6. and F. concerning 2. Is it appropriate to adopt requirements for UN3166 safety measures from other regulations for machinery independent of the quantity fuel?**

Currently the vehicles (and machinery) are subjected to the approval of the competent authority of the country of use. Is it necessary for the vehicles to add regulations for the batteries which equip them? The machinery also are subjected to the approval from the competent authority. Perhaps would it be enough to specify this without going into the details which are the subject of the point F. If such a measure would be necessary for machinery it should not be added for UN 3166 but directly in the DS363.

12. **D. Question 7. Limits for marking and labelling?**

We do not think it is necessary to replace limits LQ by others because in doing so one would create a gap between the exemption which is in the DS301 for the UN 3363 for less than the LQ quantities and the new limit of quantities in the DS363. It is however possible to add new limits for marking and documentation.

13. **D. Observation 1.** We do not have problems to adopt additional restrictions but we think that they must be introduced in the SP363 for the entries for which this one currently applies.

14. **F. Concerning 1.** There is no need to introduce new names for UN 3166. The machinery is already regulated under the entry UN 3363 and the entries to which the SP363 is assigned.

15. **G. I. Option 1.** The same as in 14. There is not no need to assign the SP363 to UN 3166 and to remove it from UN 1202, 1203, etc. The fuel in the machinery is exempted in the respective entries by the SP363 for quantities which exceed limits LQ. In the SP363 it is necessary to explain what occurs between quantities LQ and 250 l. That means that this SP363 also applies below 250 l and the introductory sentence in DS363 should not be changed. Moreover it is not exact to speak "about the additional requirements" because this would mean that the provisions of SP363 applies in addition to other provisions of the UN Model Regulations. It is not possible to apply the provisions of the UN Model Regulations to machinery and vehicles in addition to those already applying to them. For this reason it is important at the end to maintain the text "No other provision of this Regulations shall apply".

If provisions are necessary for batteries it has to be also explained for the corresponding entries for batteries by saying that for machinery SP363 also applies (UN3028, 34896, 2794, 2795, 2800, 2796, 2797, 3480, 3481, 3090, 3091). If vehicles need also an explanation this should be also said in the same way for UN 3166 by means of a dedicate SPXYZ.

16. Comments on **Advantages of Option 1**

1. In addition to the reasons already mentioned before explaining why this option should not be followed, one more reason against this interpretation is found in the special provision 312 applying to UN 3166 (SP312) which explains the scope of UN 3166 and where there is no mention of machinery and equipment. If the name and the scope of UN 3166 would be changed (by deleting vehicles) the content of the SP 312 should also be changed or moved to another entry.

2. Machinery is also now covered in only one entry (UN 3363) and for fuels in the respective unique entries (UN 1202, UN 1203, etc.) without needs of changes depending on the quantity.

3. The proposed text for the SP363 in the DGAC document would not be an exemption anymore but is written as supplementary prescriptions to those already existing in the UN Model Regulations.

17. The text proposed in SP363 (d) does not explain which rules of marking apply between 250 l and 450 l.

18. **Option 2.** For the reasons already explained we don't think there is a need of XXX.

19. **Option 3.** Should not be retained for the reasons already explained.

20. **Option 4.** This is the actual rule in the Model Regulations and in RID/ADR. The supplementary modal requirements could be easily integrated in the actual scope of SP 363 (different thresholds and supplementary rules for batteries, see Proposal 21. hereafter). Once it is known what fuel is used for the machinery there is no change in the name of the entry or in the labelling of the machinery depending on the amount present in the tank. The danger is properly given by the labels.

Proposal

21. We believe that all the concerns expressed by DGAC could be solved by changing SP363 (d) as follows:

"(d) Where the means of containment has a capacity **of more than 60 litres but** not more than ~~450~~ **250** litres, the machinery or equipment is labelled on one external side in accordance with **chapter 5.2.5.2.2** and where the capacity is greater than ~~450~~**250** litres but not more than 1 500 litres the machinery or equipment is labelled on all four external sides in accordance with 5.2.2 **and the label used shall correspond to the hazard of the fuel. Labels may be applied to the machinery where application to the means of containment is not practicable or does not ensure visibility of the label(s);** and "The Class 5 impact test if the mass of the special form radioactive material is **equal to or** more than 200 g but **is** less than 500 g".

The end of (d) with the following sentence "**and the label used shall correspond to the hazard of the fuel. Labels may be applied to the machinery where application to the means of containment is not practicable or does not ensure visibility of the label(s);**" is necessary for the modes of transport in which the marking of the dangerous goods for the

environment is obligatory for the entries in question. Without this requirement this marking would not be applicable.

Justification

22. Advantage of this option is:

- (a). It is consistent with the UN Model Regulations, RID-ADR and IMDG (in the case where the IMDG uses only UN 1202, 1203, etc). SP 363, as exemption, applies as for the time being above LQ limits and in addition both thresholds of 60 l (from RID-ADR) as well as the one of 250 l (for IMDG) (or any other threshold) will be covered at one time. Both thresholds are compatible.
 - (b). There is no need to change names of UN 3166, Special provision 312, assignments of SP363.
 - (c). Machinery and apparatus could continue to be carried following UN 3363 and the respective entries for which SP363 has been assigned (UN 1202, 1203, ...).
 - (d). This option also keeps all machinery under the more adequate UN Numbers independently of the quantity carried which avoids an unnecessary complication for the users (applying class 9 label or not depending on that quantity in tank at a given moment and changing the names in the documentation).
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