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Inland Transport Committee

Working Party on the Transport of Dangerous Goods

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**Proposals for amendments to annexes A and B of ADR:
miscellaneous proposal**

15 April 2016

Proposal for tunnel restriction codes for non-exempted vehicles, engines and machinery, UN Nos. 3166, 3171, 3528, 3529 and 3530

Transmitted by the Government of Switzerland

Summary

- Executive summary:** Tunnel restriction codes should be assigned for entries under UN 3528 to 3530
- Action to be taken:** Introduce tunnel restriction codes for entries under UN 3528 to 3530 into column (15) of Table A of Chapter 3.2
- Background documents:** ECE/TRANS/WP.15/230 and ECE/TRANS/WP.15/AC.1/2016/15 , ECE/TRANS/WP.15/2016/4

Introduction

1. The Joint meeting in March decided not to assign a transport category for the entries for vehicles UN 3166 and 3171. The majority of delegations of the JM considered, in contradiction with the reasons explaining the introduction of the new requirements for lithium batteries installed on vehicles to conform to the provisions in 2.2.9.1.7 (see SP240, 312 and 385), that all vehicles carried as load a able to conform to the requirements laid down in SP666 so that there is no need to foresee carriages of vehicles outside this exemption. As a consequence of such an assumption there is no need to assign any transport category in order to allow exemptions in case of carriages performed outside the exemption in SP666 because all kind of vehicles can fulfil the exemption conditions.

2. Also in the case of machinery and engines in UN 3528, 3528 and 3530 the JM ignored the evident possibility of existence of machinery and engines with lithium batteries not conforming to 2.2.9.1.7 which as a consequence could not benefit from the exemption in SP363. Given however the evidence of the existence of a packing instruction P005 for these entries outside the framework of the exemption laid down in SD363, the Joint meeting RID-ADR-ADN has decided after discussion to send to the UN Sub-Committee of experts the question of the existence of P005 outside the framework of SP363 and also the

question of the relationship between the two conditions of transport (SP363 and P005). The P005 presupposes that the transport of machinery and engines is done in accordance with all regulatory provisions. That means by applying only P005 the orange-coloured marking of the transport unit is also required. There is however no information in column (15) of Table A of chapter 3.2 about transport category or tunnel restriction code. The inexistence of a transport category precludes the possibility of exemptions like those in 1.1.3.1 c), 1.1.3.6, 1.10.4 (security) or 1.8.3.2 (safety advisor obligation) or the application of 1.8.5 in case of incidents. The inexistence of a tunnel restriction code linked to the obligatory presence of an orange-plate marking does impede the passage through any tunnel category.

3. Given that the interpretation of the UN-Experts of the relationship between the P005 and the SP363 will come at the earliest in June (or in December) and considering the possibility that the P005 allows the carriage of machinery and engines not meeting the requirements laid down in 2.2.9.1.7 and in SP363 and considering also that the new entries will appear as early as 1 January 2017 in ADR, it seems necessary to take a decision in relation to exemptions linked to the transport category and in relation to tunnel restriction codes based on the actual texts independently of the decision of the UN-Experts..

4. Because of the decision of the Joint Meeting of March not to adopt transport categories for these entries we present an alternative to the document ECE/TRANS/WP.15/2016/4 which does not deal anymore with the entries UN 3166 and 3171 and is no more based on the existence of a transport category. The WP.15 could however decide on the necessity to define a transport category for UN 3528, 3529 and 3530 in order to allow exemptions under certain quantities.

5. From the discussions that we experienced with some delegations during the JM in March we came to the conclusion that even if this only concerns very few transports, it is worth to check in what extend the transport of fuels in machinery and engines in the case of passing tunnels should diverge or not from exemptions, respectively limitations and rules, that govern these fuels when they are transported according to ADR rules. This case is different from the one of vehicles and their equipment in UN 3161 and 3171 because vehicles are by definition designed to withstand transport conditions. This is not the case of machinery assigned to the UN-Nos 3528, 3529 and 3530 exempted according to the SP363. Those, by definition, are not designed for use during transport and do not meet the same safety requirements as vehicle equipment destined for use during transport and exempted according to the new SP666.

6. In order to apply restrictions in tunnels for carriages of machineries of UN 3528, 3529, 3530 either according to the exemption provided in SP363 or following all the rules of ADR according to packing instruction P005 the transport unit must be subject to an orange-coloured marking.

7. In the case of a transport outside the framework of the exemption SP363 according to the P005 an orange marking will always be required and such transport cannot benefit from any relaxation following 1.1.3.6 because no transport category appears in column (15) of table 3.2. In principle for such a transport unit bearing orange plates, restrictions in tunnels shall apply for any tunnel category and independently of the quantity of fuel. Even in absence of a transport category and in order to decide if the passage through a given tunnel (B, C, D or E) is permitted, the tunnel managers need to know what tunnel restriction code the goods in question is assigned to. Explanations bringing to different tunnel restriction codes for these entries were already provided in document ECE/TRANS/WP.15/2016/4. This leads to the following table where no transport category is assigned:

Proposal 1

8. For entries 3528 to 3530, introduce the following tunnel restriction codes into column (15) of Table A of Chapter 3.2:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(...)	(15)	(16)	(17)	(18)	(19)	(20)
3528	ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED or MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED	3			3	363 667	0	E0	P005		<u>D/E</u>					
3529	ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED	2			2.1	363 667	0	E0	P005		<u>B/D</u>					
3530	ENGINE, INTERNAL COMBUSTION or MACHINERY, INTERNAL COMBUSTION	9			9	363 667	0	E0	P005		<u>E</u>					

9. Even if the JM has not foreseen any transport category for UN 3528, 3529 and 3530, in case of carriages not using the exemption of SP363 and carried according to P005 it would be preferable to define quantities under which some exemptions apply. To achieve this and taking account of the kind of fuels used a consequential amendment would be to add in the table in 1.1.3.6.3 the entries as follows:

1.1.3.6.3 in the second column of the table,

- For transport category 2:
in the last line for class 2 after UN 3500 add 'and 3529.
Before the line of class 4.1 add "Class 3: UN 3528".
- For transport category 3 in the line for class 3, after 3473 add ', 3530 '.

10. The proposal in 9. implies a transport category 2 in case of gases and flammable liquids and 3 in case of non-flammable fuels of class 9. The WP.15 should consider if it remains necessary to add these transport categories also in Table A of chapter 3.2 as was proposed in our original document ECE/TRANS/WP.15/2016/4 even if this solution has not been considered opportune by the JM. In any case it is necessary in case of carriages bearing orange-colored plates to have such an explanation at least in 1.1.3.6 in order to decide if a given machinery is exempted in a given tunnel category and in what amount the exemption shall apply.

11. For machineries and engines exempted by the SP363, it should be considered that this exemption apply with no limits in quantities. Certain types of machinery can contain thousands of litres of fuel, e.g. generators. The same fuels are limited in tunnels when they are not exempted either if they are contained in machinery under these entries and transported in accordance with the P005 (with no tunnel restriction code and no transport category this limit is to be considered zero) or if they are transported in other UN entries (UN 1202, 1203, etc.). Furthermore from now on these new entries for machinery are easily identified, it is therefore coherent to limit in the case of the passages in the tunnels the scope of the SP363. The latter contains a limit of 1000 l of content for liquid fuels and of capacity for gases. Above this limit the machine must bear labels and a transport document with the mention "Carriage in accordance with special provision 363" is required.

12. In order to submit a transport to restrictions in tunnels the transport unit has to be subject to an orange-colored marking according to ADR 5.3.2. For this purpose we could use the limits contained in the SP363 itself so that the transport unit carrying a machinery that is subject to the placarding should be in addition subject to the orange-colored marking according to 5.3.2. For this, a simple solution would be to amend the SP363 by adding text under the SP363 g) vi) (proposal 2a). Because it is a text which comes from the Model regulations and in case that this option would not be acceptable for this reason, another option could be to clarify the requirement in a special provision ad hoc DXYZ (proposal 2b). Finally a third possibility is to introduce this limitation for tunnels directly in 1.9.5.3.6 and 8.6.3.1 (proposal 2c).

Proposal 2a

SP 363

Change the text in SP363 g) vi) as follows (the added text is bold and underlined):

vi) A transport document in accordance with 5.4.1 **and an orange-colored plate marking in accordance with 5.3.2** is required only when the engine or machinery contains more than 1 000 l of liquid fuels, for UN 3528 and UN 3530, or the fuel tank has a water capacity of more than 1 000 l, for UN 3529

Proposal 2b

SPXY

In Table A of Chapter 3.2 by entries of UN-Numbers UN 3528, 3529 and 3530 introduce following special provision:

«SPXYZ Transport units carrying engines and machinery subject to the marking according to SP363 g) vi) are subject to orange-colored marking in accordance with 5.3.2.»

Proposition 2c

1.9.5.3.6 and 8.6.3.1

In 1.9.5.3.6 and in 8.6.3.1 add the following second sentence:

«These restrictions apply also to dangerous goods assigned to UN-Numbers 3528, 3529 et 3530 subject to marking according to SP363 g) vi).».
