

## 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

27 November 2015

### Forty-eighth session

Geneva, 30 November – 9 December 2015

Item 2 of the provisional agenda

**Explosives and related matters: Classification of articles under UN No. 0349**

## **Application of Security Provisions to Explosives N.O.S – Comments on ST/SG/AC.10/C.3/2015/47 (United Kingdom) and informal document INF.17 (United Kingdom)**

**Transmitted by the expert from Italy**

### *Summary*

<b>Executive summary:</b>	Classification of explosives: assigning 1.4S Classification code
<b>Action to be taken:</b>	Proposal to add two new UN entries and to amend UN0349 and UN0481
<b>Reference documents:</b>	ST/SG/AC.10/C.3/2014/22 (Italy) and informal document INF.61 (Report Working Group on Explosives) (45 <sup>th</sup> session of the Sub-Committee) , ST/SG/AC.10/C.3/2014/86 (Italy) and informal document INF.47(Italy), informal document INF53 (Report Working Group on Explosives) (47 <sup>th</sup> session of the Sub-Committee)
<b>Related documents:</b>	ST/SG/AC.10/C.3/2015/47 (UK) and INF.17 (UK)

## **Introduction**

1. At its June 2015 session, the Working Group on Explosives discussed document ST/SG/AC.10/C.3/2014/86 from Italy containing a revised proposal (firstly discussed at June 2014 session) related to the classification process of explosives with 1.4S Classification code. The proposal was motivated as follows:

(a) The necessity to solve the inconsistency of paragraph 2.1.2.1.1 of the Model Regulations on the Transport of Dangerous Goods while it states that the 1.4S classification code can be assigned in case of:

“ ..... *Substances or items packed in such a way as to confine any dangerous explosive effect, caused by an accidental operation, within the package itself, therefore those items or materials can be assigned the 1.4S classification code.* ”

when such procedure is applied to N.O.S entries.

(b) As far as concern the applicability of the security provisions (requirements laid down in Chapter 1.4), the necessity to maintain the same conditions applicable to the original items.

During the debate an example was presented related to UN 0349 ARTICLES, EXPLOSIVE, N.O.S with the 1.4S classification code, assigned to items originally classified as UN 0279 CHARGES PROPELLING FOR CANNON, 1.1C but enclosed in an adequate packaging (designed and built with respect of the Test series 6 of the Manual of Tests and Criteria). While UN 0279 shall be subjected to security provisions, UN 0349 is not because it is not mentioned in the Table 1.4.1.

(c) The necessity to find a urgent solution because the National Authority received a request of classification in that sense .

2. The Working Group on Explosives concluded the following (excerpt from report: see informal document INF 53):

*“Conclusion: While there was sympathy for the problem described by Italy in 2014/86 and INF.47, opinions in the working group were divided and it could not come up with a consensus. Italy would like clear instructions from the sub-committee as to how to proceed next.”*

3. Meanwhile a document from the United Kingdom (2015/47 + INF17) was presented in the same context, suggesting three alternatives solutions, highlighting advantages and disadvantages for each of these.

4. It is an aim of this document by the expert of Italy both on one hand to explain the position on the proposals from the UK and on the other to finalize with a revised proposal the solution for the raised problem.

### **Comments to ST/SG/AC.10/C.3/2015/47 (United Kingdom) and INF.17 (United Kingdom)**

5. With reference to Proposal I ( ref. INF 17 par. 6.I )

*“Add all the Explosives N.O.S entries to the High Consequence Dangerous Goods List provided in Table 1.4.1 of the Model Regulations.”*

It is evident that this proposal would require the application of security measures to all NOS even those who do not require (some of them do not have the characteristics to be considered "High consequence dangerous good" for transport). The disadvantage has been rightly also pointed out by the expert from the UK (see par. ....).

6. With reference to Proposal II ( ref. INF 17 par. 6.II )

*“Revise Special Provision 178 to require the Competent Authority to specify whether or not the item classified is subject to the security provisions required in 1.4.3.2 of the Model Regulations; and*

*require the transport documents for articles and substances so identified to be clearly marked “High Consequence Dangerous Goods”; and*

*amend the Indicative list in Table 1.4.1 to capture articles and substances identified by the Competent Authority as high consequence as part of the classification procedure”*

Taking into account biennial updating of the UN Model Regulations, a specific request by a Competent Authority regarding a UN number to add to the Indicative List of High

Consequence Dangerous Goods (Table 1.4.1) would take effect in the next edition of the Recommendations thus with an average delay of two years, causing significant delays in practice enforcement.

On the other hand a “national” view of the concept of the High Consequence Dangerous Goods not in line with the Table 1.4.1 as published into the current edition UN Model regulations would raise problems for international transport.

Regarding the possibility to put a phrase in the transport document as “High Consequence Dangerous Goods”, Italy considers it inappropriate and contrary to the principle of confidentiality of information when carrying such kind of substances / objects.

7. With reference to Proposal III ( ref. INF 17 par. 6.III)

*“Add new UN numbers for all Explosives N.O.S entries in the Dangerous Goods List to differentiate between those that are considered to be of high consequence (and therefore attract the security provisions in 1.4.3.2), from those that are not.*

*Update Table 1.4.1 to include all the new entries.”*

It is clear this proposal that would generate for each Explosives NOS entry a twin to be subject to the security rules, would add to the Dangerous Good List more than thirty new lines.

This proposal is similar to the Italian one but seems to be more complicated. In fact following the proposal described in doc. 2014/86, only two new UN numbers would be generated. This two new "Jolly numbers" to be used only in the case of article or explosive substance NOS to be subjected to the security rules.

8. For that reasons it is the opinion of the expert of Italy to confirm the validity of the proposal already presented during the previous sessions of the Sub-Committee of Expert on TDG.

The proposal, that is summarized in the following paragraphs, has been updated with the addition of "PACKED" in the "Name and description" to avoid redundancy in the proper shipping name; the specific issue was raised by some experts during previous debates. (paragraph 2.1.2.1.1 of the Model Regulations states “.....Substances or items packed in such a way as to confine any dangerous explosive effect, caused by an accidental operation, within the package itself, therefore those items or materials can be assigned the 1.4S classification code” )

## Proposal

9. Add two new entries in the dangerous goods list (Chapter 3.2) as follows:

UN 0XXA SUBSTANCES, EXPLOSIVE, **PACKED**, N.O.S. 1.4S                      SP 178,  
SP 274, SP 347, SPyyy

UN 0XXB ARTICLES, EXPLOSIVE, **PACKED**, N.O.S. 1.4S                      SP 178,  
SP 274, SP 347, SPyyy

10. Add a new special provision in Chapter 3.3 as follows:

**SPyyy This entry applies only when the security provisions of Chapter 1.4 have to be fulfilled.**

11. Add to the Table 1.4.1 of Chapter 1.4 against “Class 1, Division 1.4” the new UN numbers 0XXA and 0XXB

12. Add a new special provision in Chapter 3.3 as follows:

**SPzzz** This entry shall not be used when the security provisions of Chapter 1.4 have to be fulfilled.

13. Add the new SPzzz in Column (6) of the Dangerous Goods List of Chapter 3.2 against UN 0349 and UN 0481.
14. The amendments contained in paragraphs 10 and 12. 14. above have as result in the Dangerous Goods List the following modifications (new text underlined).

UN No.	Name and description	Class	Sub Sidiary risk	UN packing group	Special provisions	Limited and excepted quantities		Packing instruction
						(7a)	(7b)	
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)
-	<u>3.1.2</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0.1.3</u>	<u>3.3</u>	<u>3.4</u>	<u>3.5</u>	<u>4.1.4</u>
<u>0XXA</u>	<u>SUBSTANCES, EXPLOSIVE, PACKED, N.O.S.</u>	<u>1.4S</u>	-	-	<u>178</u> <u>274</u> <u>347</u> <u>yyy</u>	<u>0</u>	<u>E0</u>	<u>P101</u>
<u>0XXB</u>	<u>ARTICLES, EXPLOSIVE, PACKED, N.O.S.</u>	<u>1.4S</u>	-	-	<u>178</u> <u>274</u> <u>347</u> <u>yyy</u>	<u>0</u>	<u>E0</u>	<u>P101</u>
0349	ARTICLES, EXPLOSIVE, N.O.S.	1.4S	-	-	178 274 <u>zzz</u>	0	E0	P101
0481	SUBSTANCES, EXPLOSIVE, N.O.S.	1.4S	-	-	178 274 <u>zzz</u>	0	E0	P101

## Justification

Better details of the proposal. Comments on related documents and proposals.