

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

18 November 2016

Sub-Committee of Experts on the Transport of Dangerous Goods

Forty-ninth session

Geneva, 28 November–6 December 2016

Item 6 of the provisional agenda

New proposals for amendments to the Model Regulations on the Transport of Dangerous Goods

New UN entries for Electronic Detonators

Transmitted by the Australian Explosives Industry Safety Group (AEISG)

Introduction

1. The current edition of the UN Model Regulations contains the following entries for detonators, other than those used in ammunition:

Name and description	Class	UN Number
DETONATORS, NON-ELECTRIC for blasting	1.1B	0029
	1.4B	0267
	1.4S	0455
DETONATORS, ELECTRIC for blasting	1.1B	0030
	1.4B	0255
	1.4S	0456
DETONATOR ASSEMBLIES, NON-ELECTRIC for blasting	1.1B	0360
	1.4B	0361
	1.4S	0500

2. An additional range of detonators for blasting known as ‘Electronic Detonators’ has been introduced. Such detonators utilise an integrated circuit and/or micro processing technology to provide communications, energy control and storage capability, timing delay information and commands in order.

3. Electronic detonators should not be confused with Electric detonators, having significantly different design characteristics, and improved safety and security benefits.

4. In many jurisdictions, existing electric detonator regulations continue to be applied mistakenly to electronic detonator technologies, and the proper differentiation of these two detonator technologies in the UN Model Regulations will assist in the education and training of all relevant parties.

5. Electronic detonators cannot reasonably or legitimately be included within the existing entries, and as with other explosives, the proper classification of these devices will depend on packaging. Hence new entries would need to include all possible classifications.

Discussion

6. AEISG would like feedback on a proposal that new UN entries be created for electronic detonators as follows:

UN No	Name and description	Class									
(1)	(2)	(3)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)
05XX	DETONATORS, ELECTRONIC for blasting	1.1B				0	EO	P131			
05XX	DETONATORS, ELECTRONIC for blasting	1.4B				0	EO	P131			
05XX	DETONATORS, ELECTRONIC for blasting	1.4S			347	0	EO	P131			

7. A consequential amendment to the Glossary of Terms in Appendix B of the UN Model Regulators Volume 1, for ‘Detonators’ would be required as follows:

“Detonators

Articles consisting of _____.

The term includes:

DETONATORS FOR AMMUNITION and

DETONATORS for blasting, ELECTRIC, NON-ELECTRIC OR ELECTRONIC.”

8. Following discussions and/or feedback, AEISG would consider introducing a formal submission at the next session.
