UNITED NATIONS

E

Economic and Social Council

Distr.
GENERAL

TRANS/WP.15/AC.1/2001/50
29 June 2001

Original: ENGLISH

ECONOMIC COMMISSION FOR EUROPE

INLAND TRANSPORT COMMITTEE

Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Safety Committee and the Working Party on the Transport of Dangerous Goods
(Geneva, 10-14 September 2001)

TRANSPORT OF FIREWORKS

Transmitted by the Government of the Netherlands */

SUMMARY

Analytical Summary:

This document outlines a proposal to improve the classification of fireworks in praxis by having the possibility of a preventive control. As a result the enforcement of a correct classification will be improved.

Action to be taken:

Amendments of 3.2.1, 3.3.1 and 5.4.1.2.1 of RID and AD

Related documents:

(Draft) Report of the Joint Meeting RID/ADR (28 May-1 June 2001), OCTI/RID/GT/III/2001/….., TRANS/WP.15/……, paragraphs [44 to 47]: dealing with a discussion based on Informal document INF. 32 (Netherlands)

*/ Circulated by the Central Office for International Carriage by Rail (OCTI) under the symbol OCTI/RID/GT/III/2001/50.

INTRODUCTION

At the last Joint Meeting RID/ADR the Netherlands informed the COTIF/ADR-member states on the results of the investigations after the very serious accident with fireworks which took place in the Netherlands (Enschede) in May 2000 as well as the actions taken on a national and international level (see document INF 32).

Although it concerned a location where professional fireworks were stored and probably assembled, we feel that this disaster could have its consequences for the transport regulations.

Classification

From the point of view of transport the main problem is the classification of fireworks. In many cases the indication by the label is 1.4G or 1.4S. Tests according to the UN Recommendations (test 6b) and 6 c)) performed after the explosion in Enschede proofed, that the correct classification should be at least 1.3G and in some cases even 1.1G or 1.2G.

A further result of the investigation of the accident and of the tests was, that fireworks classified as 1.3 loaded together with small amounts of division 1.1 can react almost at the same time e.g. as a mass explosion. This is covered in principle by the rule, that a transport unit should be labelled according to the most severe division. However it emphasises the importance of a correct classification !

The matter has been brought to the attention of the United Nations Committee of Experts (see document ST/SG/AC.10/C.3/2001/13 of the Netherlands).

Although we believe that the matter should be finally discussed by this Committee, several delegations noted that no final decision could be taken before December 2002 at the UN-level, and as a consequence no decision taken at the UN-level is expected to be reflected in RID/ADR before 2005 in conformity with normal procedures of amending RID/ADR.

At the last Joint Meeting several delegations noted that the fireworks in question had not been correctly classified and that the transport regulations had not therefore been complied with. Monitoring of the application of the rules should therefore be improved.

Therefore several delegations suggested that the classification should be verified by the competent authority along the same line as is applicable to substances and articles of n.o.s. entries of Class 1.

That is to say, - referring to the prescriptions of 2.2.1.1.3 and special provision 178 in column (6) of Table A of Chapter 3.2 and 5.4.1.2.1 (c) , which are applicable to n.o.s. entries of Class 1 - , we propose to have comparable prescription for fireworks of the classification codes 1.1G, 1.2 G, 1.3.G, 1.4 G and 1.4 S in RID/ADR.

Our proposal is meant to be an interim solution. In the end we believe that the problems with respect to classification should be solved on a mondial level.

PROPOSAL

1. For fireworks of UN 0333 (1.1G), UN 0334 (1.2 G), UN 0335 (1.3 G), UN 0336 (1.4 G) and UN 0337 (1.4 S), insert a new special provision “xxx” in column (6) of Table A of Chapter 3.2 of RID and ADR.

2. Insert in Chapter 3.3, section 3.3.1 a new special provision "xxx" with the following text:

> "The classification code as mentioned in colum (3b) of Table A of Chapter 3.2 shall be used only with the approval of the competent authority of the country of origin.
> If the country of origin is not a Member State to COTIF / a Contracting Party to ADR, the classification shall be recognized by the competent authority of the first Member State to COTIF / the first country Contracting Party to ADR reached by the consignment. "

3. In Chapter 5.4, add paragraph 5.4.1.2.1 (g) / (f) of RID / ADR with the following text:

> "When fireworks of the UN-numbers 0333, 0334, 0335, 0336 and 0337 are carried, the consigment note / transport document shall bear the inscription: "**Classification recognized by the competent authority of …** "(State referred to in special provision "xxx" of section 3.3.1).

JUSTIFICATION

Safety

As long as the classification is not correct in practice we feel that this proposal will contribute to the application of the rules and will improve safety.

Enforcement

The enforcement of the correct classification of fireworks is very difficult. In RID/ADR the only instrument is enforcement, which is in nature a repressive instrument. Only (very expensive) tests can confirm the correct classification.

Given the incorrect classification in praxis at this moment we feel that a preventive instrument is needed in order to check the correct classification of fireworks and to improve the enforcement of the regulations. An authorization as proposed is such an instrument.

However the enforcement of the rules will always be necessary. Further harmonization on the way how the controls are carried out should be encouraged.

Harmonization

It has been recognized that a lot of countries had also problems with (the correct classification of) fireworks. Several countries require a special authorization for Class 1 substances and articles. Part of those authorizations is the classification of Class 1 substances and articles and especially of professional fireworks by the competent authority of the country of import. This authorization is not based on the legislation of transport but for example on the basis of storage regulations or on special acts concerning explosives.

The proposal has the effect that all member states of RID/ADR will have this preventive instrument of enforcement of the correct classification.

In order to prevent that competent authorities have their own interpretation we feel that it is necessary to have a common basis for the authorization system.

In our view this system should be based on the results of tests in conformity with the RID/ADR e.g test series 6 of the Manual of Test and Criteria of the UN Recommendations.

A summary of the test performed by the Netherlands is given in *Annex 1* and has also been the input of a proposal in the UN-Subcommittee. Further communication on the basis of test results between competent authorities should be encouraged in order to harmonise the authorization of the classification as much as possible.

Furthermore it is important to harmonise the procedure of authorization as much as possible.

_____

Annex 1

Different kinds of fireworks and with different calibre have been tested and on that basis the table below is made. Test serie 6a), 6b) and 6c) are performed.

This table should be regarded as a starting point and can be improved and completed if more test results are known. Other countries are invited to submit their experience with the classification of the listed and other fireworks articles in order to improve the list below.

Default classification means that the classification can be taken as indicated unless it can be proven that another division is correct.

Table 1: Example of default classification of fireworks articles.

Name	Synonyms	Calibre (“)	Calibre (mm)	Default classification
report shell	(titanium) salute, (titanium) thunder, single salute titanium, maroon, final salute	all	all	1.1
colour shell	display shell, aerial shell, cylinder shell {colour} -peony, -chrysanthemum, -with pistil, willow, palm	≥ 8 < 8	≥ 200 < 200	1.1 1.3
Cakebox With report as primary effect	finale box, {cakebox} -titanium salute, -titanium thunder	all	all	1.1
Cakebox	flowerbed, battery, barrage, bombardos	all	all	1.3
Romans candle	exhibition candle	≥ 2 < 2	≥ 50 < 50	1.2 1.3
Rockets		all	all	1.3
Rockets With report as primary effect	avalanche rocket	all	all	1.1

- *This is a general overview, individual articles may behave differently.*
- *All articles containing report composition have a default classification 1.1.*
- *Articles containing a combination of colour and report effect, should be considered as report shells.*

_____