Transport of professional fireworks*

Transmitted by the Netherlands

Introduction

Recently a severe accident with fireworks took place in the Netherlands. The accident started with a small fire and came to an end with a mass explosion. Twenty-one people died and many people got injured. The material damage was enormous, for example, more than 300 houses were destroyed completely.

In the Netherlands this was the most severe accident with dangerous goods since decades. 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.

According to national regulations for storage, the storage of fireworks of classification codes 1.3G, 1.4G and 1.4S was authorised for the following quantities:
2 000 kg (separated in four parts of 500 kg) of division 1.3
159 000 kg division 1.4 (including 1.4G and 1.4S).

Classification

The cause of the accident and the circumstances under which it took place are still under investigation.

However it may be clear that the mass explosion could not have been caused by 1.3/1.4 fireworks alone. This leads to the assumption that the classification of professional fireworks is not always correct and this is in our view also directly relevant to transport.

In practice a lot of professional fireworks is transported by sea and imported in the Netherlands as 1.4G. Investigations show until now however that professional fireworks are at least of division 1.3 and some types are even of division 1.1.

Especially the report shells (titanium saluts) turn out to be of division 1.1, although they have been transported by sea and imported in the Netherlands as 1.4G. During the investigations it became clear that the 6 (b) test is in some cases decisive for the classification of professional fireworks. In practice however this test is not frequently used.

In our view further discussion is necessary on the status of the 6 (b) test.
Enforcement

Apart from regular inspections the Netherlands do not have any additional legal instrument to check the containers with professional fireworks. No reclassification is required until now nor on the basis of transport regulation nor on the basis of storage regulations. In this respect it is noted that the enforcement of the correct classification of professional fireworks is very difficult. Only (very expensive) tests can confirm the correct classification. Furthermore test reports are often very difficult to obtain in practice. Another problem here is the diversity of the products.

Harmonisation

After the accident in Enschede it was found that a lot of countries require a special authorisation for Class 1 substances and articles. Part of those authorisations is the authorisation of the classification of Class 1 substances and articles and especially of professional fireworks by the competent authority of the country of import. Although it is recognised that additional requirements may be needed for purposes other than transport (e.g. storage), we feel that as far as it concerns fireworks, as packed for transport, the matter (like classification) is also relevant to transport and should also be regulated in the UN Recommendations in order to solve possible problems in a multimodal matter.

In the present situation requirements differ from one country to another, which is not desirable and contrary to the policy of harmonisation. Also in the light of the GHS discussion it should be clear how to deal with Class 1 substances and articles.

Recommended actions

In our view the issue of classification of Class 1 substances and articles and especially professional fireworks concerns a safety issue and therefore the committee should deal with this matter in the next biennium, e.g. in a working group. As a first step it is necessary to make an inventory of the situation in the different countries especially with respect to the enforcement of the regulations. It should be discussed which requirements are relevant to transport. Furthermore the results of the test done after the accident of Enschede and test results from other countries should be evaluated. On that basis further recommendations could be made for the safe transport of Class 1 substances and articles and especially professional fireworks.

In the short term we feel that it is important to recognise that professional fireworks should be classified at least in division 1.3 and that some types even belong to division 1.1. Probably this should be stated in a special provision against the entries for fireworks.

The Committee is invited to discuss this matter.
* Display fireworks used for professional entertainment purposes
Recently a severe accident with fireworks took place in the Netherlands.