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

10 June 2010

Thirty-seventh session Geneva, 21–30 June 2010 Item 2 of the provisional agenda Explosives and related matters

Large-scale behaviour of fireworks

Transmitted by the expert from the Netherlands

Introduction

- 1. In December 2007 the expert from the Netherlands presented the informal document UN/SCETDG/32/INF.47 (UN/SCEGHS/14/INF.20) dealing with large scale behaviour of fireworks.
- 2. Reference was made to an EU funded research project "Quantification and Control of the Hazards Associated with the Transport and Bulk Storage of Fireworks" (CHAF). This project was set up to assess whether the effects of accidents or unintentional initiation on the scale of transport in containers and bulk storage corresponded with the hazards predicted on the basis of Series 6 tests.
- 3. In the majority of the tests good correlation between Series 6 and large-scale results was found. Nevertheless, some unexpected and unexplained results were also obtained, like the mass explosion of a container completely filled with an article classified by Series 6 tests as 1.3G.
- 4. INF.47 stated that the unexplained issues from the CHAF project could best be resolved by a global research project with several partners and announced a meeting in the spring of 2008 to advance setting up such a follow-up project.

Further developments

- 5. Two meetings in 2008 were organised in the Netherlands. Experts from Canada, China, France, Germany, Greece, Japan, Netherlands, Spain, UK and the International Fireworks Association (IFA) participated in the meetings.
- 6. It soon became clear that no central funding for the research project was to be expected. Potential partners in the project would have to take care of their own budget on a national level.
- 7. An outline of the project was developed during the meetings and the potential partners indicated their intended contribution to the project and work packages.
- 8. The outline and work package descriptions served as a basis for obtaining the budgets on a national level.



- 9. During 2009 the partners were actively involved in obtaining budget for participation in the project. Several partners succeeded in obtaining budget for (a part of) their contribution to the project.
- 10. However, in the course of 2009 it became clear that the sum of the budgets was not sufficient to perform the project completely as described in the outline and work packages.
- 11. The Netherlands is of the opinion that there would still be benefit and added value in exchanging information on the work and results of the individual partners.
- 12. The Working Group on Explosives might be a good forum to discuss the results of work done by the partners involved in the attempts of setting up a follow-up project and other relevant research results.

Proposal

13. The Netherlands is proposing a mandate from the Sub-Committee of Experts on the Transport of Dangerous Goods to the Working Group on Explosives to discuss research results on the field of large-scale behaviour of fireworks and if necessary to report the progress to the Sub-Committee.

2