WORK OF THE SUB-COMMITTEE OF EXPERTS
ON THE TRANSPORT OF DANGEROUS GOODS

Report of the Working Group on Gas Receptacles and
Multiple-Element Gas Containers (MEGCs)

1. The Working Group met under the chairmanship of Mr. H. Puype (EIGA). Representatives of Canada, the European Commission, France, Germany, Switzerland, the United Kingdom, the United States of America, ISO, AEGPL, CGA, ECMA, and EIGA participated.

2. The annex to this report reproduces the agreed text from the Working Group on Gas Receptacles and Multiple-Element Gas Containers (MEGCs) finalized during the meeting from 4th to the 7th December 2000.

3. The working group reviewed the consolidated EIGA document ST/SG/AC.10/2000/22 that presented the outcome of the previous discussions with additions from Canada and USA. Further proposals taken into account were 2000/27 (USA), 2000/30 (CGA) and 2000/38 (France) together with informal documents INFs.10, 16, 23 (UK) INF. 24 (EIGA), INF.38 (Canada), INF.39 (ISO), INF.46 (USA).

4. In the proposals 1 and 2, the working group decided to limit the capacity of pressure drums to 1000 litres. The reference temperature of -50°C for compressed gases was confirmed and was clarified by adding further text to the definition. This entails the suppression of the word “compressed” in the proper shipping name of eleven gases. The definition of test pressure was modified so that it was suitable for all Classes.

5. Other changes for MEGCs in proposals 6 and 7 concerned packing provisions and construction requirements and were largely editorial which brought further refinements and clarifications to the provisions.

6. The Packing Instruction now includes a table of substances of other classes assigned the P200. PP79 for UN 1040 Ethylene Oxide was incorporated in the gas specific provisions of P200.

7. Some LC₅₀ values are under review and have been annotated with an asterisk in the table. A number of filling ratios of concern have been proposed by CGA. They were incorporated in the table in application of the precautionary principle adopted in the previous session. During the discussion on filling ratios for other substances there appeared to be no major reason for concern in adopting the values proposed by EIGA and endorsed by BAM. The USA uses a reference temperature of 55°C (130°F), whereas the working group refers to 65°C. This should automatically lead to more conservative values.
8. The adoption of additional limiting factors for toxic gases as proposed by the USA was not supported by the group considering the above and the already agreed upon restrictions in special packing provision “k” relating to these substances.

9. The section previously entitled Quality Conformance was renamed Conformity Assessment and Pressure Receptacle Approval. There was no majority for implementing the UK proposal based on Class 7, and the text adopted was based upon the EIGA INF. 24 which, in turn, was based upon Canada’s adaptation of ISO Technical Report 14600.

10. Considerable time was spent on re-discussing marking. Due attention was given to the regulatory, operational and safety concerns expressed by various delegates. The final compromise satisfying all parties imposes a sequence on the certification and manufacturing marks. ISO agreed to study how best to distribute all other marks in a consistent way so as to ensure a practicable application.

11. Part of the discussion concerned the preferred identification marks of countries. In order to align with other packagings in the Model Regulations the group adopted the distinguishing signs of motor vehicles in international traffic, rather than the ISO alpha 2 code.

12. The working group supported CGA’s recommendation to withdraw proposal 2000/30 on cryogenic receptacles. The issue will be addressed during the next biennium taking into account the proceedings at ISO TC220.

13. The working group accepted the recommendation of the UK INF. 23 paper to retain the filling factors appearing in the 11th revision of the Model Regulations for UN 3337 (R404A), UN 3338 (R407A) and UN 3339 (R407A).

14. The working group proposes an extension of the mandate given by the Plenary Meeting to deal with the topics which require further development both at the UN and the ISO level. Such topics include cryogenic receptacles, specific provisions for LPG and acetylene, composite cylinders, pressure drums and further operational requirements on filling and requalification.