REPORT ON THE WORKSHOP

1. The Workshop on the Use of ISO 14000 Environmental Management System Standards in the Chemical Industry in the UN/ECE Region was held as a result of a proposal and invitation by the Government of Hungary to the Working Party on Technical Harmonization and Standardization Policies of ECE. The idea of the Workshop was supported both by the Working Party and ad hoc Group of Experts on the Chemical Industry and implemented by them as a joint project. The Workshop was held at the Hotel Gellért in Budapest, which was also the official conference hotel.

2. Representatives of the following States took part in the Workshop: Armenia, Belgium, Belarus, Bosnia and Herzegovina, Canada, Croatia, Czech Republic, France, Germany, Hungary, Netherlands, Poland, Romania, Russia, Slovakia, Ukraine, United Kingdom, and Yugoslavia. A representative of the European Commission also took part. Representatives of the following international organizations also took part in the Workshop: European Chemical Industry Council (CEFIC), International Organization for Standardization (ISO) Technical Committee 207, and International Rubber Study Group (IRSG).

3. The final Programme for the Workshop will be found in the annex to this report. The full papers will be the subject of a separate publication to be prepared by the Hungarian Organizing Committee.
4. The secretariat prepared a questionnaire on the *Use of the Environmental Management Standards in the Chemical Industry in the UN/ECE Region*. Responses to the questionnaire were summarised in document TRADE/WP.6/2000/1/Add.1 which was available to the participants of the Workshop.

5. The Workshop was opened by Ms. J. Ory, Chairman of the *ad hoc Group of Experts on the Chemical Industry*, who welcomed participants and thanked the Organizing Committee for their efforts in arranging the Workshop. The meeting was also welcomed by Mr. Z. Illés, Chairman of the Environmental Committee of the Parliament of Hungary, who noted that Hungary’s record in the use of ISO 14000 is well advanced, and that the Government, through two programmes will help fund enterprises in obtaining certification. Hungary is the 24th country in the list of absolute numbers of ISO 14000 certifications, and 8th if based on total national GDP.

6. A generalized but controversial overview of industry’s attitude toward certification was presented by the representative of ICSCA (Industry Cooperation on Standards and Conformity Assessment), who felt that the certification business itself had gone too far. He felt that the costs for certification have risen dramatically and it has become necessary to review how certification should be carried out. There are three levels of certification: third-party certification, as carried out by certifying agencies; second-party certification, as carried out by the customer; and first-party certification, where the company or enterprise declares itself to be certified. In his opinion, suppliers declarations should be sufficient and be the preferred means of self-certification. There was considerable discussion on this issue.

7. Developments for the future of ISO 14000 and related standards were presented by the Secretary of ISO Technical Committee 207, which deals with environmental standards. He mentioned the five principal concerns of TC207: overall costs, progress on implementation, trade implications, developing countries and SMEs. Other developments to be expected in the near future are the integration of ISO 14000 with ISO 9000, the incorporation of life cycle assessment (LCA) and the elaboration of a series of ISO Standards on health and safety management systems, and their possible integration with the other management systems.

8. The EMAS (Eco-Management and Audit System) was described by the EC representative. EMAS registration was developed by the EC and is presently open only to companies and institutions within the European Union. It sets somewhat broader reporting parameters than does ISO 14000 in that it requires employee involvement, legal compliance, performance improvement and public reporting. It already has some 3000 registrations.

9. Different viewpoints from certifying bodies were presented in the following three papers, which covered international aspects as reported by a long-established large certifier, and national perspectives from a medium-sized Western agency and another from a small Eastern body. All three indicated the need for firms wishing to become certified that the systems are becoming less of an administrative burden, that having ISO 9000 is an advantage, that costs are typically recovered in 1-2 years from savings generated by improved productivity or efficiency. It was also pointed out that certain aspects of the EMAS system, particularly employee and local needs, are frequently overlooked but are useful parameters to incorporate.
10. The smaller, local agencies have the advantage of being fluent in the local language, customs and legislation, and can advise their clients of the special characteristics that may apply due to the local scenario, while the larger institutions can aid in obtaining certification in several plant locations for a multinational client.

11. The chemical industry has developed its own environmental, safety and occupational health management systems over the years, which became formalized under the Responsible Care® programme, administered by the European Chemical Industry Council (CEFIC) and the International Council of Chemical Associations (ICCA). The chairman of the CEFIC Responsible Care® programme indicated that the requirements of ISO 14000 are consistent with that programme and help in delivering Responsible Care® commitments related to the environment. Responsible Care® also incorporates elements of safety and health, product stewardship, and indicators of performance.

12. A major western chemical group described its experience in obtaining and spreading certification to ISO 14000 and related standards throughout its facilities in some 40 countries worldwide, and how it sees future evolution of standardized management systems. They are seriously testing the possibilities of integrating safety and health management systems with ISO 14000 and ISO 9000, into a certification framework, but it is clear that local customs and habits must be taken into consideration. They recognize that obtaining certification to ISO 9000 already provides some 80% of the base for ISO 14000 certification, and this is an indication that integration of other systems could also be cost-effective.

13. Another important western European chemical group described the integration of its health, safety and environmental protection (HSE) management systems with the existing ISO 9000 and internal auditing systems. This integration reduces the overall effort required and simultaneously increases the resulting benefits.

14. A major Hungarian oil company with downstream operations in the chemical and other areas described the reasons it decided to proceed with certification to ISO 14000, which included aiding the country in its accession process to the EU. Hungary has already generated its own set of ISO 14000 Standards in Hungarian, through its own Technical Committee 725. The government is very positive about EMS Standards, and is ready to finance, through at least two programmes run by the Ministry of the Environment and the Ministry of Economy. The company indeed has the intention to create a QUENSH system (quality, environment, safety and health).

15. The Hungarian Government encourages the use of EMS and at present some 109 certifications have been awarded for ISO 14000 and at least 3 are ready for EMAS registrations after Hungarian accession to the EU, expected around 2002. These programmes are of course voluntary, but the Hungarian Government would like to find ways to encourage wider participation.

16. In the Czech Republic more than 50 companies are already certified to ISO 14000, and 95% of these firms already had ISO 9000. The introduction of the ISO 14000 programme began in 1996, and EMAS preparations started in 1998.
17. The Polish experience with ISO 14000 goes back several years, and was a natural extension of the quality management systems of ISO 9000. In 1997 5 of the ISO 14000 family of standards (ISO 14001, 14004, 14010, 14011 and 14012) were incorporated as Polish national standards. At present some 24 Polish companies have earned the ISO 14000 certificate, but in the chemical industry only 2 are already awarded. However, 31 chemical companies have been certified to ISO 9000, and many of these firms are in the preparatory phase for ISO 14000. The Responsible Care® programme is well known in the Polish chemical industry, and many companies will be committing to that programme - in part by using ISO 14000 as a tool in achieving that performance.

18. Two other presentations by Hungarian chemical firms completed the workshop programme. A large pharmaceutical manufacturer described the process it followed to install an EMS. The total procedure took about 28 months from beginning to complete implementation, starting in early 1998. They used the ISO 14000 series adopted by the Hungarian authorities in 1997, and initiated the programme by making an environmental impact assessment (EIA). It followed up on this with a company environment policy, identifying key operational areas from an environmental aspect and thus could define their targets and objectives. These were prioritized and implemented according to resources available.

19. The first Hungarian chemical company to be awarded the ISO 14000 certificate is a large petrochemical company, and it received the certificate in 1997. As the certificate is valid for 3 years the company is presently in the renewal process. It still has separate systems for ISO 9000 and ISO 14000, but is considering integration, together with safety management.

**Conclusions of the Workshop**

**CONCLUSIONS**

- The family of Management System Standards developed by ISO is a useful tool and this workshop endorses their development and acceptance by enterprises, in particular by SMEs;

- Small conferences such as the present workshop are very helpful in providing practical understanding of the value of these systems and the process of implementing them; and

- Company cultures must be encouraged to incorporate MS of all kinds in today’s world.
RECOMMENDATIONS

for Governments:

Governments should support and promote implementation of EMSs through:

- allowing special financial and tax incentives for companies being certified;
- recommending to banks and insurance companies to take into account environmental performance of companies in making investment decisions and establishing insurance fees;
- seeking to reduce certification and registration costs for companies (particularly for SMEs) by providing financial concessions to consulting and certifying companies and accreditation boards on their activities relating to EMS introduction;
- considering measures aimed at facilitation of mandatory certification and inspection regimes for EMS certified companies; and
- providing information to companies on the benefits of EMSs to society and to the company itself.

for Enterprises:

Enterprises should:

- incorporate environmental management in their strategic planning;
- adopt a holistic approach in their investment and long term decisions by taking into account potential economic, environmental and social aspects; and
- promote the company’s management culture aimed at a partnership approach with society and with its clients.

for Accreditation and Standards Bodies:

These bodies should:

- facilitate rules and procedures for easier audit and inspection procedures; and
- consider with their counterparts in other countries measures aimed at raising mutual confidence in the requirements on issuance of environmental and quality management certificates, thus facilitating recognition of certificates issued in transition economies.
for UN/ECE:

The UN/ECE should:

- include environmental management issues in its programme of activities;

- prepare and organise a series of practical workshops on EMS issues in transition economies;

- publish a collection of practical case studies of enterprises in various industries obtaining certification; and

- consider the feasibility of preparation, in co-operation with interested companies and industry associations, of guidelines for companies from transition economies on how to approach the introduction of EMS and related systems.
Programme of the Workshop

30 March 2000

Opening session

10.00 - 10.10  Welcome to the Workshop, Joëlle Ory, Chairman of the ad hoc Group of Experts on the Chemical Industry

10.10 – 10.25  Opening of the Workshop, Zoltán Illés, Chairman of the Environment Committee of the Hungarian Parliament

10.25 – 10.45  UN/ECE Standard-setting Activities and Promotion of Quality and Environmental Management Standards, Serguei Kouzmine, Secretary of the UN/ECE Working Party on Technical Harmonization and Standardization Policies, Geneva (Switzerland)

10.45 – 11.00  UN/ECE Environmental and Chemical Industry Related Activities, Howard Hornfeld, Secretary of the UN/ECE ad hoc Group of Experts on the Chemical Industry, Geneva (Switzerland)

11.10 – 11.30  Industry's View on Management Systems and Management System Standards in Quality and Environment, Thomas Fischer, Siemens AG, Erlangen (Germany) and representative of ICSCA (Industry Cooperation on Standards and Conformity Assessment)

11.30 –11.50  Coffee break

Session 1: ISO 14000 Family of Standards

11.50 – 12.20  ISO 14000 Standards: Current and Future Development, Ahmad Husseini, Secretary of ISO/TC 207 (Canada)

12.20 – 12.50  ISO 14000 Standards and EMAS in the European Union, Jon Faragher, European Commission, Directorate-General Industry, Brussels (Belgium)

13.00 – 14.30  Lunch break
Session 2: ISO 14000 Views from Certifiers

(Issues to be addressed: requirements to be met by companies to be certified, general issues and specific concerns for chemical companies, national requirements, if any)

14.30 – 15.00 *Benchmarking Environmental Performance in the Chemical Industry Using ISO 14000*, Yann Guerin, BVQI Ltd., London (United Kingdom)

15.00 – 15.30 *Common Problems Encountered by Organisations Implementing ISO 14001*, Andrew Burns-Warren, National Quality Assurance Ltd., Liverpool (United Kingdom)

15.30 – 16.00 *Experience of a Small Environmental Management System Certification Company in Hungary*, Péter Oláh, Director, EUROCERT Ltd., Budapest (Hungary)

16.00 – 17.00 Discussions and questions

19.00 - Conference dinner in Hotel Gellért

31 March 2000

Session 3: Experience with ISO 14000 from Companies

(Issues to be addressed: motivation for using ISO 14000 standards, costs and benefits, to what extent companies having introduced ISO 9000 systems can more easily introduce EMS, problems faced introducing EMS, etc.)

10.00 – 10.20 *Use of ISO 14000 in the Chemical Industry*, Jacques Busson, European Chemical Industry Council CEFIC, Brussels (Belgium)

10.20 – 10.40 *Introduction of ISO 14000 EMS in a Large Diversified Chemical Company*, Degenhardt Mueller, Solvay S.A., Burgdorf (Germany)

10.40 – 11.00 *Presentation from an Eastern European company*, Gyuláné Kovács, MOL Rt., Szolnok (Hungary)

11.00 – 11.30 Coffee break

11.30 – 11.50 *Presentation from a CIS company*, Alexandre Gorbachev, Belaruskali Co., Soligorsk (Belarus)
11.50 – 12.15  Importance of ISO 14000 for Transition Economies, Tamásné Biacs, Hungarian Ministry of Environment, Budapest (Hungary)

12.15 – 12.30  Discussions and questions

12.30 – 14.00  Lunch break

**Session 4: Interactive Workshop on How to Plan and Implement ISO 14000 System and/or EMAS in a Chemical Company**

Durin g this session a number of detailed presentations and case studies will be provided to give an idea of actions to be undertaken to achieve ISO 14000/EMS certification. An insight into experience of various types of companies in different sectors of the chemical industry and of models of ISO 14000/EMAS used by them will be provided to participants.

14.00 – 14.30  Approach of Polish Chemical Companies to Environmental Management Systems and other Voluntary Programs, Andrzej Krzéslak, Industrial Chemistry Research Institute, Warsaw (Poland)

14.30 – 15.00  Bayer as an Example from the Petro-chemical Industry, Wolfgang Viefers, Bayer AG, Leverkusen (Germany)

15.00 – 15.30  Coffee break

15.30 – 16.00  Environmental Protection as Part of Everyday Work, Zsolt Szabó, Gedeon Richter Pharmaceutical Co. Ltd., Budapest (Hungary)

16.00 – 16.30  Presentation from the Plastic Industry, Laszlo Majerusz, TVK Chemical Group - Olefins Unit, Tiszaujvaros (Hungary)

**Concluding Session**

16.30 – 17.00  Conclusions and recommendations for possible follow-up

17.00  Closing of the Workshop