

EUROPEAN COMMISSION DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT

DIRECTORATE H - Nuclear Energy Radiation Protection

Meeting of the Group of Experts (GoE) referred to in Article 31 of the Euratom Treaty

Luxembourg, 12 – 13 June 2007

SUMMARY REPORT

(Approved by the Group of Experts at the meeting 13 – 14 November 2007)

GENERAL

In his introduction the Chairman welcomed the participants.

The Director of TREN H welcomed the Group of Experts (GoE) and reported on issues related to the Euratom Treaty. He referred to the 50-year Anniversary of the signature of the Euratom Treaty in March 1957 and mentioned a special Euratom Report which will be published on this occasion. He further mentioned discussions on the Euratom Treaty in the European Parliament particularly highlighting the success of Chapter 7 on Safeguards and Chapter 3 on Health Protection. With regard to Chapter 3 of the Euratom Treaty he underlined the important and fruitful work undertaken by the GoE and wished further good success for the revision of the Basic Safety Standards (BSS). Finally, he underlined the importance of radiation protection in the medical area as it was also stated during the latest meeting of the IAEA Commission on Safety Standards.

The Chairman thanked the Director also in the name of the entire GoE and confirmed that the GoE will continue the engaged work for the revision of the BSS.

1. AGENDA ITEM 1: APPROVAL OF THE AGENDA

The agenda was slightly modified to incorporate the issues on Member States consensus regarding iodine prophylaxis, radiotherapy incidents in France, and the polonium case. With these modifications the agenda was approved.

2. AGENDA ITEM 2: APPROVAL OF THE SUMMARY REPORT OF THE MEETING HELD IN LUXEMBOURG ON 16-18 OCTOBER 2006

The GoE approved the Summary Report with a few minor changes.

3. AGENDA ITEM 3: PROCEDURAL ASPECTS/RULES OF PROCEDURE

3.1. Recording of dissent/format of the Summary Report

The EC presented a short note on how to record dissenting views in the Summary Record. It was proposed to modify Article 8 of the "Article 31 Secretariat working arrangements" laid down in Annex II of the Rules of Procedure. After a brief discussion the GoE agreed.

3.2. Chairmanship 2008-2010

According to Article 3 of the Rules of Procedure a new Chairperson has to be elected every two and a half years, which is due at the GoE meeting in November 2007 for the period 2008 to 2010. All experts were invited to nominate candidates. The Secretariat will collect the proposals and prepare the election procedure.

4. AGENDA ITEM 4: ICRP

4.1. Transmission of comments (consultation period January to March 2007)

The EC informed the GoE on the transmission of comments on the latest draft ICRP recommendations to ICRP. Due to the very tight time schedule, it was not possible to consult the GoE beforehand. The EC, however, received input from the WP BSS, the WP RIHSS and individual experts of the GoE.

In the following discussion, a few members expressed their disappointment that some of their comments were not considered by ICRP. In general, the GoE acknowledged that there has not been enough time to discuss the draft ICRP Recommendations in detail.

4.2. Presentation of the new Recommendations

Since no representative of the ICRP was able to participate in this meeting it was decided to distribute the presentation the ICRP had given at the IAEA RASSC meeting.

In view of the approval of the ICRP Recommendations at the Essen meeting (the "After Essen" version of the Recommendations was provided), the GoE concluded that the Recommendations have considerably improved even though some comments have not been considered in the final version. The GoE acknowledged that the ICRP had agreed to consider the comments and discuss them in future in more detail.

The GoE expressed its wish to see the ICRP Recommendations published as soon as possible in order to have a solid basis for the revision of the BSS. It was noted that the published version may still include some changes, mostly of editorial character.

5. AGENDA ITEM 5: PROGRESS REPORTS IN VIEW OF THE REVISION OF THE EURATOM BSS

5.1. Recasting/consolidation of all directives related to radiation protection

With regard to the revision of the Euratom Basic Safety Standards and the consolidation of Directives related to radiation protection, the EC presented two possible ways to proceed:

- Separating the two processes: First finalising the revision of the BSS, then consolidating the revised BSS and related directives (i.e. MED, HASS, OSW, and Public Information) using the codification or recasting techniques;
- Simultaneous revision of the Euratom BSS and consolidation of related directives using the recasting technique.

The second option could probably be finalised sooner than the first option.

The processes of "Codification" and "Recasting" were explained in more detail.

Codification (horizontal) is the process of bringing together original acts covering related subjects into a single act. Codification uses as starting point the consolidated texts produced by the Publication Office. On the basis of these texts a new act is prepared combining the original acts without any further substantive changes. The new act must pass through all stages of the legislative process, although an accelerated procedure has been agreed by the European Parliament, the Council and the Commission.

Recasting (horizontal) is like codification in that it brings together two or more original acts covering related subjects in a single act. But unlike codification, recasting involves new substantive changes. The new act passes through the full legislative process but the rules provides for special procedures to enable the legislative authority to concentrate its attention on those parts of the legislative proposal which are new.

The GoE discussed advantages and disadvantages of the two options. Disadvantages, such as a longer overall process and a finally very big recasted BSS document that may be hard to read, were addressed. Possible time frames in view of a co-ordination with the IAEA BSS revision process were discussed as well and considered to be given further thoughts.

It was suggested to integrate also the Radon Recommendation in the BSS.

The GoE and the EC agreed that a Recast would be advantageous, and decided to work in this direction.

5.2. General outline of the Euratom BSS

The EC introduced a proposal for the outline of the Euratom BSS. After presenting an overview, the EC addressed title by title followed by a discussion within the GoE.

• Title I, Definitions

It was proposed to harmonise the definitions with the wording used by ICRP in its latest Recommendations. However, the definitions have to be adapted to meet the requirements for regulatory text. The discussion revealed that a clear discrimination between existing, planned, and emergency exposure situations with clear definitions should be the aim. In addition, the concept of the representative person needs careful definition. It was further underlined that this part should include definitions for the Qualified Expert, Radiation Protection Expert and Radiation Protection Officer

• Title II, Scope

The distinction between "artificial" and "natural" has been removed. The issues radon and environmental protection will be addressed. It was further suggested to explicitly mention in this title public, occupational, and medical exposure. The possible inclusion of stakeholder involvement and risk governance was discussed; however, the GoE felt that this would be better addressed in other titles.

• Title III, Responsibilities for regulatory control across all exposure situations

This title will introduce requirements to establish regulatory authorities with well defined responsibilities, and to define their role including education and training.

• Title IV, Regulatory Control and Justification of planned exposure situations

This title needs to be completely rewritten in order to consider for example an extension to all exposure situations, the responsibility for optimisation, the constraints and reference levels, medico-legal aspects, etc..

• Title V, System of dose limitation and optimisation

This title has to be seen in relation to title IV and shall cover the principles of radiation protection. After an extended discussion the GoE recommended to keep together justification, optimisation and dose limitation, to change the title to "Principles of Radiation Protection" and, to move it before the title on "Responsibilities for regulatory control across all exposure situations ".

• Title VI, Workers, apprentices and students

Very few changes were proposed.

• Title VII, Natural radiation exposure

This title was completely redrafted by the WP NORM/Natural Sources including more specific requirements on regulatory control of NORM industries, building materials and exposure to radon. In addition, aircrew exposure will be covered. Astronaut exposures could be briefly "flagged" in the new directive.

• New title VII, Protection of patients and other individuals submitted to medical exposure

To cover medical exposure the existing medical directive should be incorporated in the recast BSS. The WP MED proposes that the text could stay almost unchanged; however, a few definitions have to be modified. After discussion, the GoE concluded that the recast provides indeed a good opportunity to amend the Medical directive for inclusion into a recast BSS and asked the WP MED to identify possible amendments. At the same time education and training should be particularly addressed with emphasis on certification and accreditation.

• Title VIII, Protection of the members of the public and the environment

This title needs only minor changes. The "Representative person" has to be carefully defined. References should be made to the Recommendation on Article 36, NORM industries, and the Drinking Water directive. The GoE addressed also the issue of the environment, in particular whether to include this issue in this title or to deal with it in a separate title. The GoE preferred a separate title on protection of the environment, however, stressed that the publication of the ICRP Recommendations should be awaited.

• Title IX, Intervention

This title should be split into two separate parts on emergency exposure situations and existing exposure situations with a clear definition of the two different phases and the transition phase from emergency exposure situations to existing exposure situations. The GoE discussed the need for common, co-ordinated emergency plans which should be covered by the title on emergency exposure situations.

• Title X, Final provisions

No changes are foreseen at present

• Annexes

It was noted that the annexes are part of the directive and are therefore legally binding.

The GoE thanked the EC for drafting this first outline and stated that further work still has to be done. Based on the discussions, the Secretariat will prepare an elaborated draft and distribute it to the GoE.

5.3. WP BSS

The Chairman of the WP shortly presented the activities of the WP and proposed to discuss the establishment of four new WPS on Occupational Exposure, Emergency Exposure, Education and Training and Aircrew.

The EC and the GoE concluded that the four topics should be covered but could be treated by various means. An ad-hoc WP Occupational Exposure started working by correspondence and may have to be established as an Article 31 WP. The establishment of a WP Emergency Planning and Response was considered as useful and should in particular aim at harmonisation in close contact with the MSs. The protection of aircrew is a specific topic which can be covered by a few specialised experts, not necessarily members of the Article 31 GoE, and does not necessitate the creation of a Working Party The WP Education and Training will be established when the first output from the EUTERP platform (see also point 8.4.) is available. In conclusion, the WPs on Occupational Exposure and on Emergency Planning were

given priority at present. The EC proposed to prepare draft mandates and tasks to be presented at the next meeting of the GoE.

5.4. WP Natural Radiation Sources

The secretary of the WP Natural Sources presented a version of the report on NORM originally presented at the previous meeting of the GoE and revised considering the comments given by the GoE. The report clarifies the reasons behind the proposed regulatory approach and underlines the dose criteria of 1 mSv/y to workers and 0.3 mSv/y to the public, and the optimisation principle as a starting point for the work. There were no changes to the values or the outline of text for the new BSS.

During the discussion the proposed exemption levels were again discussed with some experts expressing concerns that even below these levels certain scenarios have shown annual doses above the dose criteria mentioned above. Finally the GoE concluded that, although some of its members disagree with the proposed activity concentration values, this is as far as one can get at the moment. The issue will be discussed again when a proposal for a full BSS, including NORM, is ready and presented to the GoE.

The WP also presented its ongoing work on building materials and radon. Reports on these two subjects, including proposal for text in the new BSS, will be presented to the GoE for discussion at its next meeting. For radon the WP is currently discussing a requirement on setting up national action plans for the reduction of radon exposure in workplaces and dwellings, along with requirements on surveys and mapping of areas with a risk for high concentrations of radon and building codes. For building materials the WP has elaborated on the proposals in the RP 112 and currently discusses categorising the materials in three categories based on an activity index.

The GoE thanked the WP for the good work done so far and looked forward to receiving the results from the WP in due time before the next meeting.

5.5. WP Graded Approach

The Chairperson of the Working Party on Graded Approach to Regulatory Control presented the status of ongoing work of this recently established Working Party. The main objective of this Working Party is to discuss current concepts of regulatory control with a view to the introduction of a graded approach. In particular, the Working Party should prepare an outline of such a graded approach to regulatory control which can be introduced as new Title III in the revised European Basic Safety Standards.

The GoE thanked the WP for the work done so far and is looking forward to receiving further results.

6. AGENDA ITEM 6: PROGRESS OF THE REVISION OF THE INTERNATIONAL/IAEA BSS

6.1. Status of the revision

The IAEA representative presented the status of the revision. She informed in detail on the different Working Groups (WG) established for the different chapters of the BSS. She announced that a new draft version (0.3) of the BSS will be provided around 21 June. This version will provide the basis for a Technical Meeting (TM) scheduled in Vienna from 16 to 20 July with a broad participation (presently about 100 participants) from the IAEA MSs (40 countries) and international organisations (12 organisations). The TM will be structured into plenary and WG meetings, with the discussion of terminology, categorisation, approach to different exposure situations, and education and training at the plenary (about 2.5 days), and the discussion of specific issues at WP meetings (1-1.5 days). After this meeting, with consideration of the discussions and recommendations, a new draft will be prepared for distribution to RASSC members before the RASSC October meeting, probably around the end of August.

6.2. Participation of the EC

The EC described its role as potential co-sponsor and thanked the IAEA for the invitation to participate as co-sponsor. The EC further addressed some difficulties regarding the cooperation due to the fact that new draft BSS versions are sometimes presented with rather short notice. The EC agreed that the next TM is an important step in the revision process and that the TM approach with plenary and WG meetings is very good. The EC confirmed its participation in the TM with a choice of persons depending on the next draft 0.3. With respect to EC co-sponsoring the EC gave the example of the IAEA Safety Fundamentals and explained the approval process with the Council involved. A similar process would apply for EC cosponsoring the IAEA BSS; the EC will ask the GoE for an opinion once a complete draft version of the IAEA BSS is available. The EC concluded that the co-ordination with the IAEA should lead to harmonised IAEA and EC BSS. Finally, the EC underlined the need for high quality of the BSS.

The GoE discussed the issue shortly and thanked both the IAEA and the EC for the very cooperative approach. Further, the EC clarified that even if the EC has become an official cosponsor of the IAEA BSS, the EC needs to establish its own BSS because the Euratom Treaty requires establishing binding European legislation, in contrast to the non-binding character of the IAEA BSS.

7. AGENDA ITEM 7: INFORMATION FROM INTERNATIONAL ORGANISATIONS

7.1. IAEA

The representative of the IAEA presented the activities of the IAEA, and reported on the Development and Application of Standards, Assisting Member States in strengthening National Regulatory Infrastructures, the International Action Plan for Occupational Radiation Protection, Safety and Security of Radioactive Sources, Patient Protection with reference to the web page <u>http://rpop.iaea.org</u>, Transport Safety, and Waste Safety.

7.2 ICRP

No representative of the International Commission on Radiological Protection could attend the meeting.

The representative of the NEA gave a short presentation of the activities of the NEA. He emphasised specifically the interaction between science and policy and informed about a meeting in January 2008 in Helsinki that will address this issue.

7.4. IRPA

The representative of IRPA gave a short presentation of the activities of the IRPA. He mentioned in particular the IRPA Regional Congress in Brasov (RO) the last week of September 2007. He further underlined the importance the IRPA is giving the improvement of professional issues and addressed in particular the registration of the profession by the ILO and the need for promoting the harmonisation of professional recognition.

7.5 European radiation protection regulators

A member of the GoE reported on a meeting of European Radiation Protection Regulators addressing various radiation protection issues, such as outside workers and dose passports, justification of radioactive sources, education and training in radiation protection, medical activities, emergency preparedness and stable iodine, and stakeholder involvement.

The EC will consider collaboration with this group of European Radiation Protection Regulators as soon as a clear description of the mandate of this group has been established. The GoE shared this view.

8. AGENDA ITEM 8: REVIEW AND PRIORITISATION OF THE ACTIVITIES OF THE WORKING PARTIES (WPS)

8.1. General discussion of working procedures

The EC briefly introduced current working procedures for the Working Parties, and addressed reporting, terms of reference and in particular the lifetime of WPs in view of the 5 year term of the GoE. The GoE concluded that the lifetime of Working Parties should be limited until they have completed their tasks and fulfilled their mandate. If deemed necessary, the GoE can re-establish a Working Party with a new/modified mandate and an updated work programme.

Along these lines, the Secretariat will prepare slightly modified working procedures for adoption by the GoE at the next meeting.

8.2. Medical exposures

The co-chairman of the WP gave a detailed description of the activities of the WP and addressed the topics "Guidelines", "Future contracts", "International documents and meetings", and other miscellaneous topics (see document). Regarding "Future projects" he underlined the priority to be given to the conference on medico-legal procedures as follow-up to the Dublin conference. Other projects of particular importance were the establishment of an ALARA network on medical exposure and the harmonisation of the MPE in cooperation with EFOMP.

The GoE discussed the presentation in detail and emphasised the importance of promoting safety culture in the medical area. The establishment of a medical ALARA network was considered to be the adequate approach. The issue of HASS in medicine was also shortly discussed as well as issues concerning isotope production.

8.3. Research Implications and on Health and Safety Standards (RIHSS)

The chairman presented the activities of the WP. He informed that the composition of the WP has changed after the completion of the work on the last seminar. He further presented the status of the proceedings for the last seminar that are nearly completed but with the contribution of one speaker still missing. The conclusion chapter has been completed with the 5 key-points as approved by the GoE included; also the approval by the speakers has already been given.

In view of the importance of the seminar he further presented the proposal of the WP to publish the conclusions of the seminar in the Journal of Radiological Protection for which agreements by the GoE and the speakers have to be given.

The GoE thanked the WP for the very good work and welcomed the initiative of the WP to publish the conclusion of the last seminar in the journal proposed, which would allow a broader distribution within the radiation protection community. In conclusion, the GoE requested to get the final paper for publication before approving its publication. In addition, the authorship has still to be clarified.

The Chairperson of the WP RIHSS then presented the draft program for the next seminar on "Emerging issues on tritium and low energy beta emitters". The program will be further discussed at the next WP meeting.

The GoE considered the draft program as very good and expressed its wish that the processing of the seminar will run with no delays.

8.4. Education and training (EUTERP)

The responsible contractor, also member of the GoE, reported on the progress of the project that started just a year ago. He in particular informed on the 1st EUTERP Workshop (WS) that took place 22-24 May in Vilnius and presented the summary and conclusion (see document). The outcome of the WS was an important step forward towards the definition, competence, qualification, and responsibility of the Qualified Expert (Radiation Protection Expert) and the newly introduced profession of the RPO (radiation protection officer) to be used later on for the revision of the BSS. He further informed about a strong participation of representatives from the medical area and proposed in that context to include in the EUTERP Steering Committee additional members of the GoE, possibly with a medical background.

The GoE acknowledged the good success of the project achieved till now and congratulated the project team. In the following discussion the issue of mutual recognition was addressed. It was agreed that a requirement of a "standardised" recognition system would be a good help to move towards improved mutual recognition.

9. AGENDA ITEM 9: INFORMATION BY THE COMMISSION

9.1. Legal developments

The head of the Radiation Protection unit informed the GoE on the latest legal developments. He referred to ongoing work on Regulation 1493/93, Transport Regulation, IAEA Safety Fundamentals, and the Drinking Water Directive. In the absence of the lawyers in unit H1 and of representatives of unit H2, he refrained from giving any details.

9.2. Other initiatives

The issues Council Working Parties and High Level Group were not discussed in any further detail.

10. Agenda Item **10:** Publications

The Commission briefly informed the GoE that the publication on Consumer Goods has been finalised and sent for printing.

11. AGENDA ITEM 11: ANY OTHER BUSINESS

11.1. Miscellaneous

- The Commission shortly informed the GoE on the outcome of the Ex-post evaluation project on the Unit's past work. The overall assessment also based on questionnaires was very positive. Weak and negative aspects were found with respect to maintaining the Unit's expertise, the low priority setting of the medical exposure, and the loss of the lawyers (transfer to H1).
- A member of the GoE reported on the consensus reached by France, Belgium, Germany, Luxembourg and Switzerland on iodine prophylaxis. It is proposed to base protective actions in the five countries on common references and common health and safety recommendations on countermeasures. This voluntary harmonisation is intended for the early stage following an accident (approximately 24 hours from the time of the alert). As a base serves a projected dose of maximum 50 mSv derived from the source information provided by the relevant country. It was emphasised that countermeasures are a combination of iodine prophylaxis, sheltering, and food bans.

The GoE very much appreciated the presentation and congratulated to this important step.

• A GoE member from the UK reported on the polonium poisoning incident in London in the follow-up of which the Health Protection Agency (HPA) was strongly involved. During the discussion many questions were addressed that could partially be answered. Regarding the identification of the origin of the polonium via an isotope composition analysis ("fingerprint") no information was available because this is considered as a part of the police investigations.

The GoE expressed its appreciation about this interesting presentation and thanked the speaker. In addition, the GoE asked the EC to be kept informed on further developments.

11.2. Next meetings

The next meeting 13 - 14 November 2007 was confirmed. The meeting in June 2008 was tentatively scheduled for 11 - 12 June 2008 but will be finally confirmed at the next November meeting.

On the occasion of the retirement of the secretary to the GoE and several of its WPs the Chairman thanked him on behalf of the GoE for all the work and the support given and wished him all the best for his future. He further thanked all participants and interpreters and closed the meeting.