Association Belge de Radioprotection / Belgische Vereniging voor Stralingsbescherming
(ABR/BVS)

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FOUNDATION OF THE BELGIAN SOCIETY FOR RADIATION PROTECTION

The society was established in 1963 by a number of professionals active in public health, medicine, industry and radiation protection. Throughout its existence, its membership reflects a truly multidisciplinary character. The number of members is approximately 250. ABR/BVS is a founding member of IRPA.

MISSION

The Society is a de facto scientific society. Its main function is to study the scientific questions related to the protection of individuals and communities exposed to ionizing and non-ionizing radiation. ABR/BVS fosters interdisciplinary collaboration and aims at facilitating the presence of Belgian representatives at international radiation protection meetings. The society provides a forum for dialogue, information and communication through the organization of quarterly meetings.

METHOD OF WORKING

An Executive Committee (Bureau) governs the society, plans its activities and issues:

• a quarterly journal, the "Annalen van de Belgische Vereniging voor Stralingsbescherming / Annales de l'Association Belge de Radioprotection" consisting mainly of the papers presented at the scientific meetings;
• a three-monthly periodical, the "Newsletter" with topical information such as parliamentary questions, review of books and conferences, new legislation, news from IRPA, ...

The society organizes every few months a scientific meeting inviting some experts to present and discuss a topical subject. ABR/BVS keeps regional relationships with the French (SFRP) and Dutch (NVS) radiation protection societies. Bilateral meetings are co-organized at regular intervals.

The subjects of the 1999 scientific meetings were:

• Health effects of prenatal irradiation;
• A new approach to the surveillance of the internal contamination at the Tihange NPP, and quality control of ionization chambers used in radiotherapy and radiation protection;
• Crisis management after a widespread radioactive contamination of the environment; joined SFRP-ABR/BVS meeting;
• Limits to the responsibility of prevention advisors: the civil and penal responsibilities.

The program of this year (2000) consists of:

• Impact of the new ICRP recommendations on the assessment of the internal contamination;
• Revised regulations on ionizing radiation in Belgium implementing the European Directives;
• A new approach to radioactive waste in hospitals: decay storage, multiple risks; joined NVS- BVS/ABR meeting (provisional);
• Results of the epidemiological study on the health effects of radiation workers in the Belgian nuclear industry, and compensation of occupational diseases of radiation workers in Belgium.

Two working groups are currently active:

• the working group on regulation has completed an advice on the training of the qualified expert in radiation protection as defined in article 1 of the European Directive 96/29/Euratom and has provided the authorities its opinion and advice on the implementation of this Directive in Belgian legislation;
• the working group on communication is establishing a two-way contact with the members and is informing target groups (education, experts, medical practitioners, ...) on radiation protection issues. They completed recently a Dutch-French leaflet freely available on the mission of the society and a corresponding poster.

The society went recently on-line:
• constructing the web-site: http://www.bvsabr.be,
• with E-mail contact addresses: office@bvsabr.be and president@bvsabr.be.

WORKING GROUP ON COMMUNICATION

The main objectives of the working group on communication are to establish a closer contact with the members and to disseminate information on radiation protection issues to the general public and to specific target groups, such as education, experts, medical practitioners, ...

Some recent realizations of the working group are:

Leaflet presenting the Society

A Dutch-French leaflet was published in 1998 with detailed information on the following points:
• objectives of the Belgian Society for Radiation Protection;
• membership requirements;
• foundation and development of the Belgian Society;
• method of working of the Belgian Society;
• publications of the Belgian Society;
• revenues of the Belgian Society;
• overview of the main scientific meetings;
• how to contact the Belgian Society;
• how to join the Belgian Society.

The leaflet was sent to all members and distributed to target groups (people with a responsibility in radiation protection training, qualified experts in radiation protection, approved medical practitioners, ...). Copies are available free of charge at the secretariat or through our web-site: http://www.bvsabr.be.

Poster presenting the Society

In its continuing mission to make the Society more widely known the working group finalized in 1999 a Dutch-French poster. The multidisciplinary character of the Society is clearly illustrated in the following figure.

Figure 1. Membership composition according to science discipline.

These initiatives of the working group on communication have certainly contributed to the 10 % increase in membership during 1999.
WORKING GROUP ON REGULATION

Advice on the training of the qualified expert in radiation protection

The Belgian Society for Radiation Protection has provided the authorities with an advice concerning the qualification and training of the expert in radiation protection. In its advice the BVS/ABR strictly adheres to the definition of the qualified expert, as is stated in the European Directive 96/29/Euratom (art. 1) (1). The training must provide a broad-based curriculum without distinction between the different nuclear and radiological technological fields. These fields can be the subjects of an additional curriculum. Courses should be timed to enable professionals with full day work schemes to attend and acquire knowledge in radiation protection. Full time courses are deemed inappropriate (2).

The annex to the advice is the Society’s proposal of a basic radiation protection curriculum of the radiation protection expert meant for the legislating bodies and educational institutions. It takes due account of the 1997 statements made by the EU Commission in Communication 98/C 133/03 (3). Provided that lecturing is made at half-a-day rate a week, spread over one academic year, the educational institutions are free to expand the curriculum. In line with the European Communication, the inclusion of additional subjects is dictated by the particular needs of specific activity fields. Too much detail should be avoided in the legal dispositions. The following is an example of subject list for a basic curriculum:

<table>
<thead>
<tr>
<th>Basic curriculum</th>
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<tbody>
<tr>
<td>Nuclear physics:</td>
<td>10 h</td>
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<tr>
<td>Radiation physics:</td>
<td>10 h</td>
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<tr>
<td>Radiochemistry:</td>
<td>10 h</td>
</tr>
<tr>
<td>Nuclear measurement:</td>
<td>20 h</td>
</tr>
<tr>
<td>Practical dosimetry:</td>
<td>20 h</td>
</tr>
<tr>
<td>Radiobiology and fundamentals of radiation protection:</td>
<td>10 h</td>
</tr>
<tr>
<td>Practical radiation protection and organization of radiation protection:</td>
<td>20 h</td>
</tr>
<tr>
<td>Legislation:</td>
<td>10 h</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>110 h</strong></td>
</tr>
</tbody>
</table>

Advice on the implementation of the European Directives into the Belgian legislation

To comply with the EU Basic Safety Standards Directive (1) and Medical Directive (4) the Belgian authorities prepared proposals for revised regulations on ionizing radiation. The European Recommendation on Indoor Radon is included also (5). In the process the services have been centralized and a new federal agency has been created: the "Federal Agency for Nuclear Control" or FANC. The Society was asked to provide its opinion and advice on the proposals for revised regulations.

CONTEST ON THE TEACHING OF THE BASIC CONCEPTS OF RADIATION AND RADIATION PROTECTION

The Society has organized in 1995 a contest on the teaching of the basic concepts of radiation and radiation protection in primary and secondary schools, awarding four prizes of 50,000. BEF. The immediate cause of the contest was the publication by the European Commission of the manual "Radiation and Radiation Protection: A Course for Primary and Secondary Schools" (6). It presents 27 lessons for 5 age groups. On the basis of the submitted written teaching material a first selection of twelve lessons was made. Then a jury composed of 6 members of the Executive Committee of the Society went to the different schools, attended the lessons and awarded the prizes taking the following criteria into consideration:

- quality of the teaching material;
- originality of the lesson;
- effective communication of correct information;
- active involvement of the pupils;
- didactically justified form;
- use of audio-visual aids.

The selected lessons were published as a special issue of our quarterly journal (7).
PERSPECTIVES

The Society will continue to work towards the enhancement of radiological protection in Belgium. The radiation protection field has evolved significantly during the past few decades and general improvement of protection techniques and technology is expected to continue. In addition to this year’s program (2000) that was given under the heading "method of working” some issues of increasing importance will be addressed by the Society in the near future:

- assisting our members in the application of the revised regulations on ionizing radiation;
- dealing with the increased attention to the non-ionizing side of the spectrum;
- implementing the framework for controlling exposures to natural radiation sources (air-crews, radon in workplaces, non-nuclear industry);
- protecting sensitive ecosystems from possible detrimental effects of radiation;
- anticipating the changing public attitude toward risk;
- ...

REFERENCES