

International Commission on Non-Ionizing Radiation Protection ICNIRP – 2006/2007 REPORT

Introduction

This report summarises the activities of the Commission for the period between the meetings held in May 2006 and April 2007.

Commission Membership

Larry Anderson, member of the Commission and Chairman of SC II resigned for personal reasons. Elections were held to fill the vacancy, and Richard Saunders was elected. At the Commission Meeting in Tokyo, he was also appointed Chairman of SC II. New members of SC II, Dr. Miyakoshi and Dr. Van Rongen, were also nominated. The updated membership of the Main Commission and Standing Committees is available on ICNIRP's website <http://www.icnirp.org>.

Commission Meetings

The Annual General Meeting of the Commission was held in Chicago, USA, 25-27 May 2007. A scientific meeting was held in Tokyo, Japan, 8-10 November 2007. The Commission thanks James Lin and Masao Taki, respectively, as well as the Secretariat for the excellent organization.

Focus Group Meetings

The Chairman's Focus Group informally met in the occasion of the International Workshop on UV Exposure Guidance held at the Federal Office for Radiation Protection (BfS) in Munich on October 18-19 2006. Business and administration issues were discussed, as well as details of organization of Commission meetings and scientific events sponsored by, or with the participation of, ICNIRP.

Work plan

The work plan for the next years has been updated based on the progress of the different task groups.

Revision of the ICNIRP guidelines for limiting exposure to electric and magnetic fields in the frequency range up to 100 kHz

The Task Group chaired by Rüdiger Matthes has started drafting the document, which should be finalized in the course of 2007.

Revision of the Guidelines on Limits of Exposure to Static Magnetic Fields

A first draft proposed by the Task Group chaired by Antony Swerdlow was discussed at the Annual Meeting in Chicago; following comments and suggestions by the Commission, a revised proposal was drafted and discussed at the meeting in Tokyo. After final refinements, the Guidelines are expected to be approved and published in the course of 2007.

Protection of Outdoor Workers to UV Exposure

The monograph "Protecting Workers from Ultra-Violet Radiation" was approved by the Commission and is now finalized. It is intended for publication jointly with WHO and ILO in Spring 2007.

Statement on exposure to far-infrared radiation

The statement prepared by the Task Group appointed by SC IV was submitted for approval to the Commission at the Scientific Meeting in November 2005 and published in Health Physics in December 2006.

Statement on EMF-emitting New Technologies

A statement on exposure and possible health risks related to new technologies is being prepared by a Task Group under the chairmanship of James Lin. A first draft, and a second

more advanced version, were discussed at the Annual Meeting in May and at the Scientific Meeting in November, respectively. The statement is expected to be finalized in 2007.

Broad-band incoherent optical radiation (0,38 µm-3mm)

An update of the guidelines for "Broad-band incoherent optical radiation (0,38 µm-3 mm)", which needs to be revisited in one very specific and narrow aspect, is on the way.

Medical ultrasound

An outline of the statement on medical ultrasound was presented by Agnette Peralta at the Scientific Meeting in Tokyo. Valuable input to the development of this document was provided by the "International Workshop on Effects of Ultrasound and Infrasound Relevant to Human Health", 24-26 October 2005, Oxford, United Kingdom, organized by HPA and co-sponsored by ICNIRP.

Review of physical aspects, biological evidence and epidemiology - RF (100 kHz-300GHz)

The comprehensive RF-review, which will lead to the publication of an ICNIRP Blue Book, was initiated. The Standing Committees I, II and III in charge have presented their outlines and are working closely to provide an harmonized work. The work on the review continues. Findings of very large international research projects are awaited, to be integrated in the overall review. The date of completion of the task will depend on the availability of such data.

Publications

The following ICNIRP document has been published in December 2006: ICNIRP statement on far infrared radiation exposure. Health Phys. 91(6):630-45 (2006).

The statement is available for download at www.icnirp.org.

Workshops and Meetings hosted, organized by ICNIRP or with ICNIRP participation

ICNIRP organizes Commission meetings and Standing Committee meetings to discuss all administrative and scientific matters related to its activities and work plan. In addition ICNIRP, as a widely recognized international organization in non-ionizing radiation protection is invited to participate in, or co-sponsor, many international scientific events. In the period covered by this report, ICNIRP has organized and/or contributed to the following meetings:

Main Commission and SC meetings

- ICNIRP Annual Meeting, Chicago, USA, 25-27 May 2006
- SCII meeting, Rome, Italy, 12 April, 2006
- SCIV meeting, Como, Italy, 10-13 June, 2006
- TG ELF meeting, Didcot, United Kingdom, 21 September, 2006
- ICNIRP Commission meeting, Tokyo, Japan, 9-11 November 2006

Workshops and Seminars

- ICNIRP/BfS International Workshop on "EMF Dosimetry and Biophysical Aspects Relevant To Setting Exposure Guidelines", 20-22 March 2006, Berlin, Germany (see below)
- Workshop on "Emerging Technologies, Potential Sensitive Groups and Health", 20-21 April 2006, Graz, Austria
- International Conference on "Electromagnetic Fields, Health and Environment", 27-29 April 2006, Madeira Island, Portugal
- Second European IRPA Conference "Radiation Protection: From Knowledge to Action", 15-19 May 2006, Paris, France
- EMF Summit: "Exposure Control Standard and Evaluation on Health Impact of Mobile Telecommunication EMF", 16-17 May 2006, Taipei, Taiwan
- 28th International Congress on Occupational Health, 11-16 June 2006, Milan, Italy
- International Workshop "Technical and Regulatory Aspects of the Effects of Non-Ionizing Electromagnetic Emissions", 19 June 2006, Lima, Peru
- International Forum on "Non-Ionizing Radiations and its Possible Health Effects", 20 June 2006, Lima, Peru

- International Forum on "The Reality behind Electro-Magnetic Frequencies", 5 July 2006, La Valletta, Malta
- International Seminar on "ELF Issues and Policy Options", 16-17 August 2006, Brasilia, Brazil
- Korea-Japan Workshop on "Biological Effects of EMF", 27-28 September 2006, Seoul, South Korea
- Training Course on "Radiofrequency Radiation Protection", 4 November 2006, Manila, The Philippines
- NICT workshop, 8 November 2006, Tokyo, Japan
- Joint EU/Japan/Korea/USA Workshop, 14-15 November 2006, Tokyo, Japan
- ICNIRP/WHO/EMF-NET Workshop on "Current Trends in Health & Safety Risk Assessment of Work-Related Exposure to EMFs", Milan, Italy, February 14-16, 2007
- Invited Lecture on "From Health Effects to International Recommendations" Forum "Non-ionizing Electromagnetic Radiation and its Health Effects", Santo Domingo, Dominican Republic, 2 March 2007
- Lecture on "International Work-Related EMF Activities" International Course on "Health Risk Management of Occupational Exposure to Electromagnetic Fields", Saariselkä, Finland, 5-9 March 2007
- Invited Lecture on "The Basis for the Development of EMF Protection Standards" Workshop on "Risk Assessment of Radiofrequency Electromagnetic Radiation", Cairo, Egypt, 19 March 2007
- Seminar on "Electromagnetic Fields and Health: From Scientific Knowledge to Policy Options. European Patent Office, Munich, Germany, 22 March 2007

Meetings with cooperation partners

- 11th International Advisory Committee Meeting, 7-9 June 2006, Geneva, Switzerland
- IRPA12 meeting of the Scientific Committee, 28-30 March 2007, Buenos Aires, Argentina

ICNIRP/BfS International Workshop on "EMF Dosimetry and Biophysical Aspects Relevant To Setting Exposure Guidelines", 20-22 March 2006, Berlin, Germany

To get views on different aspects of the guidelines as a basis for the re-evaluation of the ELF guidelines, an International Workshop on EMF Dosimetry relevant to Setting Exposure Guidelines was organized from 20-22 March in Berlin, Germany. Lectures and discussion provided useful hints on some open questions. The rapporteur's report and a summary by the Chairman are available to the Commission. Comments are awaited from those who attended the Workshop. The proceedings of the Workshop are intended for publication by the Beginning of 2007 in a Special Issue of Health Physics. Information in this regards are available on the website.

Collaboration with International organizations

World Health Organization (WHO)

ICNIRP's co-operation with WHO is mainly related to the EMF and the INTERSUN Programmes of WHO. ICNIRP participated, presenting its activities, in the 11th International Advisory Committee Meeting, 7-9 June 2006, Geneva, Switzerland.

A workshop jointly organized by ICNIRP with WHO and the EC Coordination Action EMF-NET on "Current Trends in Health & Safety Risk Assessment of Work-Related Exposure to EMFs" was held in Milan, 14-16 February 2007.

As per its agreement with WHO, ICNIRP Standing Committees are preparing a comprehensive review of physical aspects, biological effects, and epidemiological evidence of RF fields, which is expected to be delivered to WHO by the end of 2007.

European Commission (EC)

ICNIRP continues providing scientific advice to EC especially Directorate General Health and Consumer Protection, Enterprise Directorate General, and Directorate General for Employment, Social Affairs and Equal Opportunities. This role has been enhanced with the participation of ICNIRP in two relevant projects within the 6th Framework Programme of Research, namely EMF-NET and EIS-EMF. ICNIRP will provide scientific advice for the evaluation and interpretation of scientific data (EMF-NET), and for their dissemination (EIS-EMF).

In addition, ICNIRP has provided advice to the EC in the development of the Directive on the protection of workers from optical radiation.

International Radiation Protection Association (IRPA)

ICNIRP participated in the second meeting of the IRPA12 Scientific Committee, which was held on March 28-30 in Buenos Aires, Argentina, in order to prepare the next IRPA Congress in 2008.

International Commission on Occupational Health (ICOH)

ICNIRP actively participated, in the 28th International Congress on Occupational Health (Centennial Congress of ICOH), held on 11-16 June 2006 in Milan, Italy. An invited Keynote Presentation was given by the Vice-chair of ICNIRP and two minisymposia on NIR were organized by ICNIRP in collaboration with the Committee "Radiation and work" of ICOH.

Collaboration with National Organizations worldwide

As part of its mission, ICNIRP provides scientific advice on NIR protection to national governments, in particular of countries of geographical areas whose role and participation in the international debates have so far been marginal. In the last year ICNIRP contributed with lectures in training courses and scientific meetings in such countries as Brazil, Taiwan, The Philippines, Malta, Dominican Republic, and Peru (see above).

The participation in the international seminar held in Peru has been particularly important and fruitful. The seminar was in fact organized on a continental scale by the Inter-Regional Commission for Telecommunications (CITEL), and the Organization of the American States (OAS). The seminar provided the opportunity to present and discuss the international guidelines (in particular ICNIRP), and the crucial importance of the harmonization of standards worldwide. A second such meeting will take place in Salvador in April 2007.