

ICNIRP ACTIVITIES

REPORT 2016

Introduction

This report summarizes the activities of the Commission for the period between January 2016 and December 2016

ICNIRP Commission Vacancy – Membership Commission and Scientific Expert Group

ICNIRP elected Dr Monika Asmuss to join the main Commission. She is a Senior Scientist at BfS and has knowledge in non-ionizing radiation protection encompassing both EMF and optical radiation. Membership of the ICNIRP Commission is available at www.icnirp.org.

The Scientific Expert Group (SEG) is composed according to the needs of the Project Groups (PGs) in accordance with the Work Plan 2016-2020. Dr Jacques Abramowicz was elected in the Scientific Expert Group in view of collaborating to the work on ultrasound. Further adjustments are awaited also as per the upcoming PGs on HF dosimetry review and on NIR for cosmetics purposes.

ICNIRP Scientific Secretariat

The Scientific Secretariat is based in Oberschleissheim, Germany. It keeps the records of the Commission, provides administrative support, responds to scientific and other requests, prepares and organizes workshops both scientifically and logistically, coordinates the activities of the Commission including communication and partner contacts, liaison with the publishers, maintains and updates the website and manages its finances. Following the same four years term as the Commission membership, the Scientific Secretary, Dr Gunde Ziegelberger, was confirmed for the new term of office 2016-2020.

Declaration of personal interests

The declarations of personal interests are filled in by all commission and SEG members on a yearly basis. The declarations of personal interests are screened and evaluated by the Board and Commission with the objective of safeguarding ICNIRP's scientific independence. All declarations of personal interests are available on the ICNIRP website at www.icnirp.org.

Commission meetings

A Commission meeting took place on 21-23 March in Rome, Italy. The main task there was related to the update of the HF guidelines. To make the best use of resources, the PGs on Data gaps, Diagnostic applications, Protection principles and Ultrasound also met there. In the framework of the cooperation with WHO, Dr T.E. van Deventer, the coordinator of the radiation programme at WHO, attended the Commission and PG meetings as an observer.

A Commission meeting took place on 11-13 May in Cape Town, South Africa, following the International NIR Workshop, 9-11 May 2016, also in Cape Town. The main focus of the meeting was the update of the HF guidelines. Additionally, the PG on Diagnostic applications also met there on 10 and 11 May. In the framework of the cooperation with WHO, Dr. T.E. van Deventer attended part of the meeting as an observer.

The Annual General Meeting (AGM) was held in Tokyo, Japan, 3-5 December 2016 in conjunction with an International ICNIRP/NICT Joint Workshop on Non-Ionizing Radiation.

The agenda of the AGM in 2016 included managing all administrative and other Commission businesses, such as the coordination of the activities of the PGs as per the work plan, the budget approval and the screening of the declarations of personal interests. In the framework of the cooperation with WHO, Dr. T.E. van Deventer attended part of the meetings of the Commission and the PG HF guidelines as an observer. Most of the time was devoted to the HF guidelines. Other scientific topics discussed were in particular related to the HF Dosimetry Review and the NIR protection principles. The statement on Diagnostic devices using NIR was approved by the Commission after discussion of all received comments, in particular those from WHO.

In parallel, three side-meetings took place: a meeting of the PG HF guidelines, a meeting to establish the PG on HF dosimetry review and a meeting to establish the PG on NIR applications in cosmetics.

Work plan: activities of the Project Groups

Guidelines for limiting exposure to high frequency fields (100 kHz -300 GHz)

Work towards an update of the Guidelines for limiting exposure to high frequency electromagnetic fields (100 kHz – 300 GHz) is ongoing. Publication of the ICNIRP guidelines is connected to the WHO health risk assessment, which will be issued in the Environmental Health Criteria (EHC), usually as a joint collaboration with ICNIRP and ILO. In 2015 the PG handed its work to the Commission at the Annual General Meeting in San Antonio, USA. The Commission is now to continue finalizing the document. The status of the work was presented at the 8th International NIR Workshop, Cape Town, South Africa, 9-11 May 2016.

8th International NIR Workshop, 9-11 May 2016, Cape Town, South Africa

Every four year ICNIRP holds an international workshop in the same country as the Congress of the International Protection Radiation Association (IRPA). This edition, which was the first ever to take place in Africa, was held in closer cooperation with the Congress. The events shared the same Congress venue and a joint fee was proposed to those delegates wishing to attend both the ICNIRP workshop and the IRPA Congress. ICNIRP members also gave key talks at the IRPA Congress. For the first time also platform lectures were given at the ICNIRP Workshop by the two laureates of the Young Scientist Awards for their outstanding poster contribution: Dr Sarah Loughran and Dr Luca Zilberti. More information on the workshop are available at: <http://www.icnirp.org/en/workshops/article/workshop-nir2016.html>.

The PG set up in 2012 to update the ICNIRP statement on “General approach to protection against non-ionizing radiation” has completed its task. An advanced draft was submitted to the Commission, which is in charge since September 2016 of finalizing the work. Many issues require a strong attention to the discussions held within other PGs, especially within the PG HF guidelines. Ahead of a workshop on radiation protection culture to be jointly held by ICNIRP, ICRP, ILO, IRPA and WHO (expected in November 2017), the Commission intends to finalize a document for review by these organizations. This effort aims at defining commonalities in terms of the non-ionizing and ionizing radiation protection systems.

Guidelines on Ultrasound

A PG met in March 2016 to define the work necessary in view of revising the IRPA/INIRC Ultrasound Guidelines (including recommendation for patients). Progress was made in view of identifying the main topics. A new member, Dr Jacques Abramowicz, was elected to further support the group.

Statement on Data Gaps

A PG on "Data gaps identified during guidelines' development" was set up to draft a research agenda for the whole NIR spectrum, based in particular on the gaps identified during guidelines development. The ICNIRP research agenda aims at identifying knowledge gaps relevant for giving protection guidance. Work is divided by frequencies. A first part on low frequency is being currently developed and was presented at the 8th International NIR Workshop in Cape Town. The next parts will be on high frequency fields followed by optical radiation.

NIR exposure for diagnostic purposes

Following the Workshop on NIR applications in Medicine, 2 December 2012, Bonn, Germany, a PG on "Intended human exposure to NIR for diagnostic purposes" was set up to draft a statement to flag possible health challenges in regard to NIR exposure for diagnostic purposes. The PG started its work in 2013 and finalized its draft which was handed to the Commission in August 2016. At the Annual General Meeting the Commission approved the final draft which integrated all comments by the members and by WHO. The Statement is now in press at Health Physics. Publication is scheduled for March 2017.

NIR exposure for cosmetic purposes

Within the Work Plan 2016-2020, a PG on "Intended human exposure to NIR for cosmetic purposes" is established to draft a statement with a limited scope considering cosmetic applications only. At the AGM in Tokyo, Dr Monika Assmus was elected chair of this pG. She is now in charge of drafting the terms of reference and the group's membership, to be established at the beginning of 2017.

HF dosimetry review

Within the Work Plan 2016-2020, a PG on "HF dosimetry review" is established to draft a systematic review for use in the revision of the HF guidelines and the WHO RF EHC monograph. Prof Akimasa Hirata was elected chair of the PG at the AGM in Tokyo. He is now in charge of drafting the terms of reference and the group's membership, to be established at the beginning of 2017.

Publications

The report of the ICNIRP/WHO Joint Workshop "A closer look at the thresholds of thermal damage", 26-28 May 2015, Istanbul, Turkey, was published in Health Physics in September 2016: "A closer look at the thresholds of thermal damage": workshop report from an ICNIRP Task Group". Health Phys 111(3):300-306; 2016. It is available via the ICNIRP website at <http://www.icnirp.org/cms/upload/publications/ICNIRPThermalDamage.pdf>.

Workshops and Meetings organized by ICNIRP or with ICNIRP participation

As a widely recognized international organization in non-ionizing radiation protection, ICNIRP 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:

ICNIRP Main Commission, PG and Board meetings

- Commission meeting Rome, Italy 21-23 March
- PG “Diagnostic” meeting Rome, Italy 22-23 March
- PG “Ultrasound” meeting Rome, Italy 23-24 March
- PG “Philosophy” meeting Rome, Italy 24 March
- PG “Data Gaps” meeting Rome, Italy 25 March
- Commission meeting Cape Town, South Africa 11-13 May
- PG “Diagnostic” meeting Cape Town, South Africa 11-13 May
- Commission meeting The Hague, Netherlands 28-30 September
- PG “HF” meeting The Hague, Netherlands 28-30 September
- Annual General Meeting Tokyo, Japan 3-5 December
- PG “HF” meeting Tokyo, Japan 3-5 December
- PG “Cosmetics” meeting Tokyo, Japan 4 December
- PG “HF Dosimetry” meeting Tokyo, Japan 4-5 December

ICNIRP Workshops and Joint Workshops

- 8th International NIR Workshop Cape Town, South Africa 9-11 May
- ICNIRP/NICT Workshop Tokyo, Japan 2 December

Planned Workshops

- ICNIRP/ICRP/ILO/IRPA/WHO Workshop on Radiation Protection Culture, Nov 2017

Participation of ICNIRP representatives in Workshops, Scientific Meetings and Courses

- IRPA Congress Cape Town, South Africa 9-13 May
- WHO IAC Meeting Geneva, Switzerland 1-3 June
- GSMA EMF Forum Brussels, Belgium 13 June
- WHO BSS Core Group Meeting Athens, Greece 20-22 September
- ACEBR Event Melbourne, Australia 22 November
- GLORE meeting Yokohama, Japan 30 November-1 December

Collaboration with International Organizations

World Health Organization (WHO)

ICNIRP is officially recognized by the World Health Organization as a collaborative NGO for all aspects of non-ionizing radiation protection. ICNIRP's co-operation is mainly related to WHO's International EMF project, and INTERSUN Program.

ICNIRP and WHO have many projects that are interrelated. The current revision of the EHC monograph on HF is followed up closely by ICNIRP, as traditionally ICNIRP co-edits the monograph which is also used as a basis for the revision of the ICNIRP HF Guidelines. The development of the ICNIRP protection philosophy aiming at updating the ICNIRP statement "General approach to protection against non-ionizing radiation" (see <http://www.icnirp.org/cms/upload/publications/ICNIRPphilosophy.pdf>) is similarly a task of major interest for both organizations. At WHO level, an overall system of radiation protection is being developed in view of harmonizing the radiation protection culture shared by non-ionizing and ionizing radiation protection actors worldwide. Further collaboration efforts related to these tasks are planned for 2017 with a joint WHO/IRPA/ICRP/ICNIRP workshop. In relation to the topic of Intended human exposure to NIR for diagnostic purposes tackled by ICNIRP, WHO contributed to the development of the draft by offering very useful comments. Also in 2016 Dr Emilie van Deventer from WHO was an observer at all ICNIRP Commission meetings and the related PG meetings, while ICNIRP was represented by its Chair, Dr Eric van Rongen, at the WHO IAC meeting on 1-3 June, Geneva, Switzerland.

European Commission (EC)

ICNIRP provides, upon request, scientific advice for the evaluation and interpretation of scientific data, and for their dissemination, especially to Directorate General "Health and Consumer Protection", Directorate General "Enterprise and Industry", and Directorate General "Employment, Social Affairs and Equal Opportunities".

International Labour Organization (ILO)

The partnership between ICNIRP and ILO dates back to 1994 when ICNIRP was admitted on the ILO's Special List of Non-Governmental Organizations. Since then several publications have been jointly issued in particular related to EMF and Ultraviolet radiation. Further collaboration is expected within the framework of the ICNIRP activities on Radiation Protection Principles.

International Radiation Protection Association (IRPA)

ICNIRP and IRPA are linked per Charter and the cooperation is within this framework. IRPA provides information on ICNIRP activities regarding its publications, current online consultation, the organization of conferences, and the elections on its website. To mark the IRPA 50th Anniversary, collaboration with IRPA in 2016 was related in particular to the IRPA Congress and the ICNIRP NIR Workshop, which were held for the first time in the same city and venue at the same time. Since some participants in particular from IR regulatory offices

are more and more also in charge of NIR, IRPA and ICNIRP decided to grant a discounted dual registration rate to encourage participation in both events.

Other collaboration

As part of its mission, ICNIRP provides scientific advice on NIR protection to public agencies with an interest in radiation protection in many countries worldwide (see above). These activities are performed mostly through participation in seminar or round tables and the provision of lectures in training courses and scientific conferences, as well as meetings with protection agencies. This year ICNIRP collaborated with the Japanese National Institute for Communications and Technologies (NICT) by organizing a Joint Workshop on 2nd December 2016.

Budget

In 2016 the ICNIRP activities were supported by the German Federal Ministry for the Environment (BMUB), the European Union Directorate General Employment, Social Affairs and Inclusion (Safety at Work), the International Radiation Protection Association (IRPA), and the Japanese National Institute of Communication Technology. ICNIRP's annual financial reports are subject to an audit by the German Tax Authorities every three years. The tables for 2015 and 2016 are indicative.

Financial Report 2015*		
Income		
Subsidies		201.151,93
Workshops and Books		19.486,05
Total Income		220.637,98
Expense		
Staff & Training	- 82.684,65	
Meetings & Workshops	- 58.159,69	
Publications & Communication	- 3.591,04	
Insurance & Administrative Expense	- 4.688,04	
Total Expense	- 149.123,42	
Finance Income		0,00
Finance Costs	- 221,55	
Financial results	- 221,55	
Result of the Year	71.293,01	-

Financial Report 2016*		
Income		
Subsidies		112.661,54
Workshops and Books		38.167,74
Total Income		150.829,28
Expense		
Staff & Training	- 85.197,10	
Meetings & Workshops	- 100.555,53	
Publications & Communication	- 5.587,06	
Insurance & Administrative Expense	- 2.248,16	
Total Expense	- 193.587,85	
Finance Income		0,00
Finance Costs	- 114,41	
Financial results	- 114,41	
Result of the Year	- 42.872,98	-

* The above tables are indicative.