

# **ICNIRP ACTIVITIES**

**REPORT 2015**

## **Introduction**

This report summarizes the activities of the Commission for the period between January 2015 and December 2015.

### **ICNIRP Elections – Membership Commission and Scientific Expert Group**

Every four year the Commission membership including its Chair and Vice Chair is elected. In 2015 the elections to the Commission for the term of office 2016-2020 took place at the Annual General Meeting, 18-20 November 2015, San Antonio, USA. The procedure for sending candidacy was this time extended. It included not only nominations sent by the IRPA Executive Board and IRPA national societies as per the ICNIRP Charter but also nominations sent by National Governmental Radiation Protection Authorities. A call was installed for any such bodies to provide nominations together with biographical and bibliographical information on the candidate and a validated Declaration of Personal Interests. A total of 24 candidates were proposed for elections. Membership of the ICNIRP Commission as of May 2016 is available at [www.icnirp.org](http://www.icnirp.org).

The Scientific Expert Group (SEG) was also complemented by one additional member, Dr Ken Karipidis from ARPANSA. The SEG will be re-elected next year.

### **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 and manages its finances. Following the same four years term as the Commission membership, the Scientific Secretary, Dr Gunde Ziegelberger, was re-appointed for four consecutive years until 2020 at the last Annual General Meeting in San Antonio in November 2015.

### **Declaration of personal interests**

The declarations of personal interests are filled in by all commission and SEG members. 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](http://www.icnirp.org).

### **Commission Meetings**

A Commission meeting took place on 28-30 May in Istanbul, Turkey following the Workshop "A closer look at the thresholds of thermal damage", 26-28 May 2015, Istanbul, Turkey. The main task there was related to the update of the HF guidelines. To make the best use of resources, the project groups on Diagnostic applications and Data Gaps also met there.

The Annual General Meeting (AGM) was held in San Antonio, USA, 18-20 November 2015. The agenda of the AGM in 2015 included managing all administrative and other commission businesses, such as the coordination of all project groups' activities as per the work plan, the budget approval and the screening of the declaration of personal interests. This year also

the quadrennial elections to the Commission (members, vice chair and chair) and the appointment of the Scientific Secretary for the term of office 2016-2020 took place there (see above). Scientific topics, in particular related to high frequency, the use of NIR in medical diagnosis and ultrasound, were discussed within the commission and the additional project group meetings organized there.

### **Executive Board Meeting**

The Executive Board (Chairpersons and Secretariat) met in Munich on 27 October 2015. Scientific and administrative issues were discussed, including the organization of the upcoming elections, workshops and meetings.

### **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 risk assessment, which will be issued in the Environmental Health Criteria (EHC) usually as a joint collaboration with ICNIRP and ILO. 2015 the Project Group handed its work to the Commission on the occasion of the Annual General Meeting in San Antonio, USA. The Commission is now to continue finalising the document. It is decided that the status of the work will be presented at the upcoming NIR Workshop, 9-11 May 2016.

*Workshop "A closer look at the thresholds of thermal damage", 26-28 May 2015, Istanbul, Turkey*

In view of updating the guidance on limiting exposure to high frequency (HF) fields, ICNIRP reviewed the current scientific knowledge on the thresholds of thermal damage. The workshop revisited the ICNIRP 1998 concept, namely that the health relevant increase of body core temperature is approximately 1° C and a whole-body exposure with an average SAR of 4 W/kg result in a core temperature increase of less than 1°C within 30 min. Details of this concept as well as thresholds for partial/local body exposures are subjects to review. More information on the workshop are available at:

<http://www.icnirp.org/en/workshops/article/workshop-thermal-damage.html>

A report is currently in press at Health Physics.

#### *Radiation Protection Philosophy*

A Project Group was set up to update the ICNIRP statement on “General approach to protection against non-ionizing radiation”. Following the workshop on Protection principles in NIR and IR, in June 2014, a transcript has been circulated to the PG members and an outline is being developed to outline the issues that needs to be jointly considered along the progress made by the PG on guidelines settings and the revision of the HF guidelines. PG Philosophy expects to have an advanced report ready by Mid 2016.

### *Guidelines on Ultrasound*

The Project Group started revising the former IRPA/INIRC Ultrasound Guidelines (including recommendation for patients). Work is following by email and a draft is planned by Mid 2016.

### *Statement on Data Gaps*

A Project Group 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 while the next parts will be on Induced Electric Fields and optical radiation.

### *NIR Exposure for Diagnostic Purposes*

Following the Workshop on NIR applications in Medicine, 2 December 2012, Bonn, Germany, a Project Group 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 Project Group started its work and met this year on the occasions of the Commission and Annual General Meeting. An advanced draft is expected by Mid 2016.

### *NIR Exposure for Cosmetic & Non-Medical Purposes*

A Project Group on "Intended human exposure to NIR for cosmetic and other non-medical purposes" is set up to draft a statement.

### *Communication platform*

The new website launched in September 2014 constitutes a well-used information platform. It now hosts also new streams of the lectures from the Workshop "A closer look at the thresholds of thermal damage", 26-28 May 2015. This allows a wide distribution of knowledge at no costs for the user worldwide. In the back end improvements of the newsletter system were made as planned.

## **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**

- PG „Data Gaps“ meeting Istanbul, Turkey 25 May
- Commission meeting Istanbul, Turkey 28-30 May
- PG „RF“ meeting Istanbul, Turkey 29-30 May
- PG “Diagnostic” meeting Istanbul, Turkey 29 May

- PG „Guidelines Setting “ meeting Teleconference 31 July
- Executive Board meeting Munich, Germany 27 October
- Annual General Meeting San Antonio, USA 18-20 November
- PG „RF“ meeting San Antonio, USA 18-20 November
- PG „Diagnostic“ meeting San Antonio, USA 20 November
- PG „Ultrasound“ meeting San Antonio, USA 20 November

### **ICNIRP Workshops and Joint Workshops**

- ICNIRP/WHO Workshop Istanbul, Turkey 26-28 May  
“A closer look at the thresholds of thermal damage”
- Joint Workshop on Extending the UV Index Melbourne, Australia 7 December

### **Planned Workshops**

- International NIR Workshop, 9-10 May 2016, Cape Town, South Africa (in conjunction with IRPA Congress)

### **Participation of ICNIRP Representatives in Workshops, Scientific Meetings and Courses**

- WHO IAC Meeting Geneva, Switzerland 4-6 May
- Delegate visit of Ministries of Singapore Munich, Germany 22 July
- Symposium on Radiofrequency Bangkok, Thailand 17-18 December  
Electric Magnetic Fields and Human Health

### **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.

In 2014 ICNIRP started a project to reflect about the general concepts of radiation protection. One milestone was the joint organization with ICRP, IRPA, ILO and WHO of a workshop on “Radiation Protection Principles” in order to discuss the similarities and differences in ionizing and non-ionizing radiation protection principles. The result of the workshop are flowing into the update of the ICNIRP statement “General approach to protection against non-ionizing radiation” being currently developed. The topic is of major interest for the future development of a system of radiation protection for NIR and the radiation protection culture shared by radiation protection actors worldwide. In relation to radiofrequency fields, ICNIRP and WHO co-organized the International Workshop “A closer look at the thresholds of thermal damage”, hosted by the Turkish Ministry of Health in Istanbul from 26-28 May 2015 (see above).

ICNIRP was represented by its Chair, Rüdiger Matthes, at the WHO IAC meeting on 4-6 May, Geneva, Switzerland.

In relation to UV protection, ICNIRP, WHO, ARPANSA and the Cancer Council Victoria jointly organized a Workshop on extending the UV index held in Melbourne on 7 December.

#### *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. In 2015 collaboration took place within the framework of the activities of the Project Group on Radiation Protection Principles (see Workshop), the WHO Environmental Health Criteria and the Basic Safety Standards.

#### *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. Collaboration with IRPA in 2015 was related in particular to the preparation of the IRPA Congress and the ICNIRP NIR Workshop which will be held for the first time in the same city and venue at the same time to mark IRPA 50<sup>th</sup> Anniversary. Since some participants in particular from 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.

Also as per its Charter IRPA contributed nominations to the Commission Election which were held in San Antonio (see item “ICNIRP elections” above).

#### **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 entered in a new collaboration with the Turkish Ministry of Health in organizing the Joint Workshop in Istanbul.

#### **Budget**

In 2015 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),

the Finish Radiation Safety Authority (STUK), the Japanese National Institute of Communication Technology, and the Turkish Ministry of Health. ICNIRP's annual financial reports are subject to an audit by the German Tax Authorities every three years. The tables for 2014 and 2015 are indicative.

<b>Financial Report 2014*</b>		
<b>Income</b>		
Subsidies		118.090,00
Workshops and Books		11.970,00
<b>Total Income</b>		<b>130.060,00</b>
<b>Expense</b>		
Staff	- 68.349,00	
Meetings & Workshops	- 43.172,00	
Publications & Communication	- 19.568,00	
Insurance & Administrative Expense	- 4.150,00	
<b>Total Expense</b>	<b>- 135.239,00</b>	
Finance Income		0,00
Finance Costs	- 106,00	
<b>Financial results</b>	<b>- 106,00</b>	
<b>Result of the Year</b>	<b>- 5.085,19</b>	<b>-</b>

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

\* The above tables are indicative.