

# **ICNIRP ACTIVITIES**

**REPORT 2017**

## **Introduction**

This report summarizes the activities of the Commission for the period between January 2017 and December 2017.

## **Membership - Scientific Expert Group and Project Groups**

The Scientific Expert Group (SEG) is composed according to the needs of the Project Groups (PGs) in accordance with the Work Plan 2016-2020. Three new PGs were formed: PG LED, PG Laser Pointers and PG Blue Light. Also new SEG members joined PG HF Dosimetry and PG Cosmetics. The SEG and PG membership is reflected at <http://www.icnirp.org/en/about-icnirp/scientific-expert-group/index.html> and <http://www.icnirp.org/en/about-icnirp/project-groups/index.html>.

## **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.

## **Declaration of personal interests**

The declarations of personal interests are filled 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](http://www.icnirp.org).

## **Commission meetings**

A Commission meeting took place on 15-16 May in Oslo, Norway. The main task there was related to the update of the HF guidelines. To make the best use of resources, the PGs on Cosmetic applications, HF Dosimetry also met there. In the framework of the cooperation with WHO, Dr Emilie van Deventer, the Team Leader of the Radiation Program at WHO, attended the Commission and PG meetings as an observer.

The Annual General Meeting took place on 7-8 November in Munich, Germany. The agenda of the AGM in 2017 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, the approval of additional SEG members and the screening of the declarations of personal interests, etc. In parallel, the PG on HF met there ahead on 6-7 November and the PG on Cosmetic applications and on HF Dosimetry Review met on 8 November. In the framework of the cooperation with WHO, Dr Emilie van Deventer was invited to attend the meeting as an observer. However, she could only join the last day of the AGM via web conference.

## **Work plan: activities of the Project Groups**

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

At the End of 2017 the update of the Guidelines for limiting exposure to high frequency electromagnetic fields (100 kHz – 300 GHz) had progressed considerably. It is expected that an online consultation of the final draft will take place by Mid 2018.

#### *Guidelines on Ultrasound*

The PG drafted an outline of the task of revising the IRPA/INIRC Ultrasound Guidelines (including recommendation for patients). Work is ongoing.

#### *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. The draft on low frequency is close to completion. It is expected for publication in the course of 2018.

#### *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 was published in Health Physics in March 2017. Statement on Diagnostic Devices Using Non-Ionizing Radiation: Existing Regulations and Potential Health Risks. Health Phys 112(3):305–321; 2017. It is available for download on the ICNIRP [website](#).

#### *NIR exposure for cosmetic purposes*

Within the Work Plan 2016-2020, a PG on "Intended human exposure to NIR for cosmetic purposes" was established to draft a statement. The PG membership was extended in 2017 to include Dr Jacques Abramowicz. The PG met on two occasions in 2017. Work is ongoing.

#### *HF dosimetry review*

Within the Work Plan 2016-2020, a PG on "HF dosimetry review" was established to draft a systematic review for use in the revision of the HF guidelines and the WHO RF EHC monograph. Dr Akimasa Hirata was elected chair of the PG at the AGM in Tokyo in December 2016. The group's membership was fully established in 2017. The group convened at meetings and online.

#### *Health implications of LEDs*

In November 2017, a PG was formed under the leadership of Dr Sharon Miller to draft a revision of the ICNIRP Statement on Light-Emitting Diodes and Laser Diodes: Implications for Hazard Assessment (Health Phys 78(6):744-752; 2000). The new statement will be limited to LEDs.

#### *Revision of the Statement on Laser Pointers*

In November 2017, a PG was formed under the leadership of Dr Tsutomu Okuno to revise the ICNIRP Statement on Laser Pointers (Health Phys 77(2):218-220:1990).

### *Blue light and circadian rhythm*

In November 2017, a PG was formed under the leadership of Dr Sharon Miller to draft a statement on the effects of blue light on circadian rhythm.

### **Publications**

ICNIRP Statement on Diagnostic Devices Using Non-Ionizing Radiation: Existing Regulations and Potential Health Risks. *Health Phys* 112(3):305–321; 2017. Available for [http://www.icnirp.org/cms/upload/publications/ICNIRPDiagnostic\\_2017.pdf](http://www.icnirp.org/cms/upload/publications/ICNIRPDiagnostic_2017.pdf) *Health Phys.* 114(1):84–90; 2018. Following the 3rd International UV and Skin Cancer Prevention Conference, Melbourne, Australia, 2015, which was co-sponsored by ICNIRP, and a workshop report was published in *Health Physics* and is available [here](#).

ICRP/ICNIRP Joint Note on the Meeting on the International Systems of Radiation Protection: Bringing together Protection against Ionizing and Non-Ionizing Radiation. Published on ICNIRP and ICRP Websites on 14 November 2017. Available [here](#).

### **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 HF meeting           | Online          | 13 March     |
| • PG Cosmetics meeting    | Oslo, Norway    | 14 May       |
| • PG HF Dosimetry meeting | Oslo, Norway    | 14 May       |
| • Commission meeting      | Oslo, Norway    | 15-16 May    |
| • PG HF meeting           | Oslo, Norway    | 15-16 May    |
| • PG HF meeting           | Online          | 29 August    |
| • PG HF Dosimetry meeting | Online          | 11 September |
| • PG Ultrasound           | Online          | 30 October   |
| • PG HF meeting           | Munich, Germany | 6-7 November |
| • Commission meeting      | Munich, Germany | 7-8 November |
| • PG Cosmetics meeting    | Munich, Germany | 8 November   |
| • PG HF Dosimetry meeting | Munich, Germany | 8 November   |

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

- |  |                 |               |
|--|-----------------|---------------|
| • WHO Joint Workshop on Radiation Protection Culture | Munich, Germany | 8-10 Nov 2017 |
|--|-----------------|---------------|

## Participation of ICNIRP representatives in Workshops, Scientific Meetings and Courses

- WHO IAC Meeting Geneva, Switzerland 28-29 June
- GSMA EMF Forum Brussels, Belgium 5 October
- ITU meeting Warsaw, Poland 5 December
- GLORE meeting Washington, USA 5 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 interrelated projects. 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 guidelines. Similarly a task of major interest for both organizations was in the focus this year: the development of a radiation protection culture shared by non-ionizing and ionizing radiation protection actors. This work will inform at the ICNIRP level the revision of the ICNIRP statement "[General approach to protection against non-ionizing radiation](#)". Recently, a WHO workshop was hosted by BfS in Munich, Germany from 8-10 November to tackle this issue together with ICNIRP, ICRP, ILO, and IRPA. Also Dr Emilie van Deventer from WHO was an observer at all ICNIRP Commission meetings and related PG meetings, while ICNIRP was represented by Dr Adèle Green at the WHO IAC meeting on 28-30 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 the Directorate General "Health and Consumer Protection", the Directorate General "Enterprise and Industry", and the 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. This year collaboration was related to the discussions led at the international level on a system of radiation protection relevant to ionizing and non-ionizing radiation protection. A joint meeting hosted by BfS in Munich, Germany, from 8-10 November 2017 was held with delegates from ILO, ICRP, IRPA, WHO and ICNIRP.

### *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. In 2017 work started in 2015 on discussing a common radiation protection system relevant to both ionizing and non-ionizing

radiation continued. A joint meeting hosted by BfS in Munich, Germany, from 8-10 November 2017 was held in this view with delegates from IRPA, ILO, ICRP, WHO and ICNIRP.

### **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 seminars 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 International Commission on Radiation Protection (ICRP) on the radiation protection system and co-sponsored a Joint meeting held in Munich, Germany, from 8-10 November 2017 with ICRP, IRPA, ILO, and WHO. The Joint Note published on 14 November is available on the ICRP and ICNIRP websites (see the publication on the [ICNIRP website](#)).

Also ICNIRP reported, at its own costs, on its current activities at meetings organized by ITU, GSMA and GLORE.

### **Budget**

In 2017 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), and the International Radiation Protection Association (IRPA). The Norwegian Radiation Protection Agency (NRPA) provided support by hosting the ICNIRP Commission and PG meetings in May. ICNIRP's annual financial reports are subject to an audit by the German Tax Authorities every three years. The tables for 2016 and 2017 are indicative only.

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

<b>Financial Report 2017*</b>		
<b>Income</b>		
Subsidies		139.969,00
Workshops and Books		586,00
<b>Total Income</b>		<b>140.555,00</b>
<b>Expense</b>		
Staff & Training	- 84.461,00	
Meetings & Workshops	- 44.832,00	
Publications & Communication	- 8.013,00	
Insurance & Administrative Expense	- 3.218,00	
<b>Total Expense</b>	<b>- 140.524,00</b>	
Finance Income		0,00
Finance Costs	- 154,00	
<b>Financial results</b>	<b>- 154,00</b>	
<b>Result of the Year</b>	<b>123,00</b>	

\* The above tables are indicative.