

# ICNIRP ACTIVITIES

## REPORT 2019

## **Introduction**

This report summarizes the activities of the Commission for the period between January 2019 and December 2019.

## **Membership – Commission, Scientific Expert Group and Project Groups**

Every four years the election of the Commission Members (including the Chair and Vice Chair) takes place following the nomination call extended to the current ICNIRP members, the IRPA Executive Board and its national societies, and to National Governmental Radiation Protection Authorities. Candidature must be accompanied with a curriculum, bibliography list and a validated Declaration of Personal Interests.

The ICNIRP elections for the Commission 2020-2024 took place at the ICNIRP Annual General Meeting (AGM), 19-20 November 2019, Munich, Germany.

From May 2020 until May 2024, the ICNIRP Main Commission will be comprised of:

Rodney Croft (Chair), Australia  
Eric van Rongen (Vice Chair), Netherlands

Tania Cestari, Brazil  
Nigel Cridland, United Kingdom  
Guglielmo d'Inzeo, Italy  
Akimasa Hirata, Japan  
Anke Huss, Netherlands  
Ken Karipidis, Australia  
Carmela Marino, Italy  
Sharon Miller, USA  
Gunnhild Oftedal, Norway  
Tsutomu Okuno, Japan  
Martin Rösli, Switzerland  
Soichi Watanabe, Japan

## **ICNIRP Scientific Secretariat**

The Scientific Secretariat is based in Oberschleissheim, Germany. It keeps the records of the Commission, overviews the work program, 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.

At the last AGM, the ICNIRP Scientific Secretary, Dr Gunde Ziegelberger, was re-elected for the term of office 2020-2024.

## **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**

The Commission and Project Group meetings took place on 3 and 4-5 April in the premise of the Food and Drug Administration, Silver Spring, USA. The following Project Groups met onsite and also via web conference: PG Short Wave, PG Data Gaps, PG RF Dosimetry and PG Laser pointers. The Commission Meeting was mostly dedicated to the RF Guidelines.

The Annual General Meeting took place on 19-20 November in Munich, Germany. The following PGs met on 18 November: PG Short Wave, Laser pointers and Data Gaps. At the AGM the agenda included besides the current work plan activities (see below) also all administrative issues as required by the statutes, and in particular the elections of the Commission members, Board and Scientific Secretariat (see above).

### **Work plan activities**

#### *Statement on Protection Principles*

In 2019, the ICNIRP statement on Protection Principles was finalized and submitted to Health Physics. The Statement is in press.

#### *Guidelines for limiting exposure to electromagnetic fields (100 kHz -300 GHz)*

The draft Guidelines for limiting exposure to electromagnetic fields (100 kHz – 300 GHz) were available online for public consultation from 11 July until 9 October 2018. More than 90 participants provided altogether more than 1200 individual comments. The Commission reviewed the comments and improved further the draft guidelines at its meetings in 2019. The Guidelines were submitted to Health Physics and ready for publication in 2020.

#### *Statements on Data Gaps*

A PG on "Data gaps identified during guidelines' development" was set up under the leadership of Dr Carmela Marino 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 statement related to the low frequency range was finalized by the Commission in 2019. It was submitted for publication in Health Physics and is now in press. The PG started to develop a similar document on RF Data Gaps intended thereafter.

#### *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. This PG under the leadership of Dr Ken Karipidis has finalized its statement, which is now in press at Health Physics.

#### *RF Dosimetry Review*

The PG "RF dosimetry review" under the leadership of Dr Akimasa Hirata is in charge of RF dosimetry aspects as relevant to the RF guidelines and the WHO RF EHC monograph. The Statement is well advanced and is expected to be final in the course of 2020.

#### *Health Implications of LEDs*

The PG formed under the leadership of Dr Sharon Miller completed its 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 limited to LEDs was finalized in 2019 and is now in press at Health Physics.

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

The revision of ICNIRP Statement on Laser Pointers (Health Phys 77(2):218-220:1990) is well advanced. A final document is expected in the course of 2020.

#### *Short Wavelength light and Circadian Rhythm*

Under the leadership of Dr Sharon Miller a statement on the effects of short wave on circadian rhythm is being prepared. It is expected to be finalized in 2020.

### **Publications**

ICNIRP Note: Critical Evaluation of Two radiofrequency electromagnetic fields Animal Carcinogenicity Studies Published in 2018. Pre-print refs: doi 10.1097/HP.0000000000001137 - Health Phys 118(00):000-000; 2020. The statement is available [here](#).

ICNIRP Guideline for Limiting Exposure to Electromagnetic Fields (100kHz – 300Ghz). Ahead of print publication (Health Phys 118(00):000-000, 2020).

### **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**

- |  |                     |             |
|--|---------------------|-------------|
| • ICNIRP PG „Short Wave “ Meeting      | Silver Spring, USA  | 3 May       |
| • ICNIRP PG „RF Dosimetry“ Meeting     | Silver Spring, USA  | 3 May       |
| • ICNIRP PG „HF Data Gaps“ Meeting     | Silver Spring, USA  | 3 May       |
| • ICNIRP PG „Laser Guidelines“ Meeting | Silver Spring, USA  | 4 May       |
| • ICNIRP Commission Meeting            | Silver Spring, USA  | 4-5 May     |
| • ICNIRP PG NIR Workshop               | Montpellier, France | 25 June     |
| • ICNIRP PG „Short Wave “ Meeting      | Munich, Germany     | 18 November |
| • ICNIRP PG „Laser pointers“ Meeting   | Munich, Germany     | 18 November |
| • ICNIRP PG „RF Data Gaps“ Meeting     | Munich, Germany     | 18 November |

- ICNIRP Annual General Meeting                      Munich, Germany                      19-20 November
- ICNIRP PG Web Meetings                              Online                                      2019

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

- Meeting EMF emissions                              Bahrain                                      5-6 February
- Time Forum Conference on 5G                      Warsaw, Poland                      4-5 March
- CRASA Workshop on EMF Issues                      Victoria Falls, Zimbabwe                      9-11 September
- Meeting of the German SSK                              Dresden, Germany                      25 September
- BioEM Conference                                      Montpellier, France                      25 June
- International Conference on NIR                      Kuala Lumpur, Malaysia                      1-3 October
- EMF Forum    Brussels, Belgium                      15 October
- Knowledge event - 5G meeting                      Delft, The Netherlands                      16 October
- International seminar "5G and Health"                      Ljubljana, Slovenia                      17 October
- Expert panel on NIR and health risks related to non-medical applications                      Ljubljana, Slovenia                      18 October
- GLORE meeting                                      Lima, Peru                                      4-6 November
- Fakta om mobilstrålning:  
Hør eksperternes vurdering                      Copenhagen, Denmark                      30 September

### **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.

WHO, through its DTO Radiation Program, Emilie van Deventer, is acting as an Observer in ICNIRP Project Group meetings related to radiofrequency review, radiation protection principles, cosmetic devices, short wave and circadian rhythm, LEDs and laser pointers. WHO contributed by providing input to seminars and to the development of the statements on cosmetic devices and radiation protection principles, which were finalized and submitted for publication in 2019. Within the cooperation, ICNIRP provides technical input supporting the development of guidance on protection from NIR exposure by drafting a scientific review of dosimetric studies related to radiofrequency fields. ICNIRP also contributed to WHO's effort on capacity building in WHO member states by participating in a workshop organized in Bahrain related to electromagnetic emissions and health protection. Finally, WHO together with ILO and IRPA, were invited to participate in the special session of the International NIR Workshop planned in May 2020 in Seoul, Korea to present their particular roles in NIR protection.

#### *European Commission (EC)*

ICNIRP advances radiation protection science throughout Europe and the World in particular through the support provided by the European Union Programme for Employment and Social Innovation ("EaSI") 2014-2020. ICNIRP provides, upon request, scientific advice for the evaluation and interpretation of scientific data, and for their dissemination, especially to the Directorate General "Employment, Social Affairs and Inclusion".

#### *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. The past years 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, which were finalized in 2019. The ICNIRP Statement on Protection Principles was submitted to Health Physics in 2019 and expected for publication in 2020.

#### *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 2019, the ICNIRP statement on protection principles, which was reviewed by IRPA delegates, was finalized and submitted for publication to Health Physics. The Statement is expected to be issued in 2020.

#### **Other collaboration**

As part of its mission, ICNIRP provides scientific advice on NIR 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.

#### **Budget and Governance**

ICNIRP funding stem from public and governmental agencies only. In 2019 the ICNIRP activities were supported by the German Federal Ministry for the Environment (BMUB), the European Union Programme for Employment and Social Innovation ("EaSI") 2014-2020, and the International Radiation Protection Association (IRPA). In addition, the Ministry of Health of New Zealand (NZ MoH) and the Australian Radiation Protection and Nuclear Safety Authority (ARPANSA) also provided a general subsidy. The flight and staying expenses of a few ICNIRP and SEG members where covered by their national radiation protection related bodies.

ICNIRP's annual financial reports are screened for tax purposes every three years. The tables for 2018 and 2019 are indicative.

<b>Financial Report 2018*</b>		
<b>Income</b>		
Subsidies		132.150,66
Workshops and Books		1.103,54
<b>Total Income</b>		<b>133.254,20</b>
<b>Expense</b>		
Staff & Training	- 86.283,39	
Meetings & Workshops	- 57.035,34	
Publications & Communication	- 5.577,23	
Insurance & Administrative Expense	- 2.063,71	
<b>Total Expense</b>	<b>- 150.959,67</b>	
Finance Income		0,00
Finance Costs	- 344,21	
<b>Financial results</b>	<b>- 344,21</b>	
<b>Result of the Year</b>	<b>- 18.049,38</b>	

<b>Financial Report 2019*</b>		
<b>Income</b>		
Subsidies		99.836,43
Workshops and Books		840,04
<b>Total Income</b>		<b>100.676,47</b>
<b>Expense</b>		
Staff & Training	- 90.342,63	
Meetings & Workshops	- 47.126,98	
Publications & Communication	- 3.056,31	
Insurance & Administrative Expense	- 1.376,53	
<b>Total Expense</b>	<b>- 141.902,45</b>	
Finance Income		0,00
Finance Costs	- 264,79	
<b>Financial results</b>	<b>- 264,79</b>	
<b>Result of the Year</b>	<b>- 41.490,77</b>	

\* The above tables are indicative. Subsidy payments and expenses related to an activity period may be reported in the next period.