

ICNIRP ACTIVITIES

REPORT 2018

Introduction

This report summarizes the activities of the Commission for the period between January 2018 and December 2018.

Membership – Commission, Scientific Expert Group and Project Groups

After two years serving ICNIRP very successfully as a Commission member and Chair of the PG on NIR for Cosmetic Purposes, Dr Monika Asmuss left the Commission in January 2018. Dr Ken Karipidis was elected as a new Chair of PG Cosmetics.

The Scientific Expert Group (SEG) is composed according to the needs of the Project Groups (PGs) in accordance with the Work Plan 2016-2020. In 2018, PG Laser Guidelines was constituted to address possible revisions in the latest ICNIRP Laser Guidelines. PG Blue Light was renamed PG Short Wave and circadian rhythm to more appropriately reflect the work scope. Also new SEG members joined PG HF Dosimetry and PG Short Wave. The SEG and PG membership is reflected at <http://www.icnirp.org/en/about-icnirp/scientific-expert-group/index.html> and <http://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, 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.

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.

Commission meetings

Commission and Project Group meetings took place on 23-25 May in Basel, Switzerland. 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, LED, Short Wave, Laser Pointers, HF Data Gaps and 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 16 November in Paris, France. Other PG were organized on 14 and 15 November. The agenda of the AGM 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. The scientific agenda of the AGM focused mainly on the work regarding the protection principles and the draft HF guidelines, and in particular the public consultation results. In the framework of the cooperation with WHO, Dr Emilie van Deventer attended the meeting as an observer.

The International Session of the meeting was attended also by Olivier Merckel, senior officer at the French Agency for Food, Environmental and Occupational Health & Safety (ANSES). He gave a presentation on the ANSES and their current work topics, as follows: His unit is in charge of risk assessment related to NIR amongst other agents (nanomaterials, visible light and noise), and in particular of EMF topics related to the exposure of humans, plants and animals. A main task in the EMF area is the publication of calls and management of large international and national research projects. Currently very important work topics are NIR exposure due to smart meters, EMF compatibility, RF and children health.

ANSES' main mission is to inform the government (5 ministries - Health, Labor, Environment, Consumer and Food) about risks through reports (200 pages), syntheses, and opinion papers (15 -20 pages). From time to time ANSES is also requested by external NGOs to formulate an opinion paper (i.e. on smart meters). An expert group on physical agents is reviewing the ANSES reports. ANSES provides also technical support to authorities in the form of comments on new publications such as the ICNIRP guidelines and NTP reports for ex.

In regards to methodology and dialogue with society, Oliver Merckel explains how ANSES has streamlined its process by adopting a methodology inspired from IARC to assess the level of evidence for each health effects being evaluated and in the completion of its reviews. This approach is especially helpful to discuss with NGOs as it adds a great degree of transparency in the system. Additionally, reports are submitted now since three years to public consultation. Although this has delayed the publication process by roughly one year, the agency is satisfied as their reports are now better received. Finally, dialogue committees with society are held on different topics such as RF, nanomaterials, and phytoproducts. In this frame, ICNIRP was once invited through its chair, Eric van Rongen, to present and explain its activities.

ANSES recently drafted a LED update (expected in December 2018) and a document on UV sunbeds for health prevention purposes. Also in the pipeline are an update of the opinion on LF (last one was in 2009), and comments related to the measurements of SAR levels in view of answering specific questions raised by the government on the safety of mobile phones currently on the market. The carcinogenicity issue following the NTP study will also be closely scrutinized, even though, in general, radiation exposure related to the use of mobile communication devices is not considered as an acute problem. He confirms that ANSES reports are drafted with a view of having the general public being able to read and understand them. ICNIRP informed Olivier Merckel about the schedule of the RF guidelines and the consultation phase (see here topic on RF guidelines).

Work plan activities

Statement on Protection Principles

In 2018, the ICNIRP statement on protection principles was further developed following receipt of comments by the WHO NIR BSS Group (which includes members from WHO, IRPA, ILO, ICRP). Those were discussed at the Annual General Meeting and the draft is now being revised by the ICNIRP Chair.

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

The draft Guidelines for limiting exposure to radiofrequency 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 review of the

comments and the improvement of the draft guidelines are progressing. A final Commission review of the draft guidelines is intended at the next Commission Meeting in 2019. The guidelines are expected to be in press in the second half of 2019.

Guidelines on Ultrasound

The PG, under the leadership of Dr Zenon Sienkiewicz, has redefined the scope of the task and aims at working on a Statement instead of Guidelines. In particular this is due to the lack of a recent systematic review of the scientific evidence on ultrasound.

Statement 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 draft on low frequency was commented by the Commission at the AGM 2018. It is now being finalized and is expected for publication in the course of 2019. The PG started to work on a similar document on RF Data Gaps which could be ready shortly after the publication of the new RF guidelines.

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 is now under the leadership of Dr Ken Karipidis. The PG membership was extended in 2017 to include also Dr Jacques Abramowicz. The PG met on two occasions in 2017. Work is ongoing.

HF dosimetry review

PG on "HF dosimetry review" under the leadership of Dr Akimasa Hirata is in charge of HF dosimetry aspects as relevant to the HF guidelines and the WHO RF EHC monograph. Dr Kensuke Sasaki and Dr Jose Gomez-Tames joined the PG in November 2018.

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. The draft is well advanced and expected to be finalized in 2019.

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).

Short Wave 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 short wave on circadian rhythm. In 2018 the PG was renamed to better reflect the

scope of the task. Dr Christian Cajochen, Dr John Hanifin and Dr Sarah Loughran joined the group in 2018.

Publications

The ICNIRP Note on recent animal carcinogenesis studies was published on the ICNIRP Website on 4 September 2018. 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

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| • ICNIRP PG „HF Dosimetry“ Meeting | Basel, Switzerland | 23 May |
| • ICNIRP PG „LED“ Meeting | Basel, Switzerland | 23 May |
| • ICNIRP PG „Short Wave“ Meeting | Basel, Switzerland | 23 May |
| • ICNIRP PG „HF Data Gaps“ Meeting | Basel, Switzerland | 23 May |
| • ICNIRP PG „Laser Pointers“ Meeting | Basel, Switzerland | 24 May |
| • ICNIRP PG „RF“ Meeting | Basel, Switzerland | 24 May |
| • ICNIRP Commission Meeting | Basel, Switzerland | 25 May |
| • ICNIRP NIR Workshop Korea Meeting | Paris, France | 13 November |
| • ICNIRP PG „Short Wave“ Meeting | Paris, France | 14 November |
| • ICNIRP PG „LED“ Meeting | Paris, France | 14 November |
| • ICNIRP PG „HF Data Gaps“ Meeting | Paris, France | 14 November |
| • ICNIRP PG „Cosmetics“ Meeting | Paris, France | 15 November |
| • ICNIRP PG „Laser Pointers“ Meeting | Paris, France | 15 November |
| • ICNIRP PG „RF“ Meeting | Paris, France | 15 November |
| • ICNIRP Annual General Meeting | Paris, France | 16 November |
| • ICNIRP PG Web Meetings | Online | 2018 |

Participation of ICNIRP representatives in Workshops, Scientific Meetings and Courses

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| • CRPA Annual Conference | Québec, Canada | 30 Apr - 3 May |
| • Utilities Threshold Initiative Consortium | Montreal, Canada | 15-16 May |
| • BioEM Conference | Portoroz, Slovenia | 24-29 June |
| • WHO IAC meeting | Portoroz, Slovenia | 20-22 June |
| • IEEE ICES meeting | Online | 15-17 August |

- Workshop on RF Measurements, Research Studies and Standards Development Lima, Peru and online 1-2 October
- ITU meeting Geneva, Switzerland 10 October
- RF Meeting with CENELEC Brussels, Belgium 11 October
- GSMA EMF Forum Brussels, Belgium 16 October
- GLORE Workshop Paris, France 12-13 November
- RF Telefonica Workshop Madrid, Spain 28 November
- EMF and Future Telecommunications Warsaw, Poland 6 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 collaboration projects. The current revision of the EHC monograph on HF is followed up closely by ICNIRP, as this informs the revision of the ICNIRP guidelines. In particular, the ICNIRP statement on protection principles was commented by the WHO NIR BSS Group. In regard to the ongoing revision of the ICNIRP RF Guidelines, Dr Emilie van Deventer (WHO) provided comments to the drafts during the Commission and PG meetings she attended as an Observer. ICNIRP was represented by the Chairman Dr Eric van Rongen and the Scientific Secretary Dr Gunde Ziegelberger at the WHO IAC meeting on 20-22 June in Portoroz, Slovenia.

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. 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. The ILO delegate for NIR, Dr Shengli Niu, provided its comments on the ICNIRP draft Statement on Protection Principles through the WHO BSS Group.

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 2018, the ICNIRP statement on protection principles was further developed following the receipt of the comments by the WHO NIR BSS Group (which includes members of IRPA). In 2018 IRPA confirmed its financial support to ICNIRP, as per the ICNIRP Charter.

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.

Also ICNIRP reported, at its own costs, on its current activities at meetings and workshops organized by external organizations, such as for example BioEM and CENELEC.

Budget and Governance

ICNIRP funding stem from public and governmental agencies only. In 2018 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) reinstalled its general subsidy. Further requests made in 2018 are expected to bring additional funds in 2019. ICNIRP's annual financial reports are submitted to the German Tax Authorities every three years. The tables for 2017 and 2018 are indicative only.

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

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

* The above tables are indicative.