THE INTERNATIONAL EMF PROJECT

Progress Report

June 2011-2012

World Health Organization

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1. OVERVIEW

In May 1996, in response to growing public concern in several Member States over possible health effects from exposure to an ever-increasing number and diversity of EMF sources, the World Health Organization (WHO) launched an international project to assess the health and environmental effects of exposure to electric and magnetic fields, which became known as **the International EMF Project**.

The International EMF Project brings together current knowledge and available resources of key international and national agencies and scientific institutions in order to develop scientifically-sound health risk assessments of exposure to static and time varying electric and magnetic fields in the frequency range 0-300 GHz**.**

This Project has been devised to provide authoritative and independent peer-review of the scientific literature. Since its inception, the objectives of the EMF Project have been to:

- review the scientific literature on biological effects of EMF exposure;
- identify gaps in knowledge requiring research that will improve health risk assessments;
- encourage a focused agenda of high quality EMF research;
- formally assess health risks of EMF exposure,
- encourage internationally acceptable harmonized standards;
- provide information on risk perception, risk communication, risk management; and,
- advise national programs and non-governmental institutions on policies for dealing with the EMF issues.

1. 1. MEMBERSHIP

The EMF Project is open to any WHO Member State government, i.e. department of health, or representatives of national institutions concerned with radiation protection. Since the commencement of the EMF Project, over 50 national authorities have been involved. In the past year, several countries have been in contact to join the Project, including Angola, Bangladesh, Bostwana, Brunei Darussalam, Iceland, Israel, Mauritius, Mozambique, Namibia and Zambia. Thailand has been contacted to replace Dr Nisakorn Manatrakul who retired two years ago. Also, new representatives have been delegated by their governments, including Canada, Hungary, Poland, United States of America and Republic of Korea.

While further outreach is planned, the challenge remains to locate the appropriate governmental contact at country level, with interest and responsibility regarding EMF protection. In some Member States, other Ministries may show interest, such as the Ministry of Industry or of Energy (dealing with electricity applications), the Ministries of Telecommunications (e.g. mobile phones), or Transport (radar equipment for air navigation), or Environment.

Oversight of the Project is provided by the International Advisory Committee (IAC). The IAC is composed of members of international organizations, WHO collaborating centres, and national authorities from all regions of the world. The IAC meets once a

year to discuss national activities, current research programmes, legislation and public concern, and advises the International EMF Project on its activities.

The objectives of the IAC are

- to provide oversight on the conduct of the Project: review outputs of the Project, including scientific information related to public and occupational health, and management of the EMF issue
- to provide a forum for peer discussion on dealing with the health concerns raised by exposure to EMF fields.

Over the last 17 years, activities have closely followed the original work plan, and most activities have or are being implemented. The Department of Public Health and Environment is committed to ensuring that the work of the International EMF project continues subject to funding.

1. 2. COLLABORATION

The EMF Project has formal collaboration with different entities, i.e. non-governmental organizations (NGOs), international organizations and WHO collaborating centres (see below for details). It also cooperates in an *ad-hoc* manner with other institutions (e.g. co-sponsoring of meetings) and with individual experts.

International organizations

A number of international agencies are involved in the Project (http://www.who.int/peh-emf/project/intorg/en/index.html). Over the reporting period, there has been active collaboration with several of them.

The **Agency for Research on Cancer (IARC)**, a specialized institution of WHO, based in Lyon, France, has strong links with the International EMF Project. Its mission is to coordinate and conduct research on the causes of human cancer, the mechanisms of carcinogenesis, and to develop scientific strategies for cancer control. The Agency is involved in both epidemiological and laboratory research and disseminates scientific information through publications, meetings, courses, and fellowships.

Two Sections within IARC have been active in EMF-related issues over the past year, i.e. the Section of Environment and Radiation and the Section on Monographs. Over the last year, the ENV Section has finalized the INTERPHONE study: all mobile phone related papers are published and contracts closed. Their research activities also include collaboration in a Danish cohort study of mobile phone subscribers, in the multinational case-control study Cefalo on intracranial tumours in 7-19 year olds, time trends in incidence rates and consistency check with analytical studies, and a feasibility study for the French component of the prospective cohort study Cosmos.

Under the auspices of the Section on Monographs, 30 scientists from 14 countries met in May 2011, at the International Agency for Research on Cancer (IARC) in Lyon, France, to assess the carcinogenicity of radiofrequency electromagnetic fields (RF-EMF). These assessments will be published as Volume 102 of the IARC Monographs, on Non-Ionizing Radiation, Part 2: Radiofrequency electromagnetic fields and radar (including mobile telephones). Conclusions of the meeting were reported in June 2011 in the Lancet Oncology as follows: “In view of the limited evidence in humans

and in experimental animals, the Working Group classified RF-EMF as “possibly carcinogenic to humans” (Group 2B). This evaluation was supported by a large majority of Working Group members” (http://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(11)70147-4/fulltext#article_upsell).

During a courtesy visit in October 2012, Dr van Deventer held discussions with Dr Kurt Straif and Dr Robert Baan (IARC Monograph Section) to coordinate efforts for the WHO Environmental Health Criteria on Radiofrequency Fields and the IARC monograph vol 102.

The **International Labour Office (ILO)**, a sister UN agency in Geneva, works closely with WHO in the area of occupational exposure to radiation, both ionizing and non-ionizing. Dr Shengli Niu from the Programme on Safety and Health at Work and the Environment (SafeWork) reiterated ITU’s interest in being a co-publisher of the new Environmetal Health Criteria on radiofrequency (RF) fields and participated in the kick-off meeting of the Core Group of experts who will develop the RF fields health risk assessment in January 2012.

The **International Telecommunications Union** (**ITU**) is the leading United Nations agency for information and communication technology issues, and the global focal point for governments and the private sector in developing networks and services. This year for the first time, all three of its sectors have been involved with the WHO EMF Project through the Telecommunication Standardization Sector (ITU-T) Study Group 5 - Protection from Electromagnetic Environment Effects, the Radiocommunication sector (ITU-R), and the Telecommunication Development Sector (ITU-D).

WHO was invited to attend an ITU-T Workshop on "Delivering Good Quality Telecommunication Service in a Safe Environment in Africa", in Nairobi, Kenya in July 2010. Also, following the World Telecommunication Development Conference (Hyderabad, 2010), where a resolution was developed on "Measurement concerns related to human exposure to electromagnetic fields", ITU-D invited WHO to contribute to Question 23/1 [Strategies and policies concerning human exposure to electromagnetic Fields]. In April 2012, Dr van Deventer participated in a meeting of ITU-D SG1 and presented the activities of the WHO EMF Project.

Active collaboration is ongoing with the **International Commission on Non-Ionizing Radiation Protection** (**ICNIRP**) - an NGO in *formal relations* with WHO (for more information, see http://www.who.int/civilsociety/). Within the reporting period, ICNIRP finished its triennial mandate. At WHO’s 130th Executive Board meeting in January, it decided to maintain ICNIRP in official relations with WHO. A work plan is currently being formulated for the next 3 years. Dr van Deventer was invited to participate and present in the 7th International Workshop on Non Ionizing Radiation from 9 to 11 May 2012 in Edinburgh, United Kingdom.

Further dialogue was held with the **European Commission Directorate-General for Employment, Social Affairs and Equal Opportunities (DG Employment**) based in Luxembourg, regarding activities related to occupational exposure to EMF, and in particular the EC Directive 2004/40/EC. On this topic, WHO was invited to attend a

meeting of the Preparatory Commission of stakeholders in Luxembourg but was unable to attend.

Discussions were also held with the **European Commission Directorate-General for Health and Consumers (DG SANCO)** and **Directorate General for Research and Innovation (DG Research)** based in Brussels, regarding activities related to EMF. DG SANCO organized an "International Scientific Conference on electromagnetic fields and health" under the auspices of the SCENIHR, within the frame of the periodic review of the scientific evidence as mandated by the Council recommendation 1999/519. The meeting was held on 16-17 November in Brussels. Dr van Deventer was invited to be part of the Steering Group for the development of the final programme and the selection of speakers.

WHO collaborating centres

A WHO collaborating centre (CC) is an institution designated by the Director-General to form part of an international collaborative network carrying out activities in support of the Organization's programme at all levels. Such designation follows a formal procedure within WHO, with specified terms of reference for a period of 4 years and annual reporting of joint activities. With effect from 1 June 2007, processing of designations, re-designations and discontinuations of CCs are being done electronically (http://intranet.who.int/homes/kcs/collaborating_centres).

The EMF Project works with the following scientific institutions that are formally recognized as collaborating centers of WHO (http://www.who.int/peh-emf/project/Org_Stru/en/index.html). The topic of electromagnetic fields is one of several areas within radiation on the work plan of these CCs

- Australian Radiation and Nuclear Safety Agency, ARPANSA (Australia)
- Institut für Strahlenhygiene, Bundesamt für Strahlenschutz, BfS (Germany)
- Health Protection Agency - Radiation Protection Division (UK) - under renewed designation

1. 3. SECRETARIAT

The Project is managed through the Radiation Programme which has the responsibility for activities related to ionizing and non-ionizing radiation. This Programme is located at WHO Headquarters in Geneva, within the Department of Public Health and Environment (PHE). PHE has for main objective to "promote a healthier environment, intensify primary prevention and influence public policies in all sectors so as to address the root causes of environmental threats to health" as described in the Medium-Term Strategic Plan (MTSP) of the organization for 2008-2013 under Strategic Objective 8.

While the priorities, strategic objectives and expected results of the Organization are delineated in the MTSP 2008-2013, more specific short-term programmatic outputs are described in two-year work plans. The current reporting biennium spans 2012-2013.

The Secretariat of the WHO International EMF Project facilitates all activities and provides regular reports to the International Advisory Committee and contributors to the Project. WHO Regional Offices participate where possible and facilitate

communications with countries in their respective regions. WHO staff provide coordination and project management and respond to enquiries. They organize and conduct review group meetings, prepare and publish reports and brochures, organize the preparation and publication of monographs and scientific reports, and liaise with consultants, collaborating agencies and key institutions to prepare material as required.

A key challenge has been and remains to ensure alignment between activities planned and the resources mobilized, both human and financial.

Personnel

Dr van Deventer is the Team Leader of the Radiation (RAD) programme, with administrative responsibility for both the Ionizing Radiation team and technical responsibility for the Non-Ionizing programme, which includes the WHO EMF Project and the INTERSUN UV Project.

Since March 11 2011, following the earthquake and tsunami in Japan, Dr van Deventer has been heavily involved in technical activities relating to this emergency, including the development of a Preliminary Dose Estimation from the nuclear accident after the 2011 Great East Japan Earthquake and Tsunami published on 23 May 2012, (http://www.who.int/ionizing_radiation/pub_meet/fukushima_dose_assessment/en/index.html) and a health risk assessment (to be published Summer 2012).

In view of this situation, the EMF Project continues to encourage Member States to promote direct involvement of their staff in the work of the International EMF Project through different means, including secondment. Other mechanisms are available through Junior Professional Officer (JPO) programs[1] or through WHO's Internship Programme which provides a wide range of opportunities for students to gain insight into the work of WHO. Every year a limited number of places for internships are available http://www.who.int/employment/internship/en/.

Funding

WHO receives its funding principally through assessed contributions from Member States and voluntary contributions. With the economic crisis over the past couple of years, assessed contributions have become a smaller proportion of the total resources received, and reliance is increasing on voluntary contributions provided by partners and donors.

All contributions and accounting are audited by WHO. For any contribution, 13% of expenditure is deducted by WHO to cover administrative costs related to administering the funds, in accordance with World Health Assembly Resolution WHA 34.17.

[1] The Junior Professional Officer (JPO) Programme provides young professionals who wish to pursue a career in development with hands-on experience in multi-lateral technical co-operation. JPOs are sponsored by their respective governments. Currently the following 11 donor governments sponsor JPOs for WHO: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Japan, Luxembourg, Republic of Korea and Sweden

Technical Units may follow up on any funding interest from the part of Ministries of Health, or other governmental bodies involved in NIR. The EMF Project is currently solely funded through voluntary contributions from participating countries. These contributions cover both activities of the Project and salaries of the personnel.

Several governments have given direct contributions to the WHO EMF Project, either on a periodic or ad-hoc basis. Some countries provide financial support for specific earmarked activities within the Project. For example, in 2011 Health Canada paid for the hire of equipment for the 16th IAC Meeting in Ljubljana, and the Ministry of Health Slovenia covered the hospitality costs for the meeting.

Other countries provide in-kind contributions in the form of staff time. This is the case, for example, of the Health Council of the Netherlands, and the UK Heath Protection Agency for the Environmental Health Criteria on RF fields or through the development and translation of documents.

2. RISK ASSESSMENT AND SCIENTIFIC ACTIVITIES

The primary goal of the International EMF Project is to assess the health risks from EMF within the frequency range 0 to 300 GHz and to develop policy options for protection of people from EMF exposure. The key **scientific objectives** of the Project are to:

- Assess the scientific literature and make a status report on health effects,
- Incorporate research results into WHO's Environmental Health Criteria (EHC) monographs where formal health risk assessments are conducted on EMF,
- Identify gaps in knowledge needing further research,
- Encourage a focused research program in conjunction with funding agencies and the global scientific community.

2. 1. RESEARCH EVALUATION

Environmental Health Criteria (EHC)
The health risk assessments related to chemical, biological and physical agents developed by WHO are published in the Environmental Health Criteria (EHC) series (http://www.who.int/ipcs/publications/ehc/en/). For over 20 years, WHO has addressed possible health effects from exposure to EMF through three monographs on extremely low frequency (ELF) fields (1984), static and ELF magnetic fields (1987), and radiofrequency (RF) fields (1993).

The EHC monographs are usually revised if new data are available that would substantially change the evaluation, if there is public concern for health or environmental effects of the agent because of greater exposure, or if an appreciable time period has elapsed since the last evaluation. Three monographs spanning the 0-300 GHz EMF frequency range have been planned: static fields (0Hz), ELF fields (up to 100 kHz) and RF fields (100 kHz – 300 GHz). So far, the EMF Project has developed the first two volumes on Static Fields and ELF fields. These documents were developed following the publication of the IARC monograph on Non-Ionizing Radiation, Part 1: Static and ELF fields (2002). The IARC monographs provide a hazard identification regarding cancer, while the EHCs represent a health risk assessment of all studied (published) health endpoints, including the four classical steps of (i) hazard identification, (ii) exposure assessment, (iii) dose-response assessment and (iv) risk characterization. EHCs usually also include recommendations for protective measures.

EHC on Radiofrequency fields
Following on the publication of the INTERPHONE study (May 2010) and the IARC classification of RF fields (May 2011), the health risk assessment of radiofrequency fields by WHO has started. A core group of experts has been gathered to help with the development of the monograph. A kick-off meeting was held in January 2012 in Geneva, to develop the work plan for this major activity. Next steps include targeted resource mobilization, as funding for this work will have to be obtained in order to bring it to fruition.

The WHO Environmental Health Criteria monograph on RF fields will be based on published peer-reviewed data, as well as the ICNIRP review of scientific literature on the health effects of RF fields commissioned by WHO (July 2009). It is expected that the Task Group will meet in Fall 2013, for a publication by end of 2014.

2. 2. RESEARCH COORDINATION

To avoid unnecessary duplication of research effort and to make sure that all important questions are being studied, research coordination on a global level is important. To that end, the WHO International EMF Project has been providing such an umbrella for worldwide coordination and exchange of information about planned and ongoing projects.

Research agenda
From its inception, the WHO International EMF Project has strived to identify gaps in knowledge needing further research to make better health risk assessments, and to encourage a focused research programme in conjunction with funding agencies (http://www.who.int/peh-emf/research/agenda/en/index.html).

For radiofrequency fields, the latest EMF Research Agenda published in 2010 (http://whqlibdoc.who.int/publications/2010/9789241599948_eng.pdf) has been taken up by several national funding agencies, e.g. the Mobile Telecommunications and Heath Research (MTHR) Programme of the United Kingdom and the French agency ANSES when developing calls for proposals.

To better measure the impact of this WHO function, a questionnaire was sent to national IAC representatives in January 2011. The information collected was then analyzed by Dr Ohkubo from JEIC, Japan, and results were presented at the 7th International Workshop on Non Ionizing Radiation in Edinburgh in May 2012.

WHO input to national agencies
The EMF Project actively works with international donors and national authorities to review, promote, and fund research topics identified by WHO. Dr van Deventer currently serves on the Programme Committee Management of the Mobile Telephone Health Research program (MTHR) in the United Kingdom, and as a member of the Swedish independent expert group on EMF, commissioned by the Swedish Radiation Safety Authority.

Research database
WHO has for many years provided a web-based database of research projects as a service to the research community (http://www.who.int/peh-emf/research/database/en/index.html). Its purpose is to inform researchers about ongoing and completed projects relevant to the EMF Project's mandate.

Until recently, the database was actively updated and formed the core tool for each 5-year revision cycle of the IEEE C95.1 (radiofrequency) and IEEE C95.6 (static and low frequency) exposure standards. Because other excellent databases exist with similar functionality, there is no longer a strong justification for WHO to maintain

such a database. It has been proposed instead to provide a link on WHO's website to other relevant databases, such as

- The FEMU EMF Portal (http://www.emf-portal.de/)
- The IEEE ICES database (http://ieee-emf.com/)
- The University of Ottawa database (http://www.rfcom.ca/welcome/index.shtml)

While it was suggested to discontinue this website, arguments have been forth to keep it as an archive. This strategy will be discussed at the next IAC meeting.

3. RISK MANAGEMENT ACTIVITIES

WHO's International EMF Project provides a unique opportunity to bring countries together, identify criteria for science-based standards setting and encourage the establishment of exposure limits and other control measures that provide the same or similar level of health protection for all people.

The key **risk management objectives** of the Project are to:

- facilitate the development of internationally acceptable standards for EMF exposure,
- provide information on the management of EMF protection programs for national and other authorities, including monographs on EMF risk perception, communication and management, and
- provide advice to national authorities, other institutions, the general public and workers, about potential hazards resulting from EMF exposure and possible mitigation measures.

3. 1. STANDARDS DATABASE

A number of national and international organizations have formulated guidelines establishing limits for occupational and residential EMF exposure. The International EMF Project has provided information on worldwide EMF standards in a web-accessible database which was set up in 2001 and revised in 2004. (http://www.who.int/docstore/peh-emf/EMFStandards/who-0102/Worldmap5.htm). However, it is on an obsolete website, and a revised version has been developed.

A new resource, the Global Health Observatory (GHO), has been developed on the WHO website over the past year (www.who.int/gho). The GHO is WHO's portal providing access to data and analyses for monitoring the global health situation. This new tool provides a harmonized approach to a great variety of data previously in different formats and databases scattered around the WHO website. After an analysis of the GHO site, it seems that it can provide a number of the features that we wish to incorporate in the database, e.g. interactive maps, export of data into Excel, etc. A meeting of the Steering Group met to discuss this new development in Edinburgh in May 2012. The GHO platform and a template of the proposed database is tabled for further discussion at the IAC meeting in Geneva.

3. 2. LOCAL AUTHORITIES BROCHURE

To help municipalities, a brochure for local authorities has been developed on Base Stations and Wireless Networks that provides local authorities with all the information they need to plan and approve the installation of mobile phone base stations. The Brochure is also intended to provide information on levels of RF fields and risks of exposure to all current wireless network fields.

The current draft version has been reviewed by a few countries. A small working group, including Australia, New Zealand, Tunisia, France, UK and Peru has been assembled through electronic means to advise on the way forward and provide

guidance as to the content and format. Due to time constraints on WHO staff, progress has been slow.

3. 3. MODEL LEGISLATION

The EMF Project has developed a Model Act and Model Regulation that provide the legal framework to provide this protection. This document was produced to assist countries that do not yet have appropriate legislation to protect their population. The Model Legislation follows the widely accepted practice among lawmakers of setting out an enabling Act which permits the responsible Minister to subsequently issue Regulations, Statutory Orders or Ordinances, as appropriate, to deal with specific areas of concern.

Over the past year, some question have arisen regarding the document. A discussion regarding an update of this document and feedback about its impact will be useful during the next IAC meeting.

4. RISK COMMUNICATION ACTIVITIES AND RESOURCES

4. 1. ENQUIRIES

A large number of enquiries are sent to the EMF Project from the general public, the media and governments. Depending on the nature of the enquiries, these are usually handled by the Project staff or by the communications officers of WHO. Technical support is regularly needed - and given - as requests in other languages are often forwarded to IAC members for translation and/or response.

4. 2. WEBSITE INFORMATION

In December 2010, the corporate WHO website underwent a major visual redesign to improve accessibility, usability and branding. The main pages currently provide information in 6 languages (Arabic, Chinese, English, French, Russian, and Spanish).

EMF Home page
With the rebranding of the WHO site, the EMF Project page has changed in look but not as much in content. An internal offer has been made to translate some of the EMF pages into all 6 languages. Advice and help will be sought from the IAC for a redesign plan.

National contacts and information
Because many enquiries to the EMF Project are of a local nature, a country-focused database of information that lists the Member States of the EMF Project has been set up. Thanks to the input of the IAC members (http://www.who.int/peh-emf/project/mapnatreps/en/)who provide annually updated information for their respective pages, this has proved to be a very useful tool worldwide. Over the past year, several new country pages were built (e.g. Tunisia, Norway).

4. 3. WHO PUBLICATIONS

The publications of the EMF Project are reviewed by the International Advisory Committee before seeking formal approval by WHO management. Recent documents are available electronically for download on the Project's website. Some of the materials are available free of charge, while priced publications are on sale through the WHO Online Bookstore http://apps.who.int/bookorders/.

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- It is ensured that the original WHO source is appropriately acknowledged with the appropriate bibliographical reference.

Since the Project's inception, translations were encouraged, many of which being undertaken by members of the IAC. These translations have proven to make the EMF Project a web site well visited over the years. (http://www.who.int/peh-emf/publications/facts/factsheets/en/index.html). From May 2011, WHO has received requests to translate the Fact Sheet N° 193 on Mobile Phones (2011 revision) into German, Italian, Japanese and Swedish.

Note: Information about the translation of WHO health information products by external entities can be found at http://www.who.int/about/licensing/translations/en/index.html. A link at the bottom of the page is the online form to be submitted http://www.who.int/about/licensing/translation_form/en/index.html

Fact sheets

Simple, easy to read information is provided through fact sheets that are formally approved by the Director General's Office. The latest EMF Fact Sheets can be found on the corporate WHO **Media Centre website**, which is aimed primarily at the press and general public (http://www.who.int/mediacentre/factsheets/en/). These include the following Fact sheets:

Over the past year, the Fact sheet N°193 on Mobile phones was updated following the IARC classification of radiofrequency fields. Its release coincided with the publication of the IARC editorial in the Lancet Oncology.(June 2011)

The fact sheet No. 304 on base stations and wireless networks requires a review. The plan had been to update it following the publication of a systematic review of randomized human trials conducted in laboratory settings and of epidemiological studies that investigated the health effects of mobile phone base stations radiation in the everyday environment. This systematic review was commissioned by WHO in a view to incorporate scientific findings published since 2006 (date of publication of the last Fact sheet on base stations). The review was published in December 2010 in the WHO Bulletin. With the Fukushima accident, WHO staff was unable to pursue this task. A new strategy for its review should be discussed at the IAC meeting.

4. 4. MEETINGS

WHO staff members and consultants participated in a number of local, national and regional scientific and coordination meetings:

When	Where	Title
May 24-31, 2011	**Lyon, FRANCE**	Meeting of the IARC Monograph on radiofrequency fields
June 21, 2011	**London, UNITED KINGDOM**	23rd meeting of the UK MTHR Programme Management Committee
July 12-13, 2011	**Palo Alto, CA, UNITED STATES**	EPRI International Expert Panel Workshop on RF Health Research **(*presented by M. Röösli*)**

July 25-26, 2011	**Gaborone, BOTSWANA**	ITU-T Study Group 5 Regional Group for Africa
October 21, 2011	**Lyon, FRANCE**	Visit to IARC regarding the RF EHC
November 16-17, 2011	**Brussels, BELGIUM**	EC SCENIHR International Scientific Conference on electromagnetic fields and health
December 6-8, 2011	**Lima, PERU**	International Forum on "Telecommunications antennas, development, inclusion and human health" **(*presented by M. Repacholi*)**
December 14, 2011	**Geneva, SWITZERLAND**	Bilateral meeting with the Ministry of Environment of the Republic of Korea
February 8, 2012	**New Delhi, INDIA**	International Health Conference "Ensuring Public Health and Safety in the Mobile Industry" ***(presented via Skype)***
March 8, 2012	**Geneva, SWITZERLAND**	Bilateral meeting between WHO/RAD and the Swiss Federal Office of Public Health
March 29, 2012	**London, UNITED KINGDOM**	24th meeting of the UK MTHR Programme Management Committee
April 3-4, 2012	**Paris, FRANCE**	URSI Journées scientifiques « Champs électromagnétiques : de la dosimétrie à la santé humaine »
April 18, 2012	**Geneva, SWITZERLAND**	Meeting on Question 23/1 of ITU-D Study Group 1
April 23-24, 2012	**Luanda, ANGOLA**	Meeting of CRASA (Communications Regulators' Association of Southern Africa)
May 9-11, 2012	**Edinburgh, UNITED KINGDOM**	ICNIRP 7th International Workshop on Non Ionizing Radiation
June 8, 2012	**Geneva, SWITZERLAND**	Bi-annual Meeting of the Swedish Radiation Safety Authority Independent Expert Group

4. 5. UPCOMING MEETINGS

- **34rd Annual BEMS Meeting**, 17-22 June 2012, Brisbane, Australia http://www.bems2012.com.au/2012/
- **International Conference on Radiation Protection in Medicine,** 3-7 December 2012, Bonn, Germany, http://www-pub.iaea.org/iaeameetings/41578/International-Conference-on-Radiation-Protection-in-Medicine-Setting-the-Scene-for-the-Next-Decade

FOR FURTHER INFORMATION ON THE INTERNATIONAL EMF PROJECT

Visit the web site at: http://www.who.int/emf/
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