

COUNTRY REPORT ON EMF IN MALAYSIA
24th EMF PROJECT INTERNATIONAL ADVISORY COMMITTEE (IAC) MEETING
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In Malaysia, there is still a high public concern regarding the non-ionizing radiation. Hence, local authorities such as the Ministry of Health (MOH), Malaysian Communication and Multimedia Commission (MCMC), Malaysia Nuclear Agency (MNA) and other parties continue to engage ongoing cooperation to ensure that the general public has the right information and always updated from time to time.

Additionally, in 2018, MOH has revised and re-appointed the members of the “Interagency Working Committee on The Health Effects of Non-Ionising Radiation” which consists of representative from various government and private agencies as well as representatives from local universities. Among others, the committee will provide the Director General of Health Malaysia an independent scientific and technical advice on potential health effects from exposures to NIR and related issues.

The following are brief reports on activities in Malaysia related to NIR between June 2018 to May 2019:

NO.	ACTIVITIES
1.	General Research
	i. A survey on extremely low frequency (ELF) exposure in the residential areas located near high voltage transmission line. The survey was carried out at several locations around the states of Negeri Sembilan, Melaka and Federal Territory of Putrajaya. The results show that the ELF level is much lower than the exposure limit recommended by the International Commission on Non-Ionizing Protection (ICNIRP).
	ii. A survey on extremely low frequency (ELF) exposure at selected critical areas in hospital (MRI Room, CT Scan Room, General X-Ray Room, NICU and ICU and Neonatal Ward). The results from this survey also show that ELF level is much lower than the exposure limits recommended by the International Commission on Non-Ionizing Protection (ICNIRP).
	iii. The NIR group of MNA has developed a system called AREFCERT. This system is an Information Delivery System for the public to access the information of RF radiation level emitted by telecommunication structure. Each structure is given a QR code and placed at the telecommunication structure. The public members can get the information by scanning the QR code, which includes RF radiation certificate and RF assessment information for each particular telecommunication structure. This system has won 4 local innovation medals in 2018 (Malaysia Technology Expo, Innovation Exhibition, INTEX 18, and Malaysian Nuclear Agency Innovation and Preview Showcase).

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	iv. Non-ionizing radiation (NIR) safety assessment. In 2018, there were 70 safety assessment projects on RF radiation conducted around Malaysia by the MNA. These projects included site visit, measurement, consultancy and technical report. Besides telecommunication industry, there are also concerns from manufacturing industry on safety issues of NIR. In response to that, three safety assessments were conducted involving manufacturing industry. On top of that, the MNA also conducted a safety assessment on ELF electromagnetic fields radiation near high voltage transmission line.
2.	Public Concern and National Response
	i. MCMC organized the Digital Outlook Series on 19 - 20 April 2019 in conjunction with the 5G Malaysia Showcase in Putrajaya, Malaysia. The Digital Outlook Series serve as a platform for the industry stakeholders as well as government agencies to keep abreast on the latest and emerging technologies in the communications and multimedia industry. Advancement in 5G technology has caused great concern among the public. These forum also involves other related government agencies such as MOH and MNA.
	ii. In 2018 MCMC conducted three types of EMF measurements, which are drive test, spot measurement and long term monitoring, at 52 selected sites in four regions throughout the country. These measurements aim to verify industry compliance towards the MCMC Mandatory Standard for Electromagnetic Field Emission from Radio-communications Infrastructures. These measurements provide reassurance to the public that the radio-communications infrastructures are safe and do not cause adverse health effect to the surrounding communities. The results are in compliance with the "MCMC Mandatory Standard for Electromagnetic Field Emission from Radiocommunications Infrastructure".
3.	Public Information
	i. In 2018, the MOH came up with two pamphlets to provide the right information to the public. The two phamplets are "ELF-EMFs and Our Health" and "RF Radiation and Our Health".
	ii. International Conference on NIR were held in Kuala Lumpur from 14-15 November 2018. There conference was attended by 95 participants with 14 presentation papers from the invited speakers and participants. The topic areas are RF radiation, NIR in medical application, safety on laser, regulations and policy on NIR, and public concern on NIR.
	iii. In 2018, the MNA, in collaboration with telecommunication industry gropus, has conducted 12 NIR awareness program around Malaysia.
	iv. MCMC published the "Guideline on the Mandatory Standard for Electromagnetic Field Emission from Radiocommunications Infrastructure (Compliance towards Determination No. 1 of 2010)" on 29 December 2017 to supplement and reinforce the Mandatory Standard for Electromagnetic Field Emission from Radiocommunications Infrastructure, Determination No.1 of 2010. MCMC has organised two training sessions on 15 and 23 October 2018 participated by

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	MCMC's licensees, namely the Network Service Providers and Network Facility Provider. The training serves as a platform for comprehensive understanding of the guideline, compliance procedures and requirements of the Mandatory Standard for EMF Emission.
	v. MCMC offered a training course on EMF Awareness in Communications and Multimedia Industry, to provide comprehensive understanding of EMF emission with specific focus at Radio Frequencies Electromagnetic Fields (RF-EMF). There were four sessions held between August and November 2018.

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