

The background of the image shows the silhouettes of several people at a conference or event. Their arms are raised, with some pointing upwards and others in various celebratory or engaged poses. The background is a warm, blurred bokeh of light colors, suggesting an indoor setting with stage lighting.

**The 11<sup>th</sup> GSMA**

# **EMF Forum Event Guide**

**The future of EMF policy harmonisation**

**Tuesday 11 October 2022 10:00-14:00**

# Introduction

**The theme this year is the future of EMF policy harmonisation.**

## **The past**

Following seven years of review, the updated international EMF guidelines from ICNIRP were published in 2020. Countries in Asia, Europe, and the Middle East have adopted the updated limits and the EU is preparing to follow the same path, ensuring that EMF policy is based on the best available evidence, in particular, for frequencies above 6 GHz.

## **The present**

The international technical standards body, the IEC, completed work in 2022, and provided updated methods for assessing EMF compliance of 5G base stations and mobile devices, including for the higher frequencies.

## **The future**

The World Health Organization is expected to publish an updated risk assessment for radio signals in 2023. The last time this was done was in 1993.

## **Next steps**

As the global economy recovers from COVID-19 and faces threats both short and long-term, mobile technology must be able to deliver to its full capability. Maximising the potential of mobile technologies means getting the policy settings right.

For EMF, that means adopting the ICNIRP (2020) EMF limits and updated technical standards for EMF compliance. It also means that all trusted stakeholders must continue to actively communicate the scientific facts.

# EMF in 2022



# Agenda

## 10:00 Welcome and Introduction

- Daniel Pataki, Vice President Policy and Regulation, Head of Europe, GSMA

## 10:10 Status of the WHO RF-EMF risk assessment process

Update on the status of the systematic reviews and task group plans.

- Dr Emilie van Deventer, Head, Radiation and Health Unit, World Health Organization (WHO)

## 10:25 Is there a health risk from Wi-Fi – results of a systematic review

Presentation of the key results of the systematic review.

- Professor Martin Röösli, Swiss Tropical and Public Health Institute, Switzerland

## 10:40 Is there a consensus among scientific reviews of RF EMF health risks?

Discussion of the areas of agreement and difference among scientific expert groups.

- Associate Professor Sarah Loughran, ARPANSA, Australia
- Professor Martin Röösli, Swiss Tropical and Public Health Institute, Switzerland
- Professor Theo Samaras, Aristotle University of Thessaloniki, Greece and member of the European Commission Scientific Committee on Health, Environmental and Emerging Risks (SCHEER)
- Dr Emilie van Deventer, World Health Organization
- Facilitator: Dr Concha Muro Lupori, Telefonica Spain – GSMA EMF and Health Delegate

## 11:10 Coffee break

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# Agenda continued

## **11:30 Assessing EMF compliance of 5G network equipment**

The updated IEC 62232 edition 3 standard and practical experience of real-world measurements.

- Mike Wood, Telstra - GSMA EMF and Health Vice Chair and Chair IEC TC 106
- Professor Nicola Pasquino, University of Naples and Chair of Technical Committee CEI CT 106.

## **12:00 Mandating of public EMF limits in the UK and millimetre wave spectrum for 5G**

The process and learnings regarding the mandating of ICNIRP public limits and EMF expectations for millimetre waves.

- Martin Fenton, Ofcom (United Kingdom)

## **12:20 Priorities for EMF Policy and Communication**

Panel discussion addressing harmonization of RF EMF limits and compliance assessment approaches; small cell developments; the future of 4G/5G deployments and approaches to improve public confidence.

- Dr Alberto Nájera, CCARS (Spain)
- Josette Gallant, Senior Director, ISED Canada
- Sarah Wylie, EMF Manager, Vodafone Group - GSMA Global EMF and Health Chair
- Martin Fenton, Ofcom (United Kingdom)
- Facilitator: Martin Busch, Deutsche Telekom - Vice-Chair EMF and Health, GSMA

## **13:00 Summary and Conclusions**

Wrap up of the day including takeaway conclusions.

- Dr Jack Rowley, GSMA

## **13:15 Light lunch for London participants**

# Focus on EMF and 5G mmWave



At this year's EMF Forum we are launching the "5G Millimetre Wave Safety" report, which offers an in-depth look at health-related research and EMF exposure levels. Millimetre wave (mmWave) spectrum is essential for maximising 5G's potential.

The use of this range enables secure, reliable and low-latency networks in dense urban areas and provides fibre-like connectivity to suburban and rural areas. It is also crucial for providing ubiquitous connectivity in manufacturing plants and high-density locations, such as stadia and travel hubs.

5G mmWave refers to frequencies above 24 GHz. The range has been a target of misinformation and conspiracy theories related to health and public safety. However, mmWave frequencies are not new and have been used for decades in satellite and other communication networks.

National and international safety guidelines for radio waves apply to all the frequencies used for 5G, including mmWave. So, importantly, the international guidelines protect all people against all established health hazards.

[DOWNLOAD HERE](#)

# Meet Our Speakers

## **Daniel Pataki, Vice President Policy and Regulation, Head of Europe, GSMA**

Daniel Pataki leads the GSMA's global engagement on mobile-sector regulatory affairs. Under his direction, the GSMA is contributing new ideas and analysis to the global policy dialogue at a time when emerging digital technologies and widespread broadband connectivity are reshaping society and the economy.

Daniel also leads the GSMA activities in Europe, Russia and the Commonwealth of Independent States (CIS). He is responsible for all GSMA Advocacy initiatives (Future Networks, Identity, Internet of Things) in the wider European region.

Daniel has a unique record of strategic input into Europe's telecommunications policy agenda, having previously served as head of Hungary's National Regulatory Authority (2004-2009), chair of the European Regulators Group (ERG, now BEREC, 2008) and chair of the European Radio Spectrum Policy Group (RSPG, 2009).

Daniel was also Director General of the European Telecommunications Network Operators' association (ETNO, 2012-2015). He holds a MSc in Economics from the Budapest University of Economics and a Postgraduate Diploma from a leading French institutional programme led by Ecole de Mines, Ecole des Ponts and Sciences- Po.

He was awarded the Officer's Cross of the Order of the Republic of Hungary in 2009 for his work in EU electronic communication regulation and the Order of Merit (Knight's Cross) of the Republic of Hungary in 2005 for his work promoting the development of the information and communications technology sector.

## **Dr Jack Rowley, Senior Director Research & Sustainability, GSMA**

Jack Rowley, Ph.D is the Senior Director for Research & Sustainability and works in the Advocacy Department of the GSMA. He is responsible for technical and policy activities related to the safety of mobile communications and responsible environmental practices.

In this role, he manages relationships with major stakeholders such as the WHO and the ITU, develops technical advice for members and coordinates GSMA communications strategy related to EMF. He supports the global and European GSMA EMF and Health working groups.

Jack has been a member of national and international working groups and contributed to the UNEP activity that led to the first international guidelines for environmentally sound management of used and end-of-life mobile phones. He has more than 30 years of experience in the telecommunications industry and joined the GSMA in 2000.

Prior to that, he worked for 10 years with Telstra (Australia) primarily in the Research Laboratories, where he rose to the position of manager of radio communications research with special responsibility for EMF issues. He has also given expert evidence in planning hearings related to base station siting and made submissions to government panels.

He holds an Electronics Engineering Degree with first class honours from the University of Limerick (Ireland) and a Ph.D. from the RMIT University (Australia). He is a senior member of the IEEE and a member of the Bioelectromagnetics Society.

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# Meet Our Speakers

## **Sarah Wylie, EMF Manager, Vodafone Group & GSMA Global EMF and Health Chair**

Sarah Wylie joined Vodafone as a Personal Secretary in 2001 and moved through the procurement team and then to the External Affairs team in 2008 to take on the role of Group EMF manager.

Her responsibilities include leading the global EMF team across Vodafone Group's mobile operations in 25 countries to ensure consistent messaging, compliance with national and international standards, and communication of all aspects relating to EMF management. She chairs the GSMA's EMF & Health Working Group.

She holds a BA in American Studies from the University of Warwick. Before working at Vodafone, she worked in University Administration and the Financial Services sector. Outside of Vodafone, she enjoys travelling (when there is no pandemic) and building new relationships with her five grandchildren.

## **Dr Concha Muro Lupori, Telefonica Spain – GSMA EMF and Health Delegate**

Dr Concha Muro Lupori holds a PhD in Biochemistry and has been working for Telefónica since 2001 as an Expert on EMF & Health. From 2003 to 2006 she headed the Quality and Environmental department of Telefónica México.

From 2007 to 2015 she worked as an Expert on EMF & Health for Public Affairs Department of Telefónica Spain. From 2015-2019 she was part of Telefónica SA and based in Germany, leading for Telefónica Corporation the global EMF & Health Project, coordinating all Operating Businesses, identifying best practices within the Telefónica Group in the management of social concern regarding EMF.

Besides this, from 2017 to 2019 she also lead the Health and Safety Global Project for Telefonica Corporation. Currently, she is part of Public Affairs Department of Telefónica Spain, where she deals with EMF and Health issues and reputational risks evaluation.

## **Dr Emilie van Deventer, Head of the Radiation and Health Unit, WHO**

Dr Emilie van Deventer is the Head of the Radiation and Health Unit at the World Health Organization in Geneva, Switzerland. This programme covers the public health aspects of both ionizing and non-ionizing radiation safety and provides information and guidance to national authorities on radiation protection and health.

She is responsible, inter alia, for the WHO International EMF Project, the Global UV project and radon activities. Before joining WHO in 2000, she was a chaired professor of Electrical and Computer Engineering at the University of Toronto, Canada.

She holds a PhD from the University of Michigan, USA and an honorary doctorate (doctor honoris causa) from the University of San Marcos, Lima, Peru.

## **Professor Theodoros Samaras, European Commission SCHEER committee**

Theodoros Samaras is a Medical Physicist, by training. He specialises in the safety and medical applications of electromagnetic fields, working mainly with exposure assessment and dosimetry.

He is currently a Professor of Applied Electromagnetics and Bioelectromagnetics at the Aristotle University of Thessaloniki and an Affiliate Professor at the University of Malta. He is also a member of the European Commission's Scientific Committee on Health, Environmental and Emerging Risks (SCHEER)

He is the (co-)author of more than 140 papers in peer-reviewed journals and proceedings (h-index 28; total citations > 2300; source: SCOPUS). He has been serving as a reviewer for several journals and funding organizations and as the national representative to European research co-ordination COST actions (BM0704, BM1309, TD1104, CA17115) and standardization committees (CENELEC, IEC TC 106).

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# Meet Our Speakers

## **Professor Martin Rösli, Swiss Tropical and Public Health Institute**

Martin Rösli received a M.Sc. degree in Environmental Science from the Swiss Federal Institute of Technology in Zürich (ETHZ) in 1997 and a Ph.D. in Epidemiology from the University of Basel in 2001. To date he is Associate Professor for Environmental Epidemiology at the Swiss Tropical- and Public Health Institute in Basel and leads the Environmental Exposures and Health Unit.

His research focuses on various environmental health topics with a focus on non-ionizing radiation exposure and health risk assessment. In the field of EMF he has conducted numerous studies documented in >100 peer-reviewed scientific articles on this topic (h-factor:51, Web of Science). He has served as advisor to a number of national and international public advisory and research steering groups concerning the potential health effects of exposure to nonionizing radiation, including the World Health Organization and the International Agency for Research on Cancer.

Currently, he is the chair of the Swiss expert group BERENIS (Swiss Expert Group on Non-ionising Radiation), and member of ICNIRP (International Commission for Non-ionizing Radiation Protection), of the German Radiation Protection Commission (Non-ionizing Radiation (A6) and working group 5G (A630)) and the Independent Expert Group of the Swedish Radiation Safety Authority.

He was a member of the Scientific Council of the European Bioelectromagnetics Association EBEA from 2009 to 2017.

## **Dr Alberto Nájera, EMF expert group CCARS (Spain)**

Dr Alberto Nájera is Associate Professor at the Faculty of Medicine of the University of Castilla-La Mancha (Albacete, Spain) since 2001. He has a degree in physics (BS) and a PhD in neurosciences. He is the coordinator of the Scientific Culture and Innovation Unit of this university.

In recent years his main line of research is the characterization of personal exposure to radiofrequency electromagnetic fields. His multidisciplinary background has led him, in recent months, to the publication of several papers related to COVID-19. He develops an intense divulgation activity in the media and in his blog ([www.radiandando.es](http://www.radiandando.es)), generally refuting hoaxes.

## **Associate Professor Sarah Loughran, ARPANSA (Australia)**

Associate Professor Sarah Loughran is currently the Director of Radiation Research and Advice, and the Principal Researcher and EME Program Manager, at the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

She is also a current member of the World Health Organisation (WHO) Radio Frequency Environmental Health Criterion Evaluation Committee and is an elected member of the International Commission on Non-Ionizing Radiation Protection's (ICNIRP) Scientific Expert Group.

Associate Professor Loughran holds degrees in physiology and psychology, and completed her PhD in cognitive neuroscience and psychophysiology at Swinburne University in Melbourne, Australia.

She subsequently spent several years as a postdoctoral fellow at the University of Zurich, Switzerland, specialising in bioelectromagnetics, sleep, and EEG signal analysis research, before returning to Australia and continuing this research at the University of Wollongong, where she was the Director of the Australian Centre for Electromagnetic Bioeffects Research (ACEBR).

Her research and expertise focuses on a wide range of bioelectromagnetic health issues including the effects on sleep, human brain function, and the mechanisms associated with these effects, as well as risk perception and risk communication more generally.

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# Meet Our Speakers

**Josette Gallant,**  
**Senior Director, Terrestrial Engineering and Standards within the Spectrum and Telecommunications Sector at Innovation, Science and Economic Development Canada**

Josette Gallant is currently Senior Director, Terrestrial Engineering and Standards within the Spectrum and Telecommunications Sector at Innovation, Science and Economic Development Canada.

Her scope includes ISED's spectrum engineering and planning work related to terrestrial services and setting technical regulations related to 5G technology, Wi-Fi applications, connected vehicles, fixed systems and many others. Josette is also Canadian Chair of the IEC Technical Committee-106 on RF exposure compliance of devices and antenna installations.

Since 2003, Josette has held senior engineering and management positions within different Canadian government departments and agencies - the Canadian Intellectual Property Office, the Canadian Radio-television and Telecommunications Commission, the Canada Border Services Agency and Innovation, Science and Economic Development Canada.

Josette graduated with a Bachelor of Science in Biochemistry (Université de Moncton) and a Master of Science in Biochemistry (McGill University), followed by a Bachelor of Applied Science in Electrical Engineering (Université de Moncton).

**Professor Nicola Pasquino,**  
**University of Naples (Italy)**

Nicola Pasquino graduated in Electronic Engineering from the University of Naples Federico II in 1998, where he also got his Ph.D. with a major in Electromagnetics in 2002.

He was a Fulbright Scholar at the University of Pennsylvania, Philadelphia, PA in 2000-01, and he's been an Senior Member of the IEEE since 2003.

He is a Professor of Electrical and Electronic Measurements at the Department of Electrical Engineering and Information Technologies at the University of Naples. His research interests include electromagnetic compatibility measurements and measurements of human exposure to high-frequency electromagnetic fields.

Prof. Pasquino is also the Chief Scientist of the Electromagnetic Compatibility Lab of his Department and Chair of CT106 "Human exposure to electromagnetic fields" of the Italian Electrotechnical Committee.

**Martin Fenton,**  
**Director of Spectrum Policy, Ofcom, United Kingdom, and Chairman, ITU-R SG 5**

Martin Fenton is Director of Spectrum Policy in the of the Spectrum Group of Ofcom (UK). He is also Chairman of ITU-R Study Group 5, the group responsible for all terrestrial radio frequency services.

Martin is an expert in international and domestic spectrum regulation; specialising in spectrum policy, interference analysis and RF performance. He has 20 years' experience in spectrum management at the UK communications regulator, Ofcom, and its predecessor, the Radiocommunications Agency.

**Mike Wood,**  
**Chair IEC TC 106 - Telstra and Vice Chair GSMA EMF and Health**

Mike Wood is a Distinguished Professional with Telstra and Principal for Telstra's Electromagnetic Energy (EME) Strategy, Governance and Risk Management program. Mike graduated from RMIT and has over 30 years' experience in mobile network deployment, EME and community consultation and leads Telstra's 5G EME program.

Mike is currently Chairman of the International Electrotechnical Commission Technical Committee 106 which has global responsibility for EME testing standards for mobile phones, devices, wireless networks and radio communications systems including 5G.

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# Meet Our Speakers

**Martin Busch,**  
**Vice Chair GSMA EMF and Health, and Group Public & Regulatory Affairs, Deutsche Telekom**

Martin Busch studied political science and international relations in Bonn and Leeds as well as law in Bonn. Before joining Deutsche Telekom AG Martin worked for many years at the Center for European Integration Studies with a focus on regulatory issues in the telecommunications sector.

He also worked as a lawyer in a law firm in Cologne focusing on public commercial law. At Deutsche Telekom he deals with consumer policy and universal service regulation.

Furthermore, he is responsible for EMF-policy within the Group Public & Regulatory Affairs. In cooperation with Deutsche Telekom Technik he chairs DT's EMF Core Team working continuously on the implementation of DT's EMF-Policy in all national subsidiaries.

**José Moure,**  
**Advisor Public Affairs, KPN**

José Moure has a background in international relations and is currently working as a public affairs advisor at KPN.

**Nadia Jouravleff**  
**Orange Group – CSR Group Manager**

Nadia Jouravleff is the head group of EMF and Health at Orange since 2007. She is also Digital Trust project director in the CSR department. She created an Orange EMF and Health committee whose objectives are to carry out scientific and legal monitoring, analyse risks and find solutions, support orange countries, listen to stakeholders and communicate internally and externally.

She also participates in international working groups such as GSMA and ITU. She was chair of EMF and Health at GSMA Europe from 2018 to 2020. She has a Master degree from Toulouse Business School (TBS) in France.