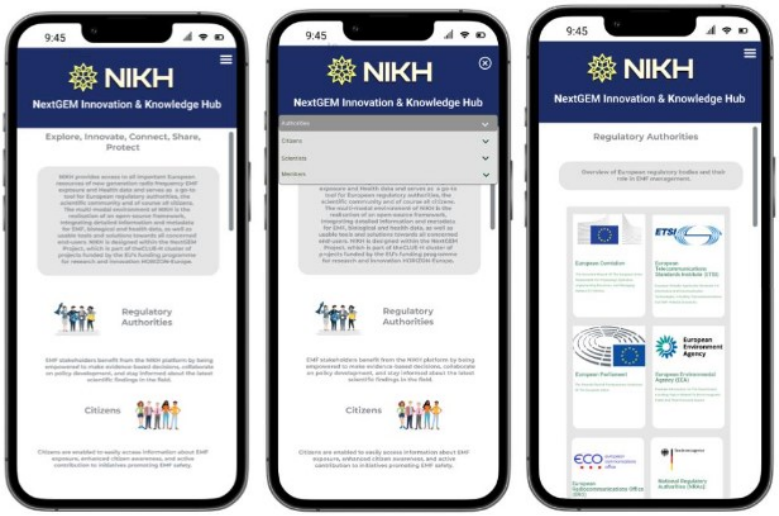
Newsletter 2
May 2024

NextGEM

Next Generation Integrated Sensing and Analytical System for Monitoring and Assessing Radiofrequency Electromagnetic Field Exposure and Health

NIKH makes its first steps



The NextGEM Innovation Knowledge Hub (NIKH) for EMF and Health set its first stones. NIKH's webpage and app were presented alongside Deliverable 6.1. This hub will offer a standardised way for European regulatory authorities, citizens, and the scientific community to store and assess project outcomes, as well as provide access to FAIR data.

This platform will be used as a stepping stone for generating relevant knowledge on EMF exposure, which, as a result, ensures the safety of EU citizens by providing a healthy living and working environment. The unified interface will accumulate, analyse, and present information to the users in a customizable module. In this way, NextGEM will provide relevant knowledge that identifies appropriate control measures of EMF exposure in residential, public, and occupational environments.

The IARC becomes NextGEM's 21st partner

The International Agency for Research on Cancer Research (IARC), which forms part of the World Health Organization (WHO), joined the EU-funded NextGEM project. The IARC becomes its 21st project partner.

Adding IARC means excellent news for NextGEM, helping achieve the project's objectives. IARC will assist in the goal of identifying causal links and perform risk assessment of EMF exposure. More precisely, the WHO-belonging agency will lead the umbrella reviews of epidemiological studies on EMF exposure and cancer risks. This mission consists of synthesizing findings from observational studies on the correlation between exposure to electromagnetic fields and cancer incidence among the population.

International Agency for Research on Cancer

World Health Organization

Click here and find out more about this news

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Project Meetings

NextGEM holds regular plenary meetings. They are organised at one partner's venue, and their objective is to oversee the state of the project and steer its future, from the research perspective to the dissemination and communication one. During these sessions, partners monitor the project's day-to-day and present their latest advancements and achievements. They are undertaken twice a year.

During the last 12 months, there have been three NextGEM Plenary Meetings.

3rd NextGEM plenary meeting in Naples

NextGEM held its 3rd project meeting in Naples, Italy, on 9-10 of May, 2023. Over 30 partners from 20 organisations attended the venue of the *Consiglio Nazionale delle Ricerche* (CNR). The 2nd Technical Workshop was held with these activities:

1. RF-EMF exposure assessment
2. Experimental activities and health risk assessment
3. NextGEM Innovation & Knowledge Hub

4th plenary meeting: presenting Clue-H

NextGEM's 4th meeting was organised in Heraklion, Crete, on 10-11 of October 2023.

Alongside this project's plenary meeting, the EMF Health Cluster (CLUE-H) partners celebrated its second summit. CLUE-H is a network involving over 70 European organisations and four EU-funded projects on EMF:

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The primary objective of the event was to provide a comprehensive overview of CLUE-H's progress to date. It was organised in 5 Working Group Sessions, all of which tackled the main goals of the cluster. **Find out more about CLUE-H by clicking here**.

5th plenary meeting: NextGEM partners gather in Brussels

On February 13-15, 2024, partners met in Brussels for the 5th meeting. Apart from the usual objectives of overseeing the state of the project, this time, partners observed the first technical demonstrations of the EMF-detection devices that are to be used during NextGEM's experiments.

The next plenary meeting is foreseen for October 2024 in Delft, Netherlands, hosted by the Delft University of Technology.

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Project Events

Our presence at BioEM 2023

BioEM 2023 took place in Oxford (UK) on June 18-23, where NextGEM partners showed their commitment to RF-EMF research. Rita Araujo (DG Research & Innovation of the European Commission) highlighted NextGEM's role in CLUE-H. Partners Mats-Olof Mattsson, Myrtill Simkó, Maria Rosaria Scarfi, Olga Zeni and Nikolaos Petroulakis took leading roles during the conference, while others presented papers.

BioEM 2024 was announced and it will take place in Chania (Greece) next June 16-21.

Winter Schools in Barcelona (Spain) and Erice (Italy)

CIMNE WINTER SCHOOL

CIMNE organised a Winter School on January 22-26, 2024. They taught about Computational Methods, such as linear algebra, continuum mechanics, or the basics of the FEM. These are related to the numerical side of ERMES, a programme that models the distribution of electromagnetic fields, allowing us to predict its incidence within organisms.

ERICE INTERNATIONAL SCHOOL OF BIOELECTROMAGNETISM

On April 7-12, in Erice (Italy), the 10th Course of the International School of Bioelectromagnetism "Alessandro Chiabrera" took place. The goal of the course is to empower participants to apply epidemiological approaches with confidence, focusing on EMF and health. This course was co-organised with BioEM and counted with NextGEM partners' participation.

Upcoming events

BioEM 2024

Chania, Crete (Greece)

16-21 June

Hosted by ICS-FORTH

BioEM 2024
CHANIA, CRETE, GREECE, 16-21 JUNE 2024

International symposium on Measurements & Networking

Rome (Italy)

2-5 July

Co-organised by Università Cassino

2024 IEEE
INTERNATIONAL SYMPOSIUM ON
M&N Measurements and Networking
July 2-5, 2024 - Rome, Italy

NextGEM

Publications

Petroulakis, N. E., Mattsson, M., Chatziadam, P., Simkó, M., Gavrielides, A., Yiorkas, A. M., Zeni, O., Scarfi, M. R., Soudah, E., Otín, R., Schettino, F., Migliore, M. D., Miaoudakis, A., Spanoudakis, G., Bolte, J. H., Korkmaz, E., Theodorou, V., Zarogianni, E., Lagorio, S., . . . Bogdanova, A. (2023). **NextGEM: Next Generation Integrated Sensing and Analytical System for Monitoring and Assessing Radiofrequency Electromagnetic Field Exposure and Health**. Int. J. Environ. Res. Public Health, 20, 6085.

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I. Kalogeropoulos, M. E. Vlontzou, N. Psaromanolakis, E. Zarogianni and V. Theodorou (2023). **EdgeDS: Data Spaces enabled Multi-Access Edge Computing**. 2023 Joint European Conference on Networks and Communications & 6G Summit (EuCNC/6G Summit), Gothenburg, Sweden, 2023, pp. 424-429.

Deprez K, Verloock L, Colussi L, Aerts S, Van den Bossche M, Kamer J, Bolte J, Martens L, Plets D, Joseph W. (2022). **In-situ 5G NR Base Station Exposure of the General Public: Comparison of Assessment Methods**. Radiat Prot Dosimetry.

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Dasenbrock, C., Poulsen, A. H., Danker-Hopfe, H., Huss, A., Poulletier De Gannes, F., Scarfi, M. R., & Röösli, M. (2024). **Recent research on EMF and health risk, seventeenth report from SSM's Scientific Council on Electromagnetic Fields**. Swedish Radiation Safety Authority, 2024:05.

Public deliverables

Deliverable 2.3 - **Health risks, citizen's concerns and international guidelines**, August 2023.

Deliverable 5.1 - **Definition methodology on umbrella reviews of epidemiological studies**, September 2023.

Funded by the European Union under Grant Agreement Number 101016567. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Health and Digital Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.