



2018-IPR-E2-FGIV-010371

FG IV – Project Officer
Exploratory Research Project:
Electromagnetic Exposure in 5G Networks for
Health and Safety (EMEX-5G)

<p>Position for:</p> <p>FG IV – Project Officer - Scientific / Technical Support Officer</p>	<p>As the science and knowledge service of the Commission, the mission of DG Joint Research Centre is to support EU policies with independent evidence throughout the whole policy cycle.</p> <p>The JRC is located in 5 Member States (Belgium, Germany, Italy, the Netherlands and Spain). Further information is available at: https://ec.europa.eu/jrc/</p> <p>The JRC offers a vacancy for a Contract Agent within the Exploratory Research Project EMEX-5G (Electromagnetic Exposure in 5G Networks for Health and Safety).</p> <p>The JRC Exploratory Research Programme (ER) is a strategic initiative characterised by ideas that may lead to novel results, which are going to qualitatively enrich the current scientific work at the JRC.</p> <p>The vacancy is within the Directorate Space, Security and Migration. The directorate focuses on emergency preparedness, response, disaster risk management and resilience in cases of natural and man-made hazards; cyber security, data protection and space infrastructures as well as the use of communications data by security and intelligence agencies to cover the fight against crime and terrorism, including combatting the illicit trafficking of people, drugs and weapons.</p> <p>The operational scientific research will take place in the unit Technology Innovation in Security.</p> <p>Short description of activity:</p> <p>The research project concerns the electromagnetic exposure in the next generation of mobile cellular networks ('5G'). Innovative 5G antenna technologies based on dynamic beam-forming pose new challenges on how to measure and assess the EMF exposure to the users in this environment. The project will assess existing EMF exposure models and propose improvements for their application to 5G networks, based on the scientific evidence, expert consultation and experimental validation. A 5G network deployment scenario will be used as a reference for studies and comparisons with other models.</p> <p>The successful candidate will:</p> <ul style="list-style-type: none">• Develop a new EMF exposure model applicable to 5G networks;• Develop a harmonised EMF measurement methodology based on different approaches used in the national contexts and• Carry out field experiments to validate exposure model(s). <p>Qualifications:</p> <ul style="list-style-type: none">• Completed university studies of at least three years attested by a diploma and at least five years professional experience in a field relevant to the
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	<p>position, alternatively a doctoral diploma in in electrical engineering / telecommunications engineering / physics or a related field;</p> <ul style="list-style-type: none"> • Hands-on experience of electromagnetic field measurement, modelling and data analysis is essential; • Knowledge of beam-forming antenna technologies, EU/national legislation on EMF exposure, and impact assessment of EMF exposure to human health will be an advantage; • Good oral and written communication skills in English (B2) are essential, knowledge of other languages is an advantage; • Solid record of research activities relevant for the post including publications in international peer-reviewed journals or equivalent policy-oriented studies and field campaigns for national regulatory bodies on EMF exposure is an advantage. <p>In addition, the following elements will be considered as an advantage:</p> <ul style="list-style-type: none"> • Ability to work in a team and multi-cultural environment; • The candidate is expected to be creative and work independently.
<p>Directorate Unit</p>	<p>Space, Security and Migration Technology Innovation in Security</p> <p>Exploratory Research Project: EMEX-5G</p> <p>Further information is available at: https://ec.europa.eu/jrc/en</p> <p>The Scientific Development Unit of the Strategy, Work Programme and Resources Directorate is in charge of the overall JRC Exploratory Research Programme. The operational scientific research will take place in the Technology Innovation in Security Unit.</p>
<p>Indicative duration</p>	<p>24 months</p>
<p>JRC Site Country</p>	<p>Ispra Italy</p>
<p>Rules and eligibility</p>	<p>The candidate must be on any valid EPSO reserve list for Function Group IV contract staff.</p> <p>Applicants to the following Calls for expression of interest can also be considered:</p> <ol style="list-style-type: none"> 1. CAST Permanent - EPSO has launched in January 2017 an open-ended selection procedure to create a pool of candidates from which the institutions, bodies, offices and agencies of the European Union (EU) can recruit contract agents. Details available at the link below: https://epso.europa.eu/documents/2240_en 2. Call COM/1/2015/GFIV – Research - The JRC has launched in January 2015 a permanent call for researchers

FG IV. Details available at the link below:
<https://ec.europa.eu/jrc/en/working-with-us/jobs/vacancies/function-group-IV-researchers>

Auxiliary contract staff:

<https://ec.europa.eu/jrc/en/working-with-us/jobs/temporary-positions/contract-staff-members>

Article 3b of the Conditions of Employment of Other Servants of the European Union applies: the actual period of employment within the Commission under this type of contract, including any period under renewal, shall not exceed 6 years.

Please note that due to the high number of applications received only shortlisted candidates will be contacted.