



2022-IPR-E2-FGIV-021908

**FG IV – Next-Generation Wireless Communications
Scientific Officer**

POSITION FOR:

Member of the contract staff FGIV – art. 3b of the Conditions of Employment of Other Servants

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1962R0031:20110101:EN:PDF>

WE ARE:

As the science and knowledge service of the Commission, the mission of DG Joint Research Centre (JRC) is to support EU policies with independent evidence throughout the whole policy cycle.

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/>

The current vacancy is in the Technology Innovation in Security of the Directorate for Space, Security and Migration of the JRC.

The Wireless Communications and Radio Spectrum Group of the Technology Innovation in Security Unit carries out experimental research on next-generation communications technologies (e.g., 5G/6G, WiFi7, vehicular communications, secure satellite communications systems, etc.) to support the work of EU policymakers, international organisations and standardisation bodies. The group works in close cooperation with the European Commission's Directorate-General for Communications Networks, Content and Technology (DG CNECT) in topics related to radio spectrum management and future connectivity systems.

WE PROPOSE:

The successful candidate will join an enthusiastic and dynamic team of researchers providing scientific and technical advice to the European Commission services in charge of the EU Radio Spectrum Policy Programme, the EU Space Programme and standardisation policies for the placement of radio equipment in the EU Single Market.

The candidate will be expected to produce high-quality scientific and hands-on engineering work in a flexible and fast-evolving environment. The required tasks will cover the following areas: wireless communications laboratory and field testing, digital signal processing, performance analysis of user and network equipment, network simulation and data analysis – amongst other.

Working in a diverse and multicultural team of scientists and engineers, the candidate will carry out technical studies based on modelling, simulation and laboratory experiments. The candidate will also support the preparation and follow-up of research and development actions related to the EU Radio Spectrum Policy Programme and the EU Space Programme, including testing and demonstration campaigns in the JRC laboratories.

The JRC Ispra campus is equipped with world-class research facilities to conduct laboratory activities, including a 20m-diameter hemispheric anechoic chamber, state-of-the art spectrum analysers, signal vector generators, vehicular communications platforms, software-defined radio devices and a vast range of wireless and cellular equipment for experimentation purposes.

WE LOOK FOR:

Candidates are expected to demonstrate the following essential qualifications:

- Ph.D. degree or a minimum of 5 years of full-time research and/or relevant professional experience after the first university degree giving access to doctoral (Ph.D.) studies, in the field of wireless communications;
- Expert knowledge on one or more topics in wireless communications, such as IEEE and 3GPP

- technologies, antennas and propagation, PHY/MAC protocols and satellite communications systems;
- Hands-on experience with laboratory experiments and field measurements;
 - Fluent in oral and written English (C1), ability to produce professional research reports under tight deadlines.

The following will be considered as assets:

- Knowledge of UNIX/Linux systems, protocol stacks, networking, packet analyser tools (Wireshark, tcpdump) and network simulation tools, such as ns-3;
- Software development experience with MATLAB and/or Python;
- A good record of relevant publications in leading international conferences and specialised journals;
- Dynamic, motivated and adaptable team player with a low ego.

INDICATIVE CONTRACT'S DURATION:

36 months initial contract with possible renewals up to maximum 6 years.

PLACE OF WORK:

Ispra (IT)

ELIGIBILITY CRITERIA:

Candidates for this contract agent post shall:

- (i) have passed a valid EPSO CAST selection procedure;

or

- (ii) be registered in the EPSO Permanent CAST <https://epso.europa.eu/en/documents/call-expressions-interest-0>

or

- (iii) be registered in the specialised call for researchers https://joint-research-centre.ec.europa.eu/working-us/jobs-jrc/temporary-positions/contract-staff-members/function-group-iv/job-opportunities-research-fellows-european-commission_en (used mainly by the JRC).

With a valid application number to one of the above, you may then apply for this specific vacancy at JRC through: <http://recruitment.jrc.ec.europa.eu/?type=AX>.

RECRUITMENT POLICY:

The Joint Research Centre

- Cultivates a workplace based on respect for other people and the environment.
- Embraces non-discriminatory practices and equality of opportunity. In case of equal merit, preference will be given to the gender in minority.