

July 2023

Title: Junior Professional Officer – Junior Satellite Frequency Request Submission

Officer

Unit: BR/SSD/SPR

Supervision: Radiocommunication engineer, head of section within the Space Publication and

Registration division

Location: ITU Headquarter – Geneva, Switzerland

Grade: P2

ITU is the United Nations specialized agency for information and communication technologies – ICTs.

We allocate global radio spectrum and satellite orbits, develop the technical standards that ensure networks and technologies seamlessly interconnect, and strive to improve access to ICTs to underserved communities worldwide.

ITU is committed to connecting all the world's people – wherever they live and whatever their means. Through our work, we protect and support everyone's fundamental right to communicate.

Today, ICTs underpin everything we do. They help manage and control emergency services, water supplies, power networks and food distribution chains. They support health care, education, government services, financial markets, transportation systems, e-commerce platforms and environmental management. And they allow people to communicate with colleagues, friends and family anytime, and almost anywhere.

With the help of our global membership, ITU brings the benefits of modern communication technologies to people everywhere in an efficient, safe, easy and affordable manner.

ITU membership reads like a Who's Who of the ICT sector. We're unique among UN agencies in having both public and private sector membership. So in addition to our 193 Member States, ITU membership includes ICT regulators, many leading academic institutions and some 700 tech companies.

In an increasingly interconnected world, ITU is the single global organization embracing all players in this dynamic and fast-growing sector.

The JPO would be based in ITU HQ in Geneva, Switzerland, an international and exciting city that host more than 190 international organizations. Geneva host more than two thirds of all UN activities and is visited by nearly 3000 heads of states or similar officials every year. It is a great opportunity to be based at the heart of the diplomatic world, and meet people from across the globe.

Organizational Unit:

Organ: The Radiocommunication Bureau (BR) is responsible for the application of the Radio Regulations and for technical and administrative support of ITU World and Regional Radiocommunication Conferences, Radiocommunication Assemblies and Study Groups. The Bureau also carries out the international regulatory processes for registration of frequency assignments and satellite orbits and assists administrations in their coordination and implementation of frequency spectrum and orbit requirements as well as in resolving cases of harmful interference. It provides the specialised technical secretariat for the work of the Radiocommunication Study Groups and the Radiocommunication Assembly in the development of recommendations for spectrum utilisation and radio system characteristics. The BR is organised into four Departments: Space Services Department, Terrestrial Services Department, Informatics, Administration and Publications Department and the Study Groups Department.

Organization Unit: Within the Radiocommunication Bureau, the Space Services Department (SSD) is responsible for the coordination and recording procedures for space systems and earth stations. In these activities the Department deals with the capture, processing and publication of data and carries out examinations of frequency assignment notices submitted by administrations with a view to their inclusion in the formal coordination procedures or their recording in the Master International Frequency Register (MIFR). The Department is also responsible for the management of the procedures of the space related assignment or allotment Plans of the ITU and for the provision of assistance to administrations in their frequency management activities. The Department comprises three Divisions: Space Systems Coordination (SSC), Space Notification and Plans (SNP) and Space Publication and Registration (SPR).

Duties, responsibilities and output expectations:

The Junior Professional Officer will work in the Space Publication and Registration division of the Space Services Department, under the supervision of a Radiocommunication engineer, Head of section.

The main duties and responsibilities will be to:

- 1. Review and update all validation rules used in for space and earth station filings, classifying them into different categories for completeness, correctness and other categories;
- 2. Redesign the electronic library of antenna patterns for space and earth stations for use in the capture of satellite network filings;
- 3. Carry out technical analysis of NGSO satellite filings, especially for small satellites;
- 4. Develop software tools as needed to complement existing BR space software.
- **5.** May be asked to perform additional duties.

Qualifications and experience required

Education:

University degree in electronics engineering, computer engineering or Information Technology, OR education from a reputed college of advanced education with a diploma of equivalent standard to that of a university degree in one of the fields above.

Work experience:

At least three years of experience in telecommunications, radiocommunications or software development. An advanced degree in a related field can be considered as a substitute for one year of working experience. A doctorate in related fields can be considered as a substitute for two years of working experience.

Languages:

Knowledge of one of the six official languages of the Union (Arabic, Chinese, English, French, Russian, Spanish) at advanced level and knowledge of a second official language at intermediate level. Knowledge of a third official language would be an advantage. (Under the provisions of Resolution No. 626 of the Council, a relaxation of the language requirements may be authorized in the case of candidates from developing countries: when candidates from such countries possess a thorough knowledge of one of the official languages of the Union, their applications may be taken into consideration.)

Competencies:

- **Core Competencies:** Applying Expertise; Effective Communication; Learning and Knowledge Sharing; Organizational Commitment; Results-Focused, and; Teamwork and Collaboration
- **Functional Competencies:** Analysis, Judgement & Decision-Making; Client and Service Orientation; Innovation and Facilitating Change; Networking and Building Partnerships; Planning and Organizing.
- Technical Competencies:
 - o Programming skills, knowledge of SQL
 - o Basic knowledge in radiocommunications
 - o Experience in Cubesat development will be an advantage

Training and Learning Elements:

- Knowledge of frequency/orbit registration process for satellite networks
- Technical elements of satellite communications system and their application in interference analysis
- Working in a multicultural, multi-national environment