International Civil Aviation Organization
Job Description [Applicable solely to secondment]

POSITION INFORMATION

Post Title:	Technical Expert, Communications, Navigation and Surveillance (CNS)	Duration of Secondment:	3 years
Grade Level:	P-4	Deadline for applications:	
Duty Station:	Montreal	Date for entry on duty:	
Special Notice: The ICAO Assembly recently reaffirmed its commitment to enhancing gender equality and the advancement of women by supporting UN Sustainable Development Goal 5 **"Achieve gender equality and empower all women and girls."**			

THE ORGANIZATIONAL SETTING

The Air Navigation Bureau (ANB) is responsible for providing technical guidance to the Air Navigation Commission (ANC), the Council, and the Assembly. ANB provides technical expertise in aviation-related disciplines to States, industry and all elements of the Organization. The Bureau is also responsible for maintaining and implementing the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP), including its aviation system block upgrades as well as producing yearly safety and air navigation status reports. The Bureau develops technical studies and proposals for Standards and Recommended Practices (SARPs), and Procedures for Air Navigation Services (PANS) for further processing by the governing bodies of ICAO. The Bureau also develops related procedures and guidance material. The Bureau also manages the Universal Safety Oversight Audit Programme (USOAP) and Continuous Monitoring Approach that monitors all Member States on a continuous basis.

The Communications, Navigation and Surveillance (CNS) Section is the primary focal point within the Bureau for standardization and implementation support of aeronautical communications, navigation and surveillance systems as well as aeronautical radiofrequency spectrum management. The Section advises States, Council and the Air Navigation Commission on CNS and radiofrequency spectrum matters and has the overall responsibility for Annex 10 – Aeronautical Telecommunications and other CNS related Guidance Documents. It maintains a primary coordination role with the International Telecommunication Union (ITU) and CNS related industry. In addition, the CNS Section conducts studies and manages work programmes aimed to evolve the required CNS systems roadmap and frequency spectrum access strategy and its rollout plans, in the short, medium and long term, in a performance based and service-oriented manner.

The incumbent reports to the Chief, CNS Section. The responsibilities of the post, as detailed below, focus on aeronautical communications, navigation and surveillance (CNS) systems and radiofrequency spectrum management.

MAJOR DUTIES AND RESPONSIBILITIES

Function 1 (incl. Expected results)

Drafts proposals related to the amendment and implementation of technical annexes to the ICAO Convention and other ICAO regulatory documents, achieving results such as:

- Analyse problems raised by States and International Organizations in the field of communications, navigation and surveillance (CNS) systems and radiofrequency spectrum management and recommend appropriate solutions.
- Propose amendments to Annexes to reflect operational needs and new trends and technological developments.
- Propose amendments to other documents, such as manuals to facilitate the implementation of Annex requirements.
- Maintain the awareness of significant trends and technological developments in the field of CNS systems and spectrum management.
- Prepare technical studies and working papers for the ANC, international meetings, etc. relating to operational procedures and technical aspects of CNS systems and to spectrum management.
- Analyse and draft proposals related to the amendment and/or implementation of relevant technical Annexes to the Convention and other ICAO documents, particularly in the areas of CNS and spectrum management.
- Preparation of reports on analyses of technical/operational aspects of civil aviation, and preparation of working papers, reports, briefs, correspondence, etc. Review and development of related global guidance.

- Support ICAO panels and study groups as may be necessary to ensure relevant coordination in the building of global provisions and guidance.
- Analyse problems raised by States and international organizations and recommend solutions to such problems.

Function 2 (incl. Expected results)

Develops working papers for the ICAO Council, ANC and international meetings on matters related to CNS systems and spectrum management, achieving results such as:

- Develop comprehensive working papers, State letters and other documentation required to present Annex amendment proposals and ICAO technical and policy material related to spectrum management to the ANC and ICAO Council to facilitate technical discussions.
- Participate in the discussion of such papers and provide support information as needed.
- Conduct the necessary follow up actions resulting from the discussion of the papers during panel and working group meetings.

Function 3 (incl. Expected results)

Serves as Secretary and/or manages or supports various CNS panels, such as the Communications Panel (CP), Navigation Systems Panel (NSP), Surveillance Panel (SP) and Frequency Spectrum Management Panel (FSMP) etc. and/or study groups of the ANC, achieving results such as:

- Provide comprehensive analysis of issues raised by States and international organizations in the field of CNS systems and spectrum management.
- Provide solutions to technical issues in support of the ANC and Council.
- Develop meeting documentation to facilitate effective technical discussions including working papers, presentations and reports.
- Provide guidance on ICAO procedures and methodologies for standards making.
- Review draft proposals from the study groups and/or panel working groups for quality and consistency with ICAO policies.
- Communicate effectively and coordinate with panel members, other ICAO Sections and technical bodies.
- Report panel activities to the ANC.
- Review proposals to be presented to the ANC from the Secretariat, panels and/or study groups.

Function 4 (incl. Expected results)

Drafts correspondence, technical studies and publications for the transmittal to Member States and international organizations, achieving results such as:

- Draft replies providing specialized advice and assistance to States, air navigation services providers, international organizations, public and or stakeholders on CNS systems and spectrum management.
- Draft and review ICAO publications, such as technical manuals and circulars related to CNS and spectrum management.
- Draft working/information papers for Assembly, Council and other governing bodies, as required.
- Undertake missions to States, and advocate ICAO's position at meetings of other Organizations.

Function 5 (incl. Expected results)

Provides advice, guidance and technical expertise on CNS systems and radiofrequency spectrum management to the Assembly, Council and Air Navigation Commission (ANC), achieving results such as:

- Act as subject matter expert on CNS systems and spectrum management matters, providing recommendations for mitigating potential risks to aviation safety issues related to such matters.
- Either individually or by managing a group, draft working/information papers for Assembly, Council and other governing bodies as required.
- Communicate developments of units/section/branch by preparing and/or delivering presentations, as required.
- Deliver technical training, internal or external, as required.
- Represent ICAO at seminars, workshops, meetings, as required.
- Develop technical briefings and prepare and update presentation to the Assembly, Council, ANC and to various panels.

Function 6 (incl. Expected results)

Actively promotes the ICAO strategy and policy on spectrum management in the international fora responsible for such matters, such as the International Telecommunication Union and regional telecommunication organizations, achieving results such as:

- Make aviation spectrum experts in ICAO member States fully aware of the ICAO strategy and policy on spectrum matters.
- Support of aviation experts from member States in their participation to the respective national and regional fora responsible for spectrum matters by providing technical and policy advice.
- Develop, present and defend ICAO positions in ITU and regional telecommunication fora responsible for technical and regulatory provisions that may have an impact on aviation use of spectrum, such as the ITU Radio Regulations, ITU-R Recommendations and relevant regional radio regulatory provisions.
- Organize ICAO spectrum management seminars/workshops at the regional level.
- Develop guidance and promotional material in support of the ICAO strategy and policy on spectrum matters.

Function 7 (incl. Expected results)

Performs other related duties, as assigned.

IMPACT OF THE OUTCOME OF THE POSITION

This position plays an important role in the development and implementation of ICAO Standards and Recommended Practices and related guidance material for air navigation services, with particular regard to CNS systems, and in the development and support of ICAO policy and guidance on matters related to radiofrequency spectrum management. The impact of the key functions of the position on the Organization as a whole is significant, as it directly contributes to ICAO's ability to effectively assist States in pursuing safety and efficiency improvements — through the development of enabling ICAO provisions for CNS systems supporting such improvements, and through effective action to ensure the availability of protected aeronautical spectrum for such systems, in line with ICAO's strategic objectives.

WORK RELATIONS AND CONTACTS

Title and level	Purpose
a) Inside the Organization • Technical Officers across ANB, other Bureaus and Regional Offices. • Representatives from the Air Navigation Commission, States, the greater UN, International Organizations and Industry	Consult and coordinate on the development and implementation of technical provisions, requirements, operational procedures and guidance material, especially as relates to Annex 10 to the ICAO Convention. Consult on all matters related to the area of specialization, providing technical input to designated specialized Panel and coordinating efforts with these and other panels and working groups.
b) Outside the Organization • Aviation, telecommunications and frequency spectrum experts in member States and international organizations	Facilitate global coordination of development of ICAO provisions. Close working relations will be maintained with the technical expert bodies of the International Telecommunication Union (ITU), regional telecommunications regulatory bodies such as The Asia-Pacific Telecommunity (APT), African Telecommunications Union (ATU), The European Conference of Postal and Telecommunications Administrations (CEPT), Inter-American Telecommunication Commission (CITEL), and with technical standardization entities such as Radio Technical Commission for Aeronautics (RTCA) and European Organisation for Civil Aviation Equipment (EUROCAE).

QUALIFICATIONS AND EXPERIENCE

Education

Essential

One of the following is required :

- An advanced-level university degree (Master's degree or academic equivalent) in electronics engineering relevant to the field of aeronautical CNS systems, or

- A first-level university degree or a recognized professional engineering qualification together with completion of specialized aeronautical technical studies, in combination with two additional years of qualifying experience

Professional experience

Essential

- A minimum of seven (7) years of experience in the technical, operational and procedural aspects of aeronautical communications, navigation and surveillance (CNS) including radiofrequency spectrum management.
- Experience working in an international environment or participating in international/regional civil aviation activities (e.g., ICAO, ITU, or related expert groups).
- Experience with project planning/management methods.

Desirable
- Experience of working collaboratively in the ICAO standards making framework and/or relevant expert/regional ICAO bodies.
- Experience in working with bodies such as ITU and Regional Spectrum Management Organizations in achieving international consensus related to radio frequency spectrum management.
- Experience in the implementation of aeronautical radio communication systems, navigational aids, primary/secondary radars and/or other surveillance systems.
- Work experience in a Civil Aviation Authority.

Languages

Essential
Fluent reading, writing, and speaking abilities in English.
Desirable
A working knowledge of any other language of the Organization (Arabic, Chinese, French, Russian, Spanish)

Competencies

Professionalism: Knowledge of civil aviation infrastructure and ICAO's role, functions and documentation. Familiarity with ICAO institutional objectives and air navigation planning framework. Good knowledge of ICAO provisions related to CNS, radio frequency interference mitigation, and aeronautical spectrum management, including ICAO Annex 10. Sound knowledge of modern radio frequency and digital technologies for ground and satellite-based aeronautical CNS infrastructure and familiarity with conventional CNS technologies. Familiarity with radio frequency spectrum issues and the role of the International Telecommunications Union (ITU). Knowledge of ICAO functions, organization and international activities in fields other than CNS and spectrum management. Shows pride in work and in achievements; demonstrates professional competence and mastery of subject matter; is conscientious and efficient in meeting commitments, observing deadlines and achieving results; is motivated by professional rather than personal concerns; shows persistence when faced with difficult problems or challenges; remains calm in stressful situations. Takes responsibility for incorporating gender perspectives and ensuring the equal participation of women and men in all areas of work.

Teamwork: Works collaboratively with colleagues to achieve organizational goals; solicits input by genuinely valuing others' ideas and expertise; is willing to learn from others; places team agenda before personal agenda; supports and acts in accordance with final group decision, even when such decisions may not entirely reflect own position; shares credit for team accomplishments and accepts joint responsibility for team shortcomings.

Communication: Speaks and writes clearly and effectively; listens to others, correctly interprets messages from others and responds appropriately; asks questions to clarify, and exhibits interest in having two-way communication; tailors language, tone, style, and format to match the audience; demonstrates openness in sharing information and keeping people informed.

Planning and Organizing: Develops clear goals that are consistent with agreed strategies; identifies priority activities and assignments; adjusts priorities as required; allocates appropriate amount of time and resources for completing work; foresees risks and allows for contingencies when planning; monitors and adjusts plans and actions as necessary; uses time efficiently.

Accountability: Takes ownership of all responsibilities and honours commitments; delivers outputs for which one has responsibility within prescribed time, cost and quality standards; operates in compliance with organizational regulations and rules; supports

subordinates, provides oversight and takes responsibility for delegated assignments; takes personal responsibility for his/her own shortcomings and those of the work unit, where applicable.

Commitment to Continuous Learning: Keeps abreast of new developments in own occupation/profession; actively seeks to develop oneself professionally and personally; contributes to the learning of colleagues and subordinates; shows willingness to learn from others; seeks feedback to learn and improve.

Mode of Secondment

The duration of the secondment is 3 years, which can be extended, depending on need for the subject matter expert. The secondee is expected to work five days per week.

ICAO may avail itself of the services of personnel seconded by governments, other international agencies or educational, scientific, research or other institutions. Seconded personnel are engaged under a Trusted Funded or Gratis (detached expert) arrangement, in accordance with terms and conditions stipulated in a Memorandum of Understanding between ICAO and sponsor of the seconded person. During the period of assignment with ICAO the seconded individual will be considered an "Official" of ICAO.

Once engaged by ICAO the seconded individual will be under the sole authority of the Secretary General of ICAO and all relationship with the releasing Government/Agency will be held in abeyance during the period of employment with ICAO.

As detached expert: The individual is detached from the releasing government/Agency but is assigned to work for ICAO.

Trust Fund arrangement: Funds are deposited by the Government/Agency with ICAO for the purpose of engaging personnel normally subject to the stipulations of a Memorandum of Understanding.

Notice to Candidates

ICAO does NOT charge any fees or request money from candidates at any stage of the selection process, nor does it concern itself with bank account details of applicants. Requests of this nature allegedly made on behalf of ICAO are fraudulent and should be disregarded.