



International Civil Aviation Organization

Job Description (Applicable solely to Secondment)

POSITION INFORMATION

Post Title:	Technical Officer Systems Integration (3 posts)	Duration of Secondment:	2 years with possibility of extension
Grade Level:	P-4	Deadline for applications:	Indefinite
Duty Station:	Montréal, Canada	Date for entry on duty:	As soon as possible

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. The Air Navigation Bureau provides technical expertise in aviation-related disciplines to States, industry and all elements of the Organization. The Bureau is also responsible for maintaining and supporting implementing the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP), including its aviation system block upgrades as well as producing regular 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 manages the Universal Safety Oversight Audit Programme (USOAP) and Continuous Monitoring Approach that monitors all States on a continuous basis.

The Multidisciplinary Priorities Section (MDP) is responsible for the coordination of multi-disciplinary priorities including Commercial Space Transport, and Higher Airspace Operations. MDP serves as the focal point for Innovation for ANB and studies emerging technologies and operations that do not fall under the scope of one of the technical sections of the Bureau. The MDP supplements the efforts across the Safety and Capacity and Efficiency programmes on New Entrants by providing a systems integration function with a view to enabling them to be a catalyst for the transformation of the global aviation system. This includes utilizing digitalization, model based system engineering and other modern approaches. It also deploys a holistic end-to-end approach to the introduction of new entrants that recognizes and accommodates for the fact that, that Member States may often adopt New Entrants earlier than ICAO can develop traditional global policies and guidance materials for. MDP works with all elements of the Safety and AN Capacity and Efficiency, to ensure that these early adopters are supported with the best interest of safety and efficiency in mind. This strategy is implemented primarily by leveraging experts within Member States, International Organizations, other external stakeholders who are at the leading edge of the relevant developments.

The Technical Officer, System Integration is responsible for developing and implementing a systems integration framework for new entrants that interfaces, and has minimal duplication, with the existing mechanisms for conceptualizing, planning and delivering the technical work of the Bureau across the pillars of Standardization, Monitoring and Implementation Support.

The incumbent reports to the Chief, MDP, and works, via a matrix model, with other managers on specific deliverables related to their work. The Technical Officer, Systems Integration collaborates closely with other Technical Officers in the Bureau, as well as with Regional Offices for all systems integration-related matters.

MAJOR DUTIES AND RESPONSIBILITIES

Function 1 (incl. Expected results)

Designs and implements a systems integration framework for new entrants that interfaces, and has minimal duplication, with the existing mechanisms for conceptualizing, planning and delivering the technical work of the Bureau, across the pillars of Standardization, Monitoring and Implementation Support, achieving results such as:

- Design the overall system, including how to model use cases, requirements, policies, dependencies, and other elements.
- Ensure that the system and models are minimized and optimized to the role of ICAO.
- Define the interface between the systems and all relevant information captured in existing systems managed by ICAO.
- Achieve buy-in and validation of design from key internal stakeholders, making modification as necessary.
- Secure approval for the system from the Director, and include an estimate for the cost of development, deployment and maintenance of it, adjusting the scope and functionality as necessary to ensure affordability of the system.
- Develop and implement a plan to roll out the system.

Function 2 (incl. Expected results)

Provides subject matter advice on systems engineering/integration, achieving results such as:

- Provide advice to expert groups on the subject.
- Mentor colleagues on the subject.
- Provide subject matter input to relevant ICAO events.
- Provide subject matter input to relevant implementation support activities.

Function 3 (incl. Expected results)

Develops proposals for the use of systems engineering to add value to existing work, achieving results such as:

- Keep abreast of significant trends and technological developments in systems engineering.
- Conduct an analysis of the potential areas of existing work that could benefit significantly from the use of systems engineering.

Function 4 (incl. Expected results)

Performs other related duties, as assigned.

IMPACT OF THE OUTCOME OF THE POSITION

The outcome of the position will potentially increase the efficiency and effectiveness of all multidisciplinary projects within the Air Navigation area as it will provide a digitalized and integrated approach to the work. This should enable ICAO to avoid duplication, avoid unintended consequences of an amendment in one area to another rendering the final product less effective, and to better manage the effect of delays in one work stream to the deliverables in another. Given the increasing number and pace of multidisciplinary subjects that are being addressed by ICAO, the impact of this position can have a very significant impact on the Organization's ability to deliver the harmonized provisions and other critical needs of the community.

WORK RELATIONS AND CONTACTS

Title and level	Purpose
a) Inside the Organization <ul style="list-style-type: none"> • Director ANB • Deputy Director ANS • Deputy Director MAC • Chiefs of ANB sections • Technical Officers ANB sections • Regional Deputy Directors and Officers • Chiefs and TOs of other bureaux 	<ul style="list-style-type: none"> • D and DDs: Provide advice on overall strategies related to the implementation of systems integration in the work of the bureau • Chiefs and TOs: develop solutions to help integrate technical work of the bureau • Regional and Other Bureau managers and technical officers: work closely to link to the work outside of ANB, as necessary and relevant.
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b) Outside the Organization <ul style="list-style-type: none"> • Technical staff of Higher Airspace Operations companies • Technical staff of International Organizations 	<ul style="list-style-type: none"> • Present ICAO work and seek and incorporate feedback. Provide systems integration architecture • Present ICAO work and seek and incorporate feedback. Provide systems integration architecture

QUALIFICATIONS AND EXPERIENCE

Education

Essential

- An advanced-level university degree (Master's degree or academic equivalent) in engineering, or related field, is required. A first-level university degree in combination with two additional years of qualifying experience in engineering, or related field, may be accepted in lieu of the advanced university degree.

Professional experience

Essential

- A minimum of seven (7) years of experience in an aviation environment, in the private sector and/or in a state authority or regional organization.
- At least six years of experience in a role related to Systems Engineering.
- Considerable experience in systems: modelling, optimization, design, and implementation in a cross functional environment.
- Experience in managing complex stakeholders, effective communications, and engagement.
- Experience in modelling requirements or regulations.

Desirable

- Experience in working on the introduction of new technologies into an existing complex system, preferably in the aviation sector.

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: Strong demonstrable process re-engineering skills. Proficient in Microsoft Office including Word, Excel and Power Point. Shows pride in work and in achievements; demonstrates professional competence 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.

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.

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.

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.

Client Orientation: Considers all those to whom services are provided to be "clients" and seeks to see things from clients' point of view; establishes and maintains productive partnerships with clients by gaining their trust and respect; identifies clients' needs and matches them to appropriate solutions; monitors ongoing developments inside and outside the clients' environment to keep informed and anticipate problems; keeps clients informed of progress or setbacks in projects; meets timeline for delivery of products or services to client.

Judgement/Decision-making: Identifies the key issues in a complex situation, and comes to the heart of the problem quickly; gathers relevant information before making a decision; considers positive and negative impacts of decisions prior to making them; takes decisions with an eye to the impact on others and on the Organization; proposes a course of action or makes a recommendation based on all available information; checks assumptions against facts; determines that the actions proposed will satisfy the expressed and underlying needs for the decision; makes tough decisions when necessary.

MODE OF SECONDMENT

The duration of the secondment is for 2 years which can be extended for an additional year. 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 Trust 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.