Internship Announcement – Year 2017



The International Civil Aviation Organization (ICAO), through its Internship Programme, aims to provide an enriching experience to young professionals to complement their academic studies and research projects in areas related to civil aviation so as to assist in motivating them to continue to pursue a career in the global aviation community. With this goal in mind, and in accordance with its Memorandum of Understanding (MOU) with the China Scholarship Council (CSC), ICAO is offering internship opportunities to students who have completed, or are enrolled in, a graduate degree programme (second-level university degree, or higher).

Expected contribution: The selected interns will be expected to contribute to ICAO work programmes related to technical air navigation disciplines, which encompasses safety, air navigation capacity and efficiency, as well the air transport-related disciplines, which encompasses aviation security and facilitation, environmental protection, and economic development of air transport. For illustrative purposes, the Appendix to this Announcement provides a broad list of activities around which a detailed internship proposal and associated terms of reference could be developed for internships at ICAO.

Development Opportunity: During their internship at ICAO, interns are given the opportunity to develop and further advance their knowledge and understanding of international civil aviation regulatory activities. Each intern will be guided and supervised by a subject matter expert. Furthermore, performance feedback during and at the end of the internship will be provided.

Duration: Interns selected under the framework of the MOU between ICAO and CSC will normally be offered an internship for a duration of three to six months. An internship for up to a maximum duration of twelve months may be offered, taking into account the needs of ICAO.

Living costs: All living costs and expenses will be borne by the intern. Interns will not receive any financial remuneration from ICAO.

Selection criteria

Level of education: Having completed, or enrolled in, a graduate degree programme (second-level university degree, or higher).

Language skills: Functional reading, writing and speaking abilities in English is required. Working knowledge of a second language commonly used in international organizations (French, Spanish, Chinese, Russian or Arabic) would be an asset.

Competencies

Planning and Organizing: Ability to set clear goals, prioritize, anticipate problems or risks, and have effective time management skills.

Communication: Ability to write in a clear, concise and accurate manner. Ability to communicate verbally and with diplomacy.

Teamwork: Ability to work collaboratively with others and maintain harmonious working relationships in a multicultural environment.

Technological awareness: Ability to use contemporary software such as MS Office Suite (Word, Excel and PowerPoint), SharePoint, or equivalent, and demonstrate a willingness to learn and use new technology.

Application

How to apply: Interested candidates are requested to submit to their CSC Focal Point for ICAO Internships an updated curriculum vitae, together with a transcript of their courses taken to date in their graduate degree programme, as well as a motivation letter indicating why they are interested in undertaking an internship with ICAO, how their studies relate to the work of ICAO, what their career aspirations are, and any other related information they would like to share.

They should also indicate (in priority order) the top two activities they would be interested in working on during their internship with ICAO and why they are interested in these activities.

Deadline for application: 28 Feb 2017

Activities in technical air navigation disciplines available for ICAO Internships

Safety, Air Navigation Capacity and Efficiency

The Air Navigation Bureau (ANB) in ICAO 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 (ASBU), as well as producing annual 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 ICAO Universal Safety Oversight Audit Programme (USOAP) that monitors all Member States on a continuous basis.

The specific tasks to be assigned will vary, taking into account programme needs and the qualification profile of the selected intern.

Safety:

- Support the development of a taxonomy for medically related accidents and incidents.
- Development/update of database of Aviation Medical Section contacts and potential service providers (Medical Provisions Study Group, CAPSCA global contacts, global aviation medical organizations and other possible resources.
- Perform literature research and document national legislation in different States relating to medical confidentiality, psychological assessment and alcohol and drug testing in order to develop baseline framework for discussion of harmonization of global aviation medicine regulations.
- Document different aviation medical legislative requirements in different States/regions in order to develop baseline framework for discussion of harmonization of global aviation medicine regulations.
- Perform literature research and document national legislation in different States relating to air ambulance operations in order to develop baseline framework for discussion of harmonization of global aviation medicine regulations.
- Support the development and management of technical assistance projects for States/organizations.
- Support Aviation Safety Implementation Assistance Partner (ASIAP) activities.
- Support No Country Left Behind (NCLB) activities.
- Support Next Generation of Aviation Professionals Programme (NGAP) activities.
- Support the Safety Fund (SAFE) Project Review Committee (PRC) activities.
- Review scanned Final Reports and update metadata in Final Reports database.

Air Navigation:

- Assist in the redesign of Annex 3 and the development of a PANS-MET.
- Support the development of metrics associated to different key performance areas.
- Support the development of specific website to support implementation.
- Support the development of Aviation System Block Upgrades (ASBUs) implementation course.
- Support the development of business case tools.
- Support the preparation, conduct and follow up of expert group meetings (e.g. panels and working groups).
- Research and document significant differences with Annexes 2, 11 and PANS-ATM published in the Aeronautical Information Publication(AIPs) of all ICAO Contracting States.
- Research and document current implementation of data link and satellite voice communications.

- Support the development of roll-out materials and website for amendment to Annexes, PANS and guidance material.
- Develop ICAO Crises Response Procedures and Manual

Other:

- Support the continued development and ongoing maintenance of an air navigation integrated work programme.
- Support the maintenance of the ICAO reporting and monitoring system (IRMS).
- Develop or improve operational risk management concepts, metrics and analytical methods.
- Support inter-Bureau collaborative efforts towards the development, implementation and coordination of
 programmes, initiatives and events related to resource mobilization, as well as the identification and establishment
 of partnerships for the purpose of fostering investment in aviation development and capacity at the global,
 regional and local level.

Activities in air transport and related disciplines available for ICAO internships

Aviation Security and Facilitation; Environmental Protection; Economic Development of Air Transport

The Air Transport Bureau (ATB) supports the implementation of the Strategic Objectives of ICAO, in particular Security and Facilitation; Economic Development of Air Transport; and Environmental Protection. It is responsible for the provision of expert assistance required by the governing bodies of the Organization (Assembly, Council, Committees, Panels and Working Groups). The Bureau assists in developing, updating, and promoting the implementation of Standards and Recommended Practices (SARPs) in Annexes 9, 16 and 17 to the Chicago Convention, air transport policies and guidance (such as air transport regulation, economics of airports and air navigation services, and funding of aviation infrastructure) as well as the specifications for machine readable travel documents. The Bureau is also responsible for the development of environment-related policies and measures; and assistance to States in the preparation and implementation of action plans for CO₂ emissions reduction activities. In addition, the Bureau implements the ICAO Comprehensive Aviation Security Strategy (ICASS), including the Universal Security Audit Programme (USAP); provides assistance to States in rectifying deficiencies identified by the USAP; and implements an ICAO Traveller Identification Programme (ICAO TRIP) Strategy.

The specific tasks to be assigned to selected interns will vary, taking into account programme needs, and the qualification profile of the selected intern. For illustrative purposes, a broad list of activities around which a detailed internship proposal and terms of reference could be developed for internships at ICAO is provided below.

Aviation Security and Facilitation:

Security audits

Assist in the planning and scheduling of Universal Security Audit Programme (USAP) activities, and in the
development and update of procedures and workflows relating to programme management, auditing and data
security.

Security Policy

- Support the implementation of the work programme of Aviation Security Policy (ASP) Section, the ICAO Aviation Security Audit (AVSEC) Panel and its Working Groups. Support the planning and conduct of ASP events
- Contribute to the development of tools to foster exchange of information on AVSEC matters, such as the Aviation Security Applications Platform (ASeAP).
- Assist in the collection, verification and analysis of information concerning security threats and acts of unlawful interference with civil aviation.
- Contribute to the work and development of AVSEC policy papers, reports, presentations and articles relating to the Global Aviation Security Plan (GASeP), Cybersecurity, Remotely Piloted Aircraft Systems (RPAS), air cargo security, innovation in aviation security, and any other activities as determined by Chief, ASP.
- Assist in the development of outreach strategies and promotional materials to expand global awareness of ICAO's AVSEC objectives and activities such as the GASeP, ASeAP, cargo security and innovation in aviation security.

Facilitation

- Develop a training course on Machine Readable Travel Documents (MRTDs).
- Support Facilitation (FAL) activities related to States' Implementation Plans to implement the ICAO Traveller Identification Programme (TRIP) Strategy, including establishing a list of national points of contacts for facilitation matters, assessment of submitted action plans and associated assistance needs.
- Support the development and management of technical assistance projects related to the ICAO TRIP Strategy for States/Organizations in the context of the No Country Left Behind (NCLB) initiative.
- Support FAL outreach activities, including the development of brochures, leaflets, presentations, videos, reports, as well as update of FAL websites. Support the planning and conduct of FAL events.
- Perform literature research and document national legislation in different States relating to the facilitation of air cargo operations in order to develop a baseline framework or strategy for a harmonized global air cargo facilitation.
- Support the management and administration of the secure internet platform, the ICAO TRIP Communication platform, including: News & Alerts, Events (Calendar), Discussions, Resources (Documents, Reports, Handbooks, etc.), Forms (Surveys, Questionnaire), Live Meetings and Webinar Lite.
- Assist in building a global database, and/or updating the existing database, on ePassport, biometrics, Public Key Directory (PKD) and Automated Border Control (ABC) as well as on all elements of the ICAO TRIP Strategy.
- Assist in the conduct of a cost-benefit analysis (CBA) of ePassports, PKD and ABC implementation and definition of a CBA template for use by States.
- Assist in defining the research needed for the development of a risk-based model for airport border controls and
 identifying similar existing initiatives and related guidance issued by ICAO and other international organizations in
 order to extract the Standards, best and recommended practices, main areas covered and specificities related to
 border control in an airport environment.

Environment protection:

- **Development of States' Action Plans to reduce CO₂ aviation emissions**: Support Environment (ENV) activities related to States' Action Plans to reduce aviation CO₂ emissions, including contacts with national focal points, organization of capacity-building seminars, and assessment of submitted action plans.
- **Communication and media outreach**: Support ENV outreach activities, including the development of brochures, leaflets, presentations, videos, reports, as well as updates of ENV websites.
- Aviation impacts on climate change scientific assessment: Support ENV activities, related to enhancing scientific
 understanding of aviation's impacts on climate change, as well as climate change's impacts on aviation operations
 and infrastructure (adaptation).

Sustainable alternative fuels for aviation:

- Research and support for the preparation of the Conference on Aviation Alternative Fuels and for the ICAO Global Framework on Aviation Alternative Fuels (GFAAF) web-platform.
- Support ENV activities, related to the life cycle analysis and to the ICAO GFAAF web-platform.
- Global market-based measure (MBM) for international aviation: Support ENV activities, related to a global MBM for international aviation, including support for relevant Committee on Aviation Environmental Protection (CAEP) Working Groups and for the provision of capability building and other technical assistance for implementation by States
- **Cooperation**: Support ENV activities, related to cooperation with other United Nations (UN) bodies and international aviation.

Economic Development of Air Transport:

- Data/Statistics: Verification and validation of statistical data submitted to ICAO. Big data analysis using "R".
 Quality control and business intelligence tool development.
- Forecasting: Conduct passenger and cargo traffic forecasts, using various econometric estimation technics and scenario analysis. Pilot and technical personnel forecast, in cooperation with International Labour Organization (ILO).

- **Micro Analysis**: Conduct and/or analyse studies on price and income elasticity of demand; connectivity indicators; economic impact of liberalization.
- Macroeconomic Analysis: Aviation satellite account methodology development; measurement of aviation GDP input-output table and system of national account analysis.
- Economic Policy: Analysis and uploading of air services agreements for World's Air Services Agreement (WASA) Database. Development of cargo and aircraft leasing guidance material. Development of State/Regional Action Plans for the implementation of the air transport statements/declarations. Assist in the preparation of ICAO Air Services Negotiation (ICAN) event and other air transport events
- **Economic Policy and Infrastructure Management**: Research national/regional development policies and strategies, including UN framework, official development assistance (ODA) and financing for economic infrastructure.
- Infrastructure Management: Analysis of Private-Public Partnership (PPP) for airport/air navigation services. Costbenefit analysis of aviation infrastructure development.

Sustainable Development:

Review available methods and techniques for the estimation of the economic contribution of civil aviation including
possible tools and data sources; review available methods and techniques for the estimation of the impact of civil
aviation on the environment including possible tools and data sources; review available forecasts for civil aviation
and; develop a methodology for the assessment of the sustainability of civil aviation.