



ICAO

TECHNICAL COOPERATION BUREAU



PRODUCTS AND SERVICES

PORTFOLIO 2020

ICAO's Technical Cooperation Bureau (TCB)  
is dedicated to building a safe, secure and efficient global aviation system.



Technical Cooperation Bureau staff

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ICAO's Technical Cooperation Bureau (TCB) has been at the forefront of our Organization's implementation, capacity building, and training activities for more than 60 years.

As ICAO's implementation arm, TCB delivers a full-spectrum of highly tailored services, and responsive solutions, to effectively address its clients' unique aviation challenges and augment their compliance to ICAO Standards and Recommended Practices (SARPS).

Member States and organizations trust TCB because of its commitments to neutrality, transparency, and accountability, its high levels of service quality and customer satisfaction, and the returns on investment its participation helps assure.

Dr. Fang Liu  
Secretary General





# The TCB Portfolio of Products and Services

TCB partners with Member States to achieve strategic and compliance outcomes in aviation safety, capacity and efficiency, security and facilitation, environmental protection, and economic development. We provide clients with:

- Subject Matter Experts
- Recruitment of National Professionals
- Training and Capacity Building
- Procurement of Goods and Services
- Project Management and Financial Monitoring
- Implementation Packages (iPACK)

# Subject Matter Experts

Since its inception, TCB recruits and deploys international subject matter experts to assist clients implement projects to achieve strategic outcomes in civil aviation. TCB offers the following two types of subject matter experts:

## Advisors

are consultants deployed to provide advice to clients only. Some of their tasks among many include:

- Drafting and/or reviewing documents e.g. legislations, manuals, check lists, specifications, etc.;
- Conducting on-the-job training, seminars/workshops or other capacity building activity;
- Carrying out studies, gap-analysis or other similar assessments to provide advice and recommendations; and
- Providing other client support e.g. project management, strategic planning, etc.

## Operational Assistance (OPAS) experts

are embedded with the client entity and are accountable to the client. TCB identifies OPAS experts and handles their contractual and administrative formalities.

These experts may be authorized by the client to issue certificates or inspection sign offs.

## National Professionals

TCB supports clients by administering National Project Professionals (NPPs) and/or National Support personnel. TCB manages the contracts of NPPs and National Support personnel. Personnel are UN-grade national officers. By contracting national professionals through TCB, clients can offer and compete for professionals with competitive remuneration packages to sustain special projects in aviation, including transitioning towards establishment of national CAAs.

# Training and Capacity Building

TCB support Member States with management, technical and operational training of civil aviation administration professionals through training, fellowships, in-country programmes and capacity building. This ensures that all Member States have access to highly qualified and competent personnel for the air transport system in accordance with the latest international standards and recommended practices. Training events occur at various training centres and academies, including:

- ICAO Training Packages
- Standardized Training Packages
- Partnership Training Packages
- Fellowships

By working with TCB on technical cooperation projects, fellowships could be awarded to National Professionals for training. These fellowships may include:

- Individual Fellowships
- Developing Countries Training Programmes (in partnership with ICAO recognized training centres)
- Group Fellowships
- In-Country Training/On-The-Job Training



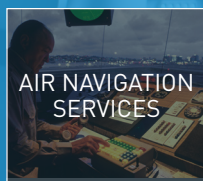
# Global Aviation Training (GAT)

Since its establishment in January 2014, the objective of ICAO's Global Aviation Training Programme has been to provide Member States with targeted assistance and to support their human resources capacity-building. Through the TRAINAIR PLUS Programme's (TPP) growing network of training organizations, academic institutions and corporate partners, over one hundred TPP Members across all Regions have implemented training activities in 75 Member States, including the delivery of ICAO-recognized courses.

## Global Aviation Training Activities:

- **Training Assessments:** Conduct assessments of Training Organizations (TOs) in line with ICAO guidance material; and provide support services in training
- **Training Design and Development:** Design and produce ICAO courses; validate ICAO-recognized training packages; Qualify training experts
- **TRAINAIR PLUS Programme (TPP):** Manage a network of ICAO recognized training centres, international organizations, and academic institutions delivering ICAO training

We have over 200 high quality ICAO courses to meet your competency-development needs, available in online, virtual and classroom format, and in the following categories:



For more information on GAT activities and registration to ICAO courses, please visit [www.icao.int/training](http://www.icao.int/training)



# Procurement of Goods and Services

A safe and secure modern air transport system needs modern aviation equipment and services. TCB offers a full turnkey, ISO9001-certified procurement of goods and services.

TCB's procurement service is unique in that it offers the clients an assurance of quality, neutrality and transparency with no commercial interest.

TCB is proud of its past performance in ensuring No Country Left Behind in the modern aviation system.

From Air Safety to Cyber Security; Civil Aviation Master Plans to Remote Piloted Air Systems, we can support.

TCB is your partner in ensuring global aviation standards.

# Project Management and Financial Monitoring

TCB employs a certified PRINCE2 project management methodology to deliver its services to clients.

All projects are closely monitored to ensure that results are achieved on time and on budget. Funds transferred to TCB for implementation are held in trust, to ensure that the client is in control of the financial decisions on projects. Funds are monitored in accordance with UN financial rules and procedures.



# Safety Oversight

- Audit Related Assistance
  - Preparation for ICAO Audit
  - Post Audit implementation
  - Implementation of SARPs
- Implementation of Global Aviation Safety Plan (GASP)
- SSP Implementation & SMS Oversight
- Ongoing Assistance in All Audit Areas
  - Procedures
  - Checklists
  - Manuals
  - OJT
  - Training





# Organizational Assistance to Civil Aviation Authorities

- Legislative Assistance
- Review Primary Legislation
- Review Regulations
- Administrative Review
- Review of Organizational Structure
- Development of Organizational Manuals
- Organizational Transition
- Training
- Drafting Training Plans
- Provision of Competency-Based Training

# Air Navigation Capacity and Efficiency

- Planning
  - Airspace Design
  - Procedures Design
  - PBN Implementation
  - National Air Navigation Plans
- Separation of Air Navigation Service Providers
- Provision of Equipment
  - Communications Systems (AFTN, CPDLC, ATIS, HF/VHF/UHF Radio)
  - Navigation Systems (ILS, DME, VOR, RNAV and RNP Approaches)
  - Surveillance Equipment (Primary and Secondary Radars, Surface Movement Radars, Multilateration Systems)
  - AIS and Aeronautical Information Exchange Model (AIXM)
  - Meteorological Systems
  - Remote Towers
  - Simulators
  - Air Traffic Control Training

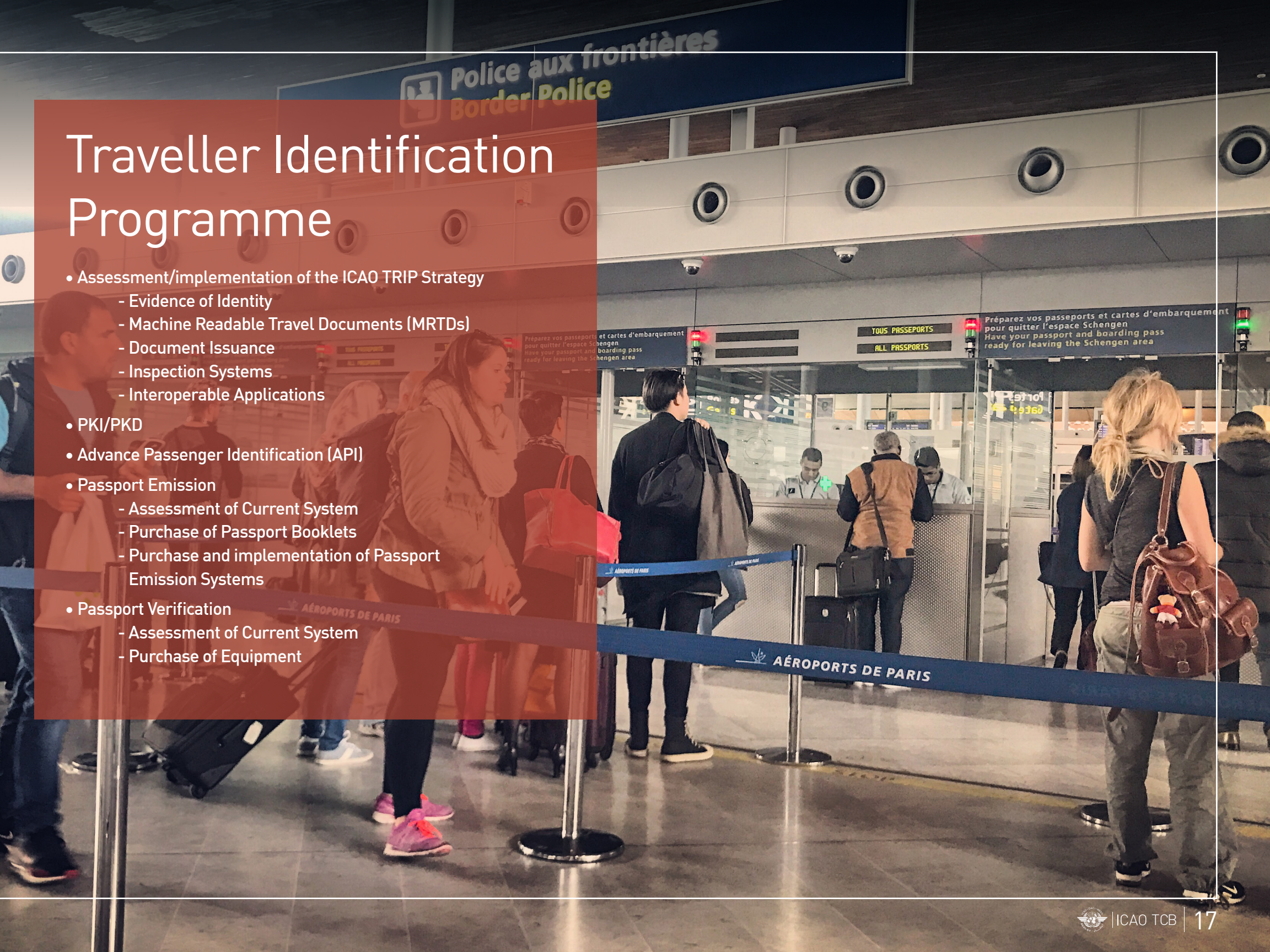


# Security

- Audit Related Assistance
  - Preparation for ICAO Audit
  - Assistance Post Audit
  - Implementation of SARPs.
- Global Aviation Security Plan (GASeP)
- Development and Implementation of State Security Plan (SSeP)
- Provision of Security related equipment
- Cybersecurity

# Traveller Identification Programme

- Assessment/implementation of the ICAO TRIP Strategy
  - Evidence of Identity
  - Machine Readable Travel Documents (MRTDs)
  - Document Issuance
  - Inspection Systems
  - Interoperable Applications
- PKI/PKD
- Advance Passenger Identification (API)
- Passport Emission
  - Assessment of Current System
  - Purchase of Passport Booklets
  - Purchase and implementation of Passport Emission Systems
- Passport Verification
  - Assessment of Current System
  - Purchase of Equipment



# Airports and Aerodromes

- Aeronautical Studies
  - Airport Capacity Studies
  - Feasibility Studies
  - Environmental Studies
  - Obstacle Limitation Studies
- Planning
  - National Airport Development Plans
  - Airport Master Plans
- Airport Development
  - Site Selection
  - Airport Design and Supervision of Construction Works
  - Airport Construction
- Provision of Equipment
- Aerodrome Certification



# Aviation System Planning

- Civil Aviation Master Plan
- Airport Development Plan
- State Safety Plan
- State Security Plan
- Environmental Actions Plans
- State Action Plans (Audit related)
- Air Cargo Security Plan
- National Air Navigation Plan



# Environment

- Implementation of Environmental Measure for Civil Aviation
- Drafting State Action Plans
- Noise Reduction Operational Procedures (CDO and CCO)
- Environmental Impact Studies
- Land Use Planning and Environmental Control
- ATM Environmental Assessments (DOC 10031)

# Procurement of Goods and Services

- Full Turn Key Procurements
- Long Term Agreements (LTAs)
- Definition of Needs
- Drafting of Technical Specifications/Terms of Reference and Evaluation Criteria
- Tendering Services
- Evaluation of Bids and Proposals
- Evaluation of Bids and Proposals
- Negotiation and Award of Contracts
- Project Management and Monitoring
- Contractual Monitoring and Oversight
- E-Passport Framework and Systems
- Aviation Security Equipment (i.e. Screening and metal detectors)
- Enviromental Studies/Solar Energy Products
- Sustainable Procurement



# Air Transport and Economic Planning

- Civil Aviation Master Planning
- Review of National Air Transport Policy and Regulations
- National Aviation Policy
- National Forecast
- Specific Airport Forecast
- Privatization and Concessions
- Economic Studies
- Review of Airport and/or Overflight Charges





## Our Roster of Aviation Experts

As experts in aviation, TCB maintains an active roster of international and local experts as well as consulting firms specializing in virtually all aspects of civil aviation. The experts and consultants advise, assist or instruct Member States in the field.

## Whom Do We Serve?

TCB serves both Member State and non-State entities, including all ICAO Member States and the greater international aviation community to build and strengthen their technical capacity in aviation. TCB also collaborates with like-minded partners in other international and regional organizations, development agencies, industry and academia.

## How We Can Partner Together?

TCB projects are both flexible in both scope and financing. Most TCB projects with Member States are funded in trust through what is known as Management Services Agreement (MSA), depending on project complexity. TCB can also assist Member States to enhance their civil aviation systems and capacity through facilitating access to voluntary funds from international donors.

# Implementation Package (iPACK)

To support States in their compliance efforts, various Implementation Packages (iPACKs) have been made available. An iPACK is a bundle of standardized guidance material, training, tools and expert support which aim to facilitate and guide the implementation of ICAO provisions for State entities (e.g. Governments, Civil Aviation Authorities, National Air Transport Facilitation Committees...), aviation service providers, supply chain stakeholders and their personnel.

An iPACK is intended to be a self-contained package composed of the relevant:

- guidance material, including ICAO Annexes, Documents, Circulars, best-practices papers or other associated guidance material;
- standardized training, including standardized and competency-based trainings, in classroom, online or virtual formats;
- tools, including data-driven applications, online reporting systems, electronic management systems or questionnaire/surveys;
- subject matter expertise, including the provision of experts to support States in their activities; and
- guidance for procurement, with regards to the purchase of infrastructure or equipment.

For more information on I-Packs, their content and deployment process, please visit [www.icao.int/iPACK](http://www.icao.int/iPACK) or email [iPACK@icao.int](mailto:iPACK@icao.int)

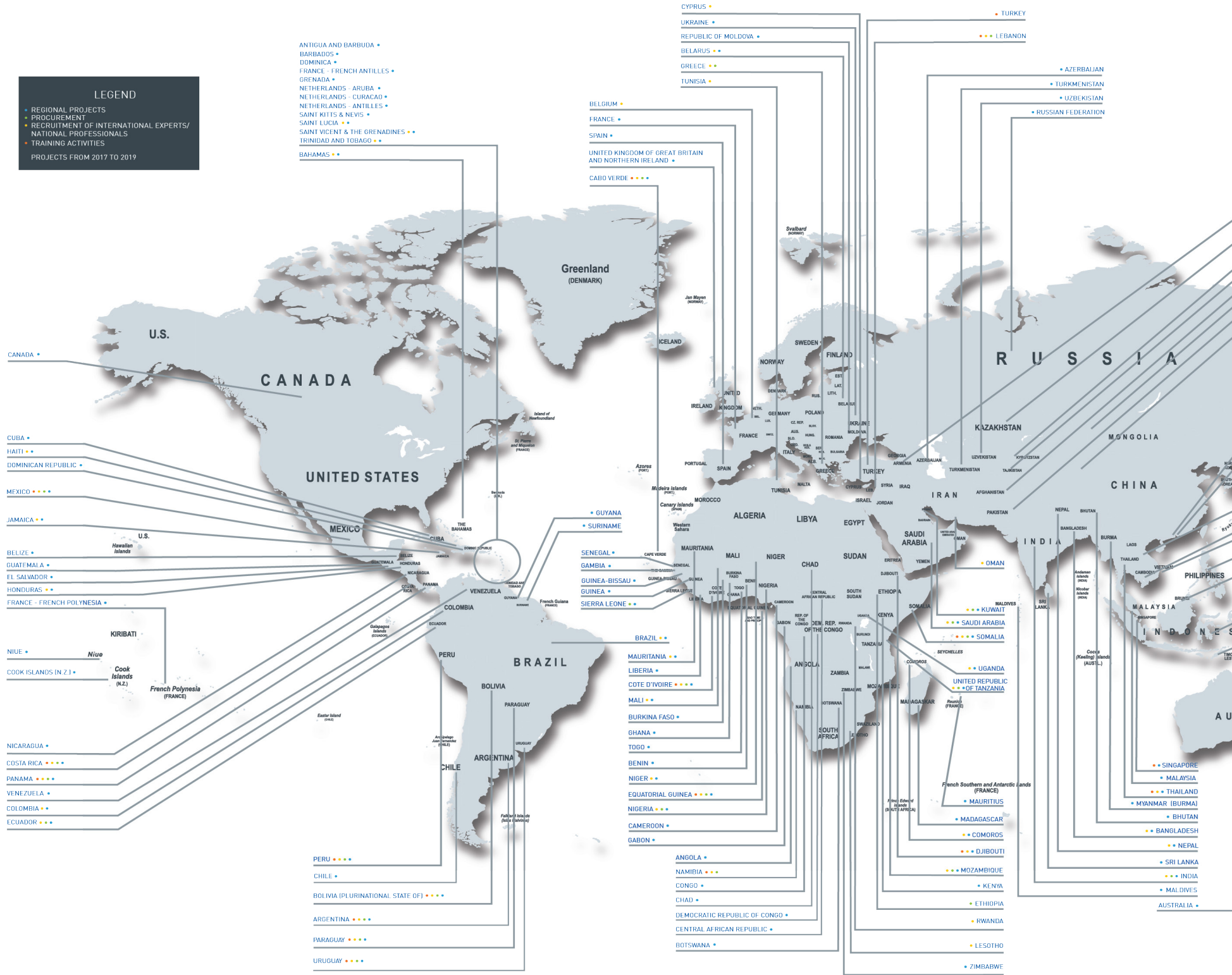


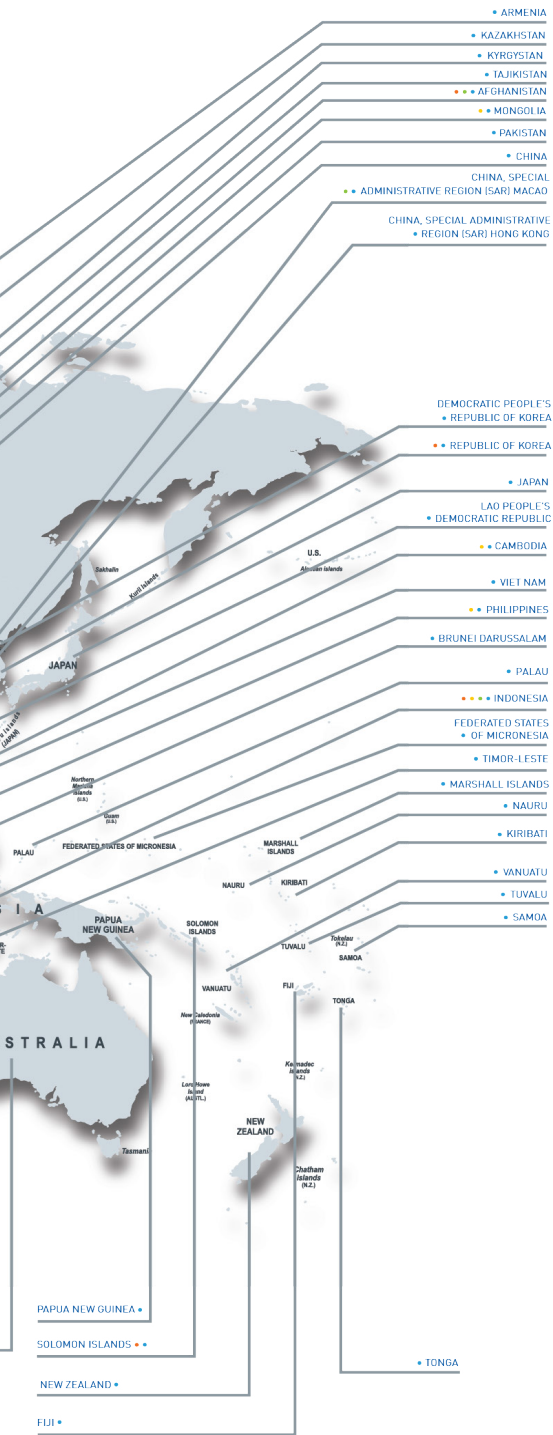
# TCB Presence Worldwide

**LEGEND**

- REGIONAL PROJECTS
- PROCUREMENT
- RECRUITMENT OF INTERNATIONAL EXPERTS/ NATIONAL PROFESSIONALS
- TRAINING ACTIVITIES

PROJECTS FROM 2017 TO 2019





# Your Partner In Ensuring Compliance with Global Aviation Standards



ICAO

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For information visit us at [www.icao.int/TCB](http://www.icao.int/TCB)  
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