



| ICAO TECHNICAL COOPERATION

NACC/DCA/6 – P/03

# Technical Cooperation Assistance and Support to the Regions

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*Regional Officer, Technical Assistance*

NACCDCA/6 Nassau, Bahamas, 10-12 May 2016





# ICAO ROLE UNDER NCLB

To  
provide...

## Technical Assistance

- Assistance provided to States, with a specific set of funds, and implemented by the ICAO NACC, for the duration of the project

## Technical Cooperation

- Any project requested and funded by States and implemented through TCB on a cost-recovery basis.



# RLA/09/801

## Objective and Purpose

**Provide assistance to States/Territories in the effective implementation of ICAO SARPs, and streamline safety and air navigation implementation consistent with air navigation and aviation safety plans and regional performance targets**



## RLA/09/801 Facts

The Project Activity Plan is aligned with the RPBANIP, GANP, GASP, NCLB and Port-of-Spain Targets

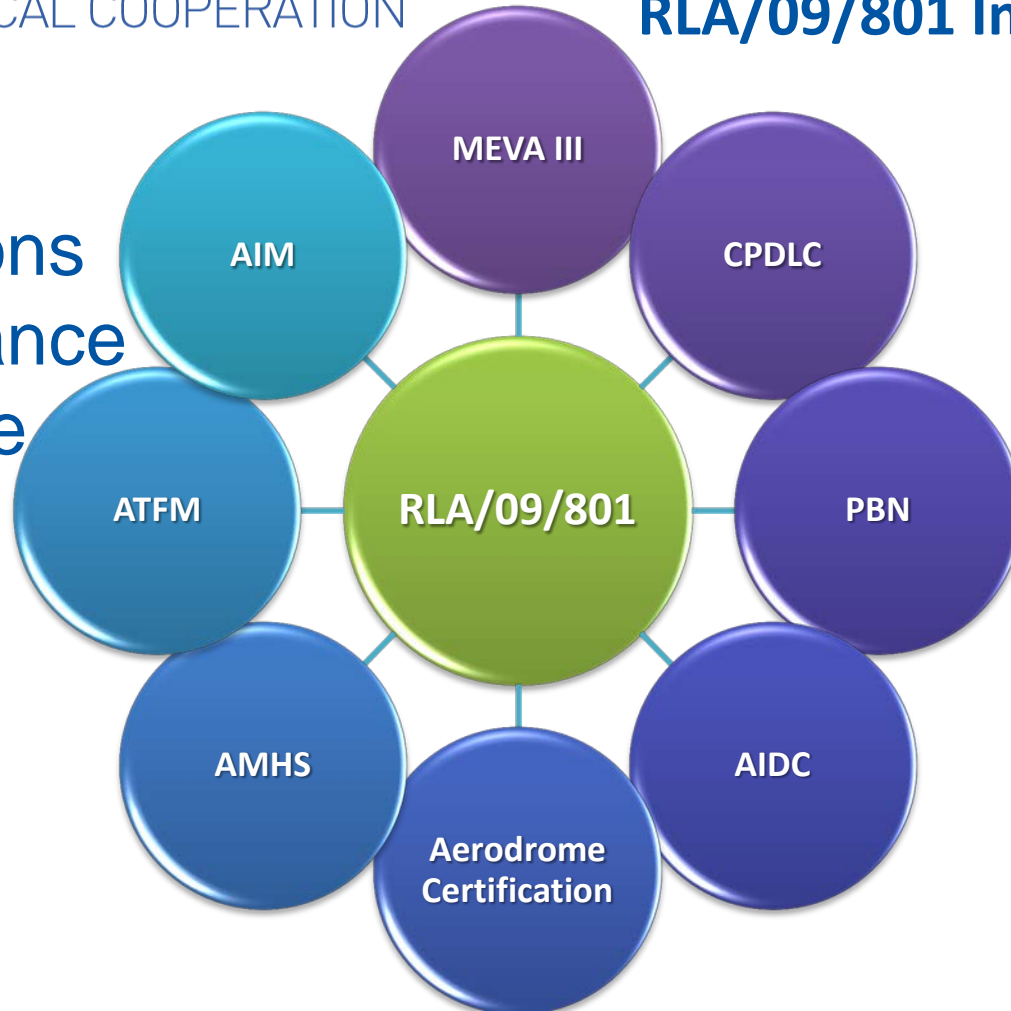
The Project Activity Plan will include Multi-Disciplinary TEAMS in support of the NCLB Strategy. All States will receive a visit by 2020

The Project objectives will focus on increasing EI, Aerodrome Certification, mitigate and/or resolve safety/security deficiencies, assist in resolution of significant safety concerns, and build CAA capacity

Specific projects will focus on PBN/ATFM implementation, Improve Regional Safety, Enhance capacity and efficiency of Aerodromes, and others

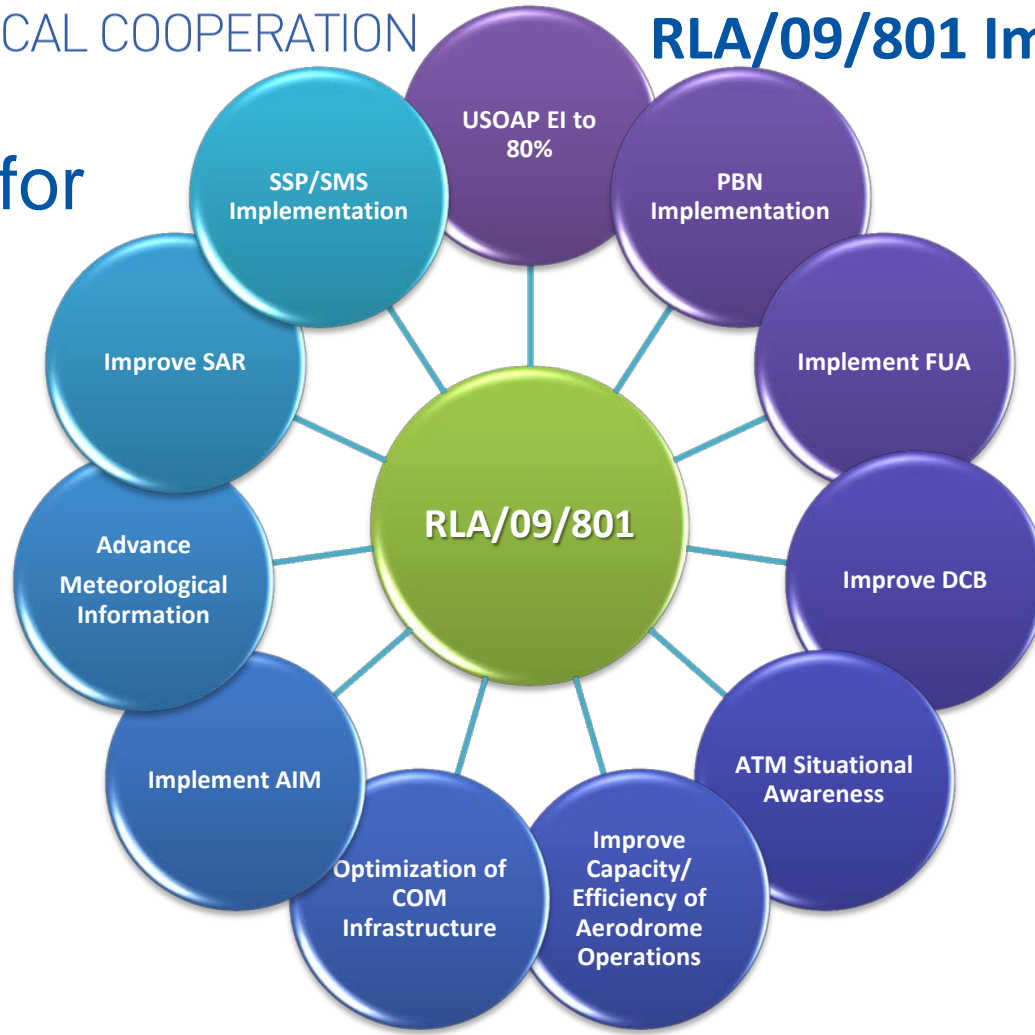


Sub-Project  
Implementations  
and/or Assistance  
Provided since  
2012





## Expectations for 2016-2020:





# RLA/09/801

## Ways to improve the Project:

### “MCAAP” – Multi-Regional Civil Aviation Assistance Programme

Introduce “third-parties” for funding support

Expand the scope of projects/types of assistance through Annex 19

Incorporation of procurement and consulting capability

Cost savings to the project



| ICAO TECHNICAL COOPERATION

# Sixth Meeting of the North American, Central American and Caribbean Directors of Civil Aviation (NACC/DGCA/6)

Iván Galán

*Director, Technical Cooperation*  
ICAO

Nassau, Bahamas, 10-12 May 2016







# Scope

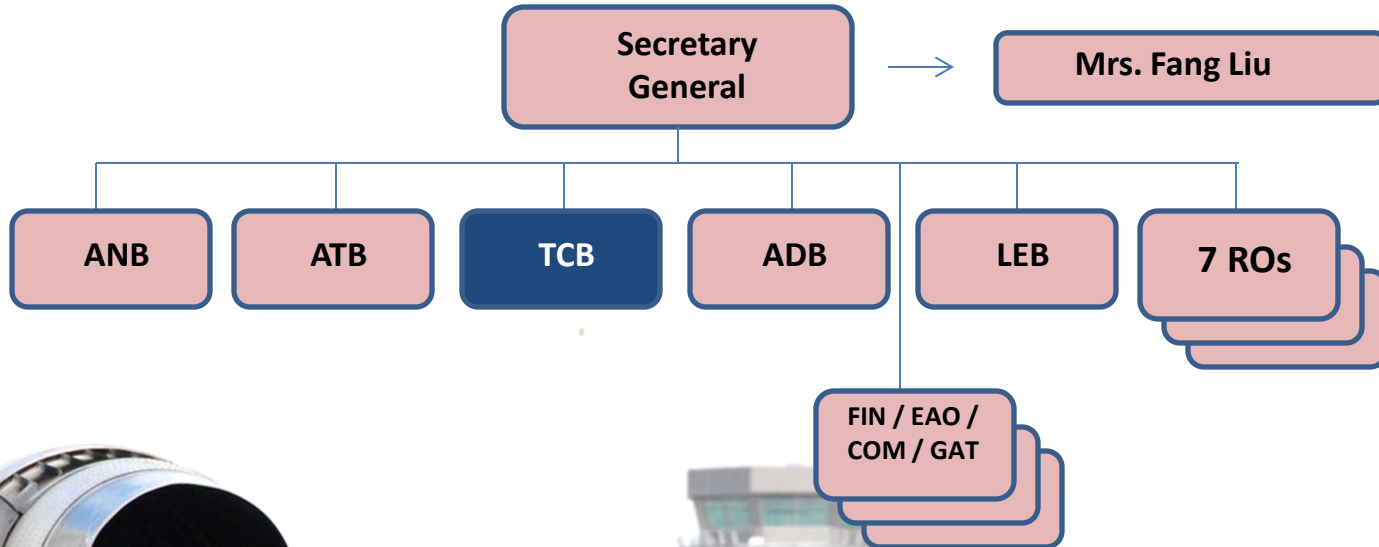
- ICAO's Structure and Roles
- TCB's Structure and Objectives
- Technical Cooperation Programme
- Project Cycle
- Examples of Projects
- IPAV
- Conclusions





## ICAO structure

### SECRETARIAT





✈ Standards and Recommended Practices (SARPS) and other publications



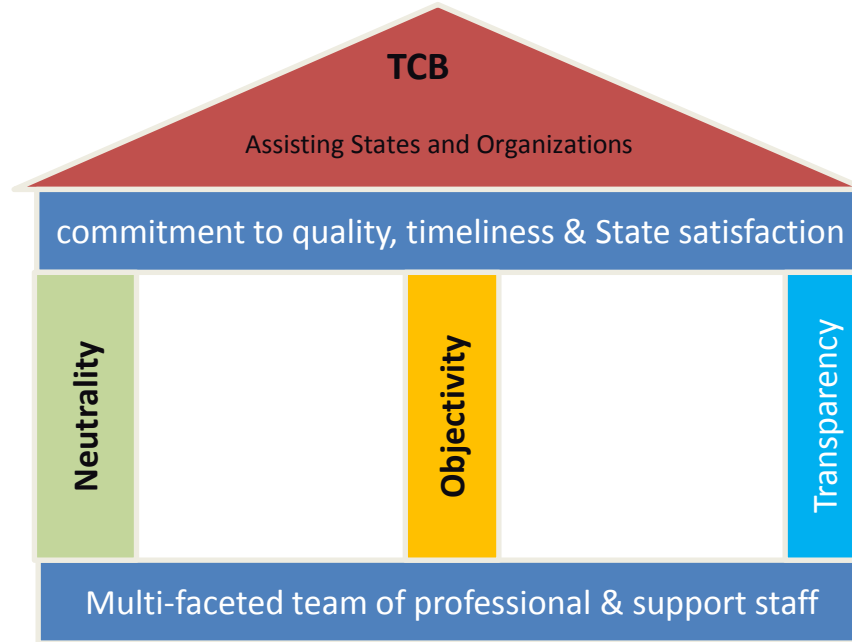
✈ Audits

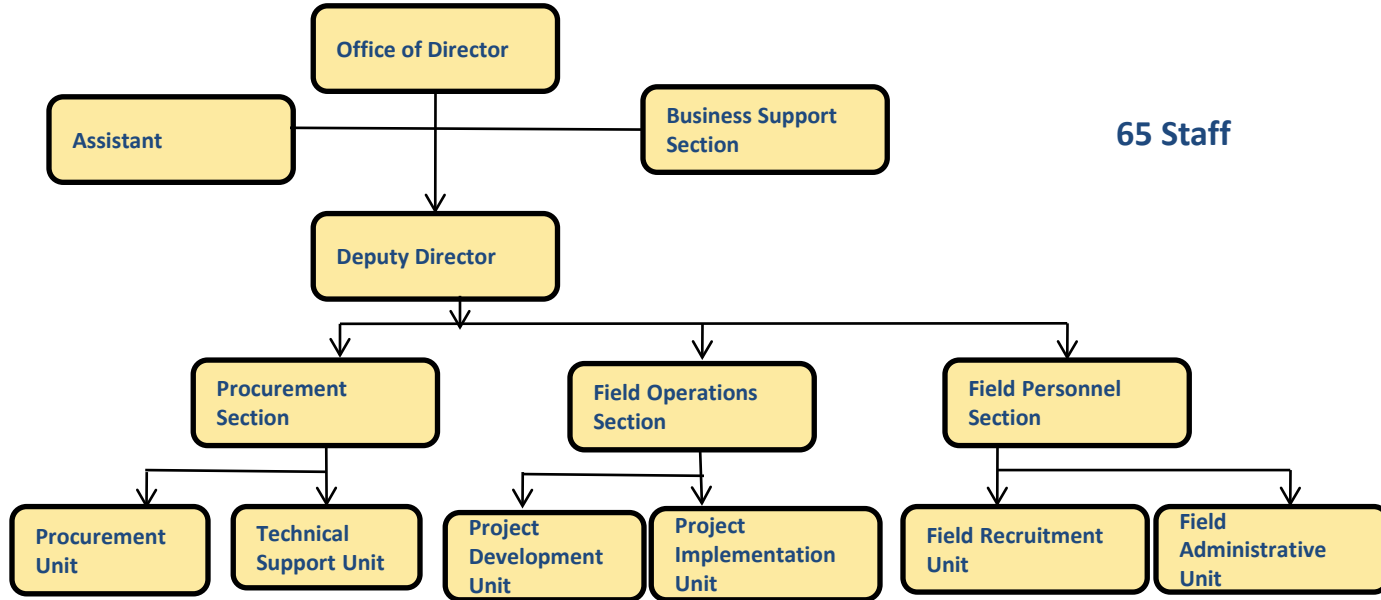
USOAP / CMA / ICVM (Safety)  
USAP (Security)

✈ Assisting the States / Organizations



## What is TCB?





65 Staff



# TCB Objectives

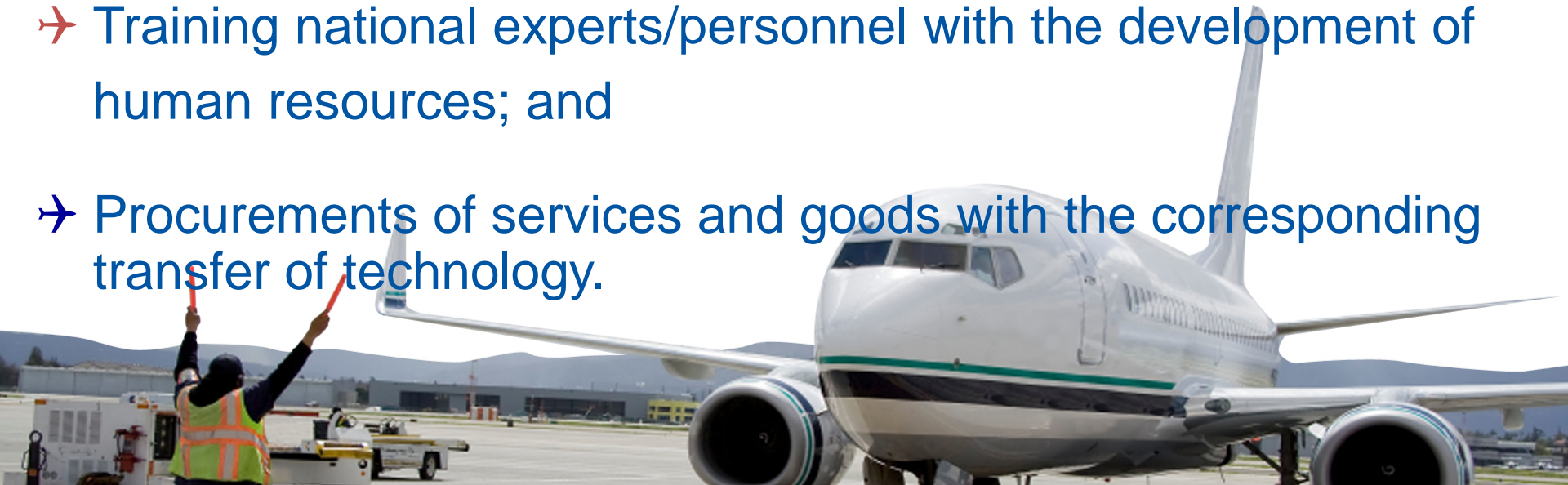
- **To enhance the capacity of the civil aviation institutions / organizations;**
- **Transfer of technology and development of human resources; and**
- **To improve and maintain the efficiency and quality in the implementation of projects.**





# Areas of Projects

- Assist States with experts to strengthening of civil aviation institutions/organizations;
- Training national experts/personnel with the development of human resources; and
- Procurements of services and goods with the corresponding transfer of technology.





- Follow-up to USOAP and USAP audits;
- Implementation of corrective action plans;
- Supplementing State's capacity;
- Development of SARPS and other documentation;
- Development of the Civil Aviation Authorities;







## ✈ Namibia:

- ✈ TCB project since 2010 for Capacity Building;
- ✈ Previous EI = 30%
- ✈ Last ICVM 2015 = 57%
- ✈ More than 7 experts on the field

## ✈ Kazakhstan:

- ✈ TCB project since 2013 for Capacity Building and SSCs;
- ✈ The two SSCs resolved;
- ✈ More than 8 experts on the field

## ✈ Saudi Arabia:

- ✈ TCB project since 1998 for Capacity Building;
- ✈ More than 18 experts as OPAS in the field

## ✈ Argentina:

- ✈ TCB project 2009 – 2010 for restructuring the CAA;
- ✈ CAA (ANAC) now working on new structure with new regulations;
- ✈ The projects continues through 2017 for the reinforcement of the ANAC.



# TCB Training Programme

- ICAO Fellowship Programme and the DCTP
  - Selected international civil aviation training centers-universities
  
- ICAO experts as instructors
  - Training programmes and seminars (regional and locally)
  - On-the-job training
  
- Training provided by the equipment suppliers



# Training programme...examples

## ✈ DCTP:

- ✈ Singapore, South Korea and India;
- ✈ More than 350 staff trained in 2015

## ✈ TCB training projects:

- ✈ AENA Spain in Latin America;
- ✈ SMS and SSP training for Bahamas;
- ✈ Fellowship programme in Mexico;
- ✈ More than 4000 staff trained in 2015

## ✈ Procurement Training:

- ✈ Aircraft for inspection of NAV Aids for Ecuador;
- ✈ ASECNA project: radars, Control centers and Simulators for ATCs;
- ✈ More than 450 staff trained in 2015



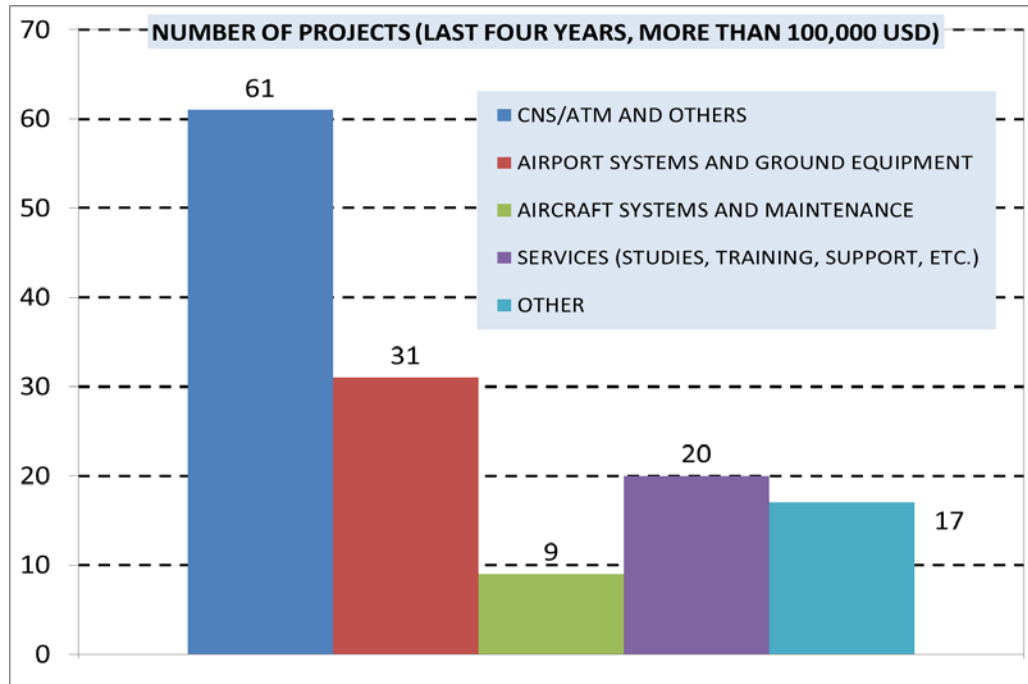
# TCB Procurement Services

- Procurement of Goods and Services
- Procurement solutions for states and organizations
- Air Navigation, Airports and CAAs Solutions





# Type of Needs Arising



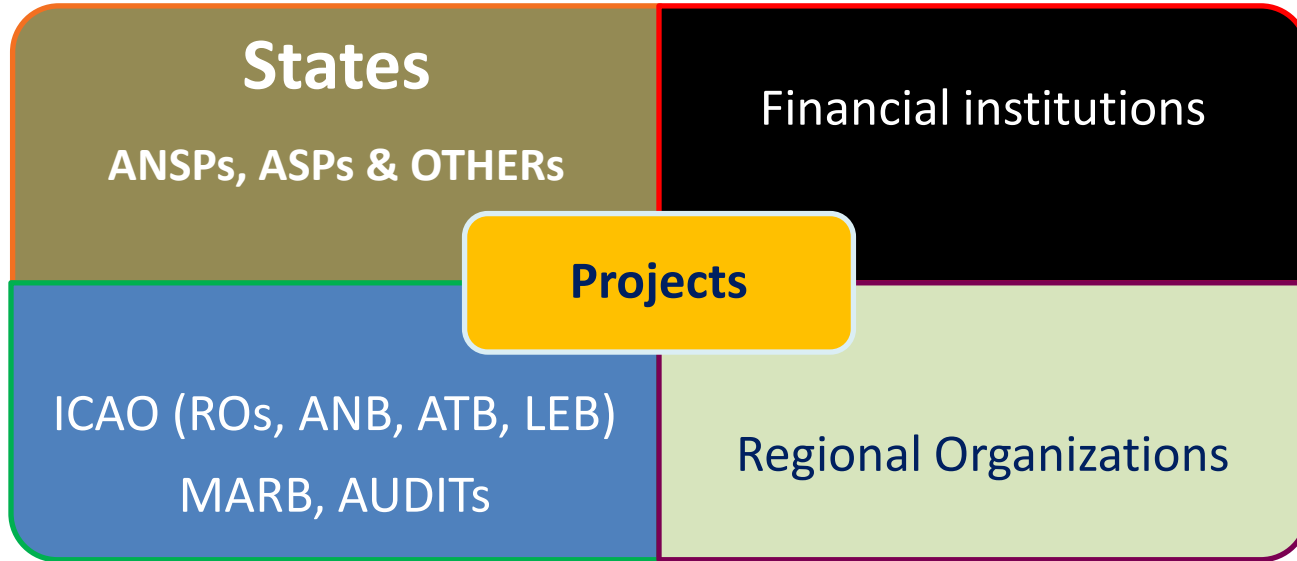


# Procurement Process





# Origin of Projects





# Working Mechanisms

- MSA (Management Service Agreement)
- CAPS (Civil Aviation Purchasing Service)

- Project Document;
- Lamp-Sum;
- Request for Procurement.







# Project Financing

- Receiving States
- Donor countries
- ICAO Voluntary Funding Mechanism
- Banks
- Private sector and aviation industry
- Regional organizations





## TECHNICAL CO-OPERATION PROGRAMME 2015

**Total Programme implementation: USD 130 million**  
**87 individual projects and 28 regional projects**





## Why is it worth paying overheads??

- Impartiality and Objectivity
- Knowledge and Experience
- ICAO SARPs compliant
- Economy of Scale
- No commercial interests - Low costs
- Transparency
- Administrative savings from the States
- ISO 9001-2008 Certification



# ICAO Programme for Aviation Volunteers (IPAV)

## ✈ Purpose of the IPAV:

- ✈ To provide a framework for the deployment of Aviation professionals, working as Volunteers, to respond to emergencies affecting the civil Aviation system in a state, to develop capabilities in the implementation of ICAO SARPS and solve deficiencies that may have the civil aviation authorities.

## ✈ Framework of the IPAV:

- ✈ Open to all professionals from the industry, civil aviation authorities, ICAO and private sector that wants to apply for volunteer;
- ✈ Request from the States and Agreement with ICAO;
- ✈ IPAV Voluntary Fund;
- ✈ Short term type of projects (no more than one month);
- ✈ Association with the UNVP.



# Conclusions

- ✈ ICAO's three main Roles
- ✈ Modern Structure and Management of TCB
- ✈ TCB's Role = Assisting the States / Organizations
- ✈ Clear Advantages for States / Organizations



# ICAO TECHNICAL COOPERATION



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North American  
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(NACC) Office  
Mexico City

South American  
(SAM) Office  
Lima

ICAO  
Headquarters  
Montréal

Western and  
Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU

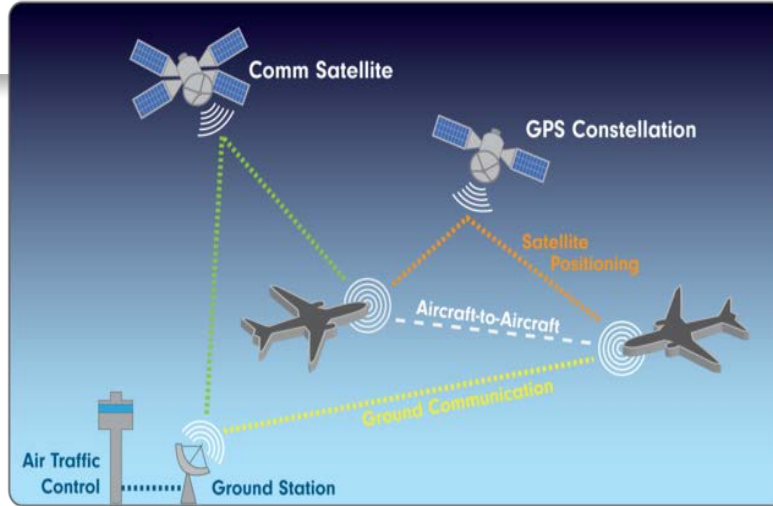
Ivan Galan  
D/TCB

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# Procurement Examples

## ADS B & C Systems





## Procurement Examples

### ILS & Navigational Aids

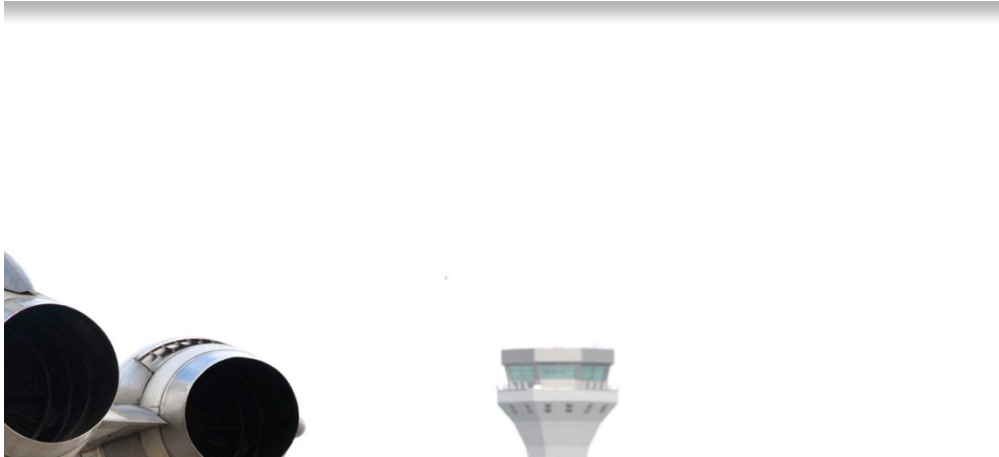






## Procurement Examples

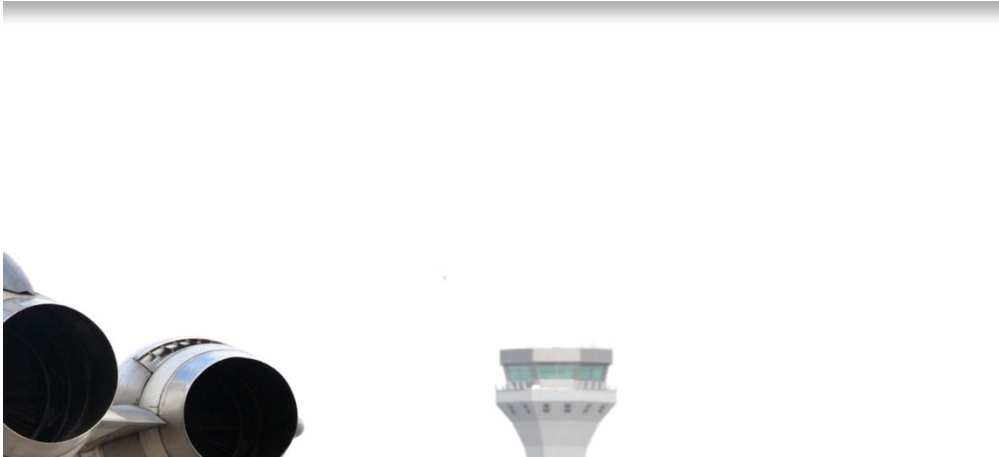
### Surveillance Radars (Primary & Secondary)





## Procurement Examples

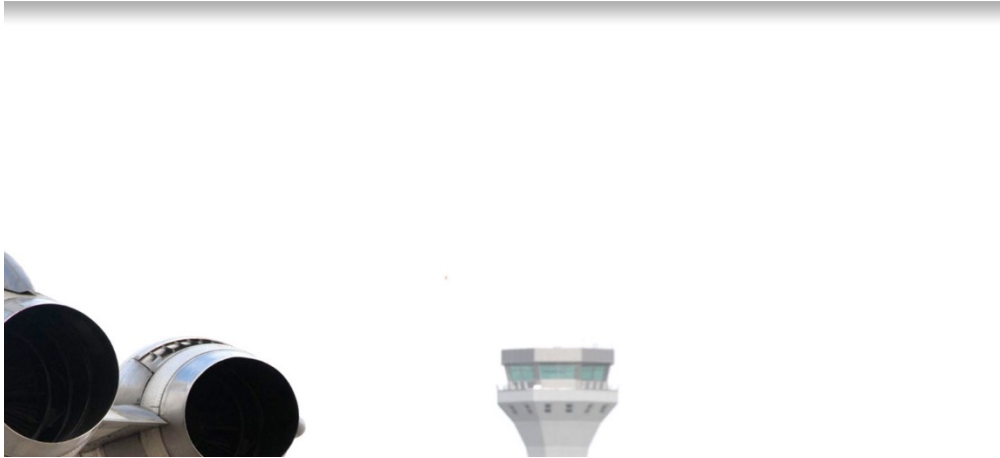
### Control Centers (ACC & APP) and ATC Simulators





## Procurement Examples

### TWR Equipment & Mobile Towers





## Procurement Examples

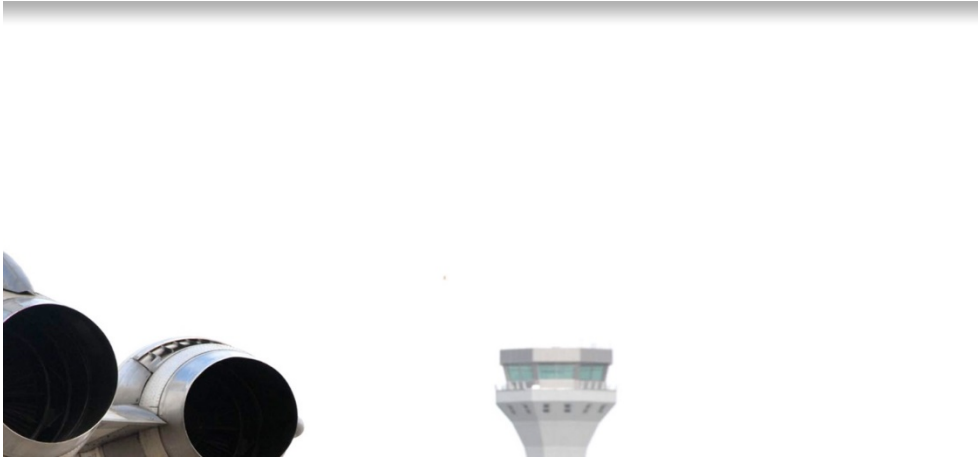
Communications (VHF, VSAT, HF, etc.)





## Procurement Examples

### Fire Fighting Vehicles





# Procurement Examples

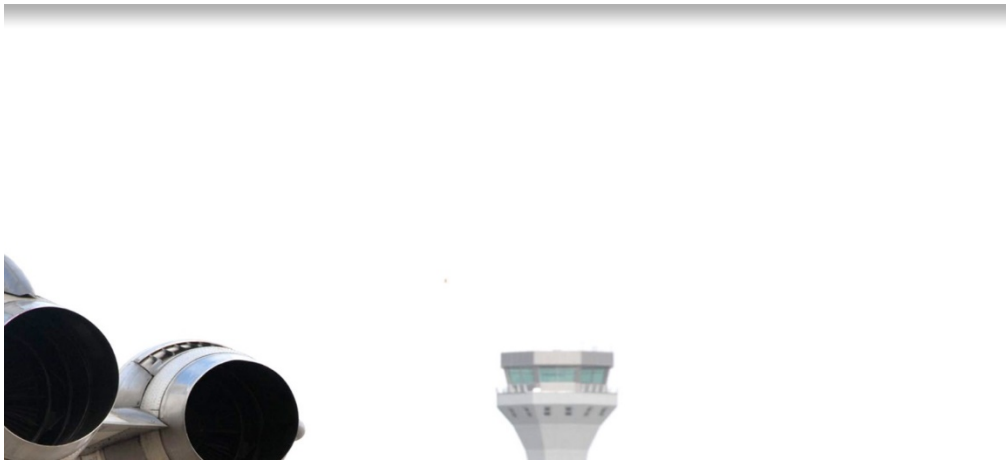
## Airport Infrastructure





# Procurement Examples

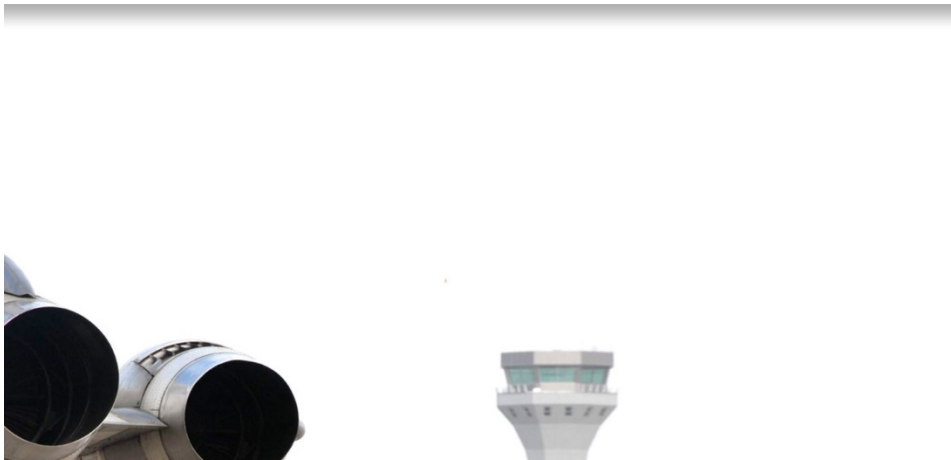
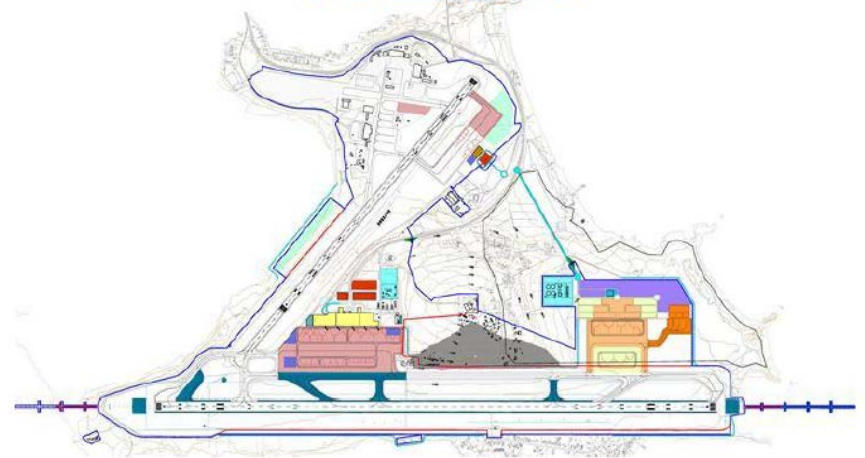
## Civil Aviation Master Plans



# Procurement Examples

## Airport Design and Master Plans

Figure 0.3. Proposed Layout of the airport









- ✈ *Venezuela* 2005 – 2011: Proyecto MAGTA (Modernización de infraestructura aeroportuaria y adquisición de equipos para navegación aérea).
- ✈ *Costa Rica* 2011 – 2015: Infraestructura aeroportuaria (plataforma, hangar, PBB).
- ✈ *Argentina* 2009 – 2015 / cuatro proyectos para: ANAC, JIAAC, DGCTA y FAA + nuevo proyecto con EANA
- ✈ *Panamá* 2009 – 2015 / dos proyectos para: Aeropuerto Tocumen y DGAC
- ✈ *Perú* 2008 – 2015 / tres proyectos para: CORPAC, DGAC y Ministerio Interior (Pasaportes Electrónicos)



- ✈ Bolivia 2008 – 2015 / DGAC creación de capacidad
- ✈ Ecuador 2012 – 2015 / tres proyectos: Software aeronáutico, avión inspección en vuelo, simulador ATC.
- ✈ Paraguay 2014 – 2017: Construcción nueva terminal y normalización lado aire para el aeropuerto internacional en Asunción.
- ✈ *Guatemala* 2005 – 2010 / tres proyectos: Construcción edificio terminal aeropuerto La Aurora, modernización del Mundo Maya International Airport y de aeropuertos en el interior del país.



- ✈ *Brasil* 2000 – 2015 tres proyectos finalizados con ANAC, INFRAERO y DECEA. Nuevo proyecto en desarrollo con ANAC.
- ✈ Uruguay 2008 – 2015 / dos proyectos: equipamiento aeronáutico y creación de capacidad en la DGAC.
- ✈ *Colombia* 2003 – 2008: cuatro radares secundarios y sistema de red VSAT completo para el país.
- ✈ El Salvador 2013 estudio para nuevo sistema de costos y cargos en aviación civil.
- ✈ Bahamas 2012 – 2015 adquisición de dos radares y construcción de un APP y un simulador de Torre de Control 3D.



- ✈ México: proyectos para DGAC, CIISA y Nuevo Aeropuerto Ciudad de México;
- ✈ *Haití*: proyectos en área de AVSEC y en asistencia a la autoridad de aviación civil OFNAC;
- ✈ Jamaica: Estudio para la eficiente vigilancia económica de aeropuertos;
- ✈ **Proyectos Regionales:**
  - ✈ Capacitación personal aeronáutico CAR/Sam (RLA/97/903);
  - ✈ SRVSOP (RLA/99/901);
  - ✈ REDDIG II (RLA/03/901);
  - ✈ MEVA III (RLA/12/902);
  - ✈ LACAC
  - ✈ ATM-CNS (RLA/06/901);
  - ✈ PBN Caribbean Region (RLA/09/801); and
  - ✈ COCESNA (RLA/13/801)



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