



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**TWENTY-SECOND MEETING OF THE
ASIA/PACIFIC AIR NAVIGATION PLANNING AND
IMPLEMENTATION REGIONAL GROUP (APANPIRG/22)**

Bangkok, Thailand, 5-9 September 2011

Agenda Item 6: Any other business
**ADDRESSING DEFICIENCIES AND APANPIRG CONCLUSIONS OBLIGATIONS
THROUGH THE ICAO TECHNICAL COOPERATION PROGRAMME**

(Presented by the Secretariat)

SUMMARY

This paper describes how the ICAO Technical Co-operation Bureau (TCB) can assist the Asia and Pacific States in eliminating air navigation deficiencies and meet their obligations towards APANPIRG conclusions and thus contribute towards assuring safety during a period of rapid growth for the Region. It introduces the ICAO Technical Co-operation Programme as a long established, resourceful and most convenient tool for States, in assisting with the practical implementation of measures for the effective implementation of SARPs and Air Navigation Plans, developing civil aviation systems, human resources, expanding or improving infrastructures and remedying, in a coordinated way, the deficiencies or findings identified through ICAO audits and RO missions. Being a non-profit organization TCB can offer its services under most favourable and cost-effective conditions while guaranteeing strict neutrality, objectivity and transparency.

Strategic Objectives:

- A: *Safety – Enhance global civil aviation safety*
- C: ***Environmental Protection and Sustainable Development of Air Transport** – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

1. INTRODUCTION

1.1 One of the main objectives of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) is to identify and address specific deficiencies in the air navigation field. WP 25 paper presents a list of Air Navigation Deficiencies in the ATM/AIS/SAR, AOP, CNS and MET fields, updated based on information provided by States during the Sub-Group Meetings for review and action by APANPIRG/22. An analysis of the online deficiency database available through the ICAO APAC website www.bangkok.icao.int reveals that urgent action is required

to eliminate the deficiencies. In fact APANPIRG Conclusion 21/53, and associated C21/54 and C21/55, urged States reflected in the APANPIRG list of deficiencies to commit resources and establish action plans with fixed target dates to the elimination of deficiencies.

1.2 Ensuring that the aviation sector in the region continues to grow in a safe, secure, efficient and sustainable manner requires targeting on several fronts: continued assurance of compliance with ICAO SARPs, improvements in the regulatory framework of States and controlled development and improvement to the aviation infrastructure (aerodromes, air navigation services and associated equipment) with minimal impact on the environment. The Technical Co-operation Bureau (TCB) of ICAO is in the position and has experience in assisting States in some of the areas mentioned albeit on a cost-recovery basis.

1.3 This paper describes how the ICAO TCB can work with the Asia and Pacific States to assist in assuring safety during a period of rapid growth. It introduces the ICAO Technical Cooperation Programme as a long established, powerful and most convenient tool for States, in assisting with the practical implementation of measures for the effective implementation of SARPs and ANPs, developing civil aviation systems, expanding or improving infrastructures and human resources and remedying, in a coordinated way, the deficiencies or findings identified through ICAO audits and RO missions.

2. DISCUSSION

2.1 The ICAO Advantage for Recipient States

2.1.1 The overall purpose of ICAO TCB projects is to promote the enhancement of oversight capabilities of States and their compliance with international safety and security requirements, eliminate deficiencies in the air navigation field, assist in the upgrading of civil aviation infrastructure and the development of human resources by providing the required expertise and training. There are a number of unique advantages for recipient States in using the services of the ICAO Technical Co-operation Bureau. Being a non-profit organization, ICAO can offer its services under most *favorable and cost-effective conditions*. As it does not represent any particular national or commercial interest or the interest of any donor in general, it guarantees strict neutrality, objectivity and transparency. Furthermore, ICAO, being responsible for the development of international civil aviation SARPs, is unrivaled in the in-depth technological know-how it offers.

2.1.2 Certain important privileges may be applicable to civil aviation authorities procuring equipment through ICAO, based on its status as a United Nations Specialized Agency, and given the volume and frequency of purchases carried out, important economies of scale are realized. It is ICAO's policy that, when assisting States/Organisation in the selection of experts, equipment and training establishments required for the implementation of a project, the final selection is left to the Government/Organisation. In this way, civil aviation authorities retain the freedom of opting for what they consider to be the best choice for achieving the desired project results. Still, as a party to the contract, ICAO will defend the interests of the Government and ensure that all aspects of the contract are properly observed.

2.2 Services Offered under the Technical Cooperation Programme

2.2.1 The services provided by the ICAO Technical Co-operation Bureau comprise the recruitment of international experts and national professionals, the provision of training, the development or strengthening of training institutions, and the procurement of equipment and services.

2.2.2 ICAO maintains an active roster of over 3600 international experts, with over 1,200 currently in the field. TCB also has access to more than 100 registered consultancy companies in

virtually all fields of civil aviation, the recruitment of which is based on a worldwide selection process. The services of these experts are offered to States as short-term consultants, intermediate and long-term advisers, inspectors, instructors or operational assistants (OPAS). OPAS are recruited through ICAO, but work directly for the Government in an executive capacity.

2.2.3 Nearly all major ICAO projects contain a training component, be it classroom, on-the-job training, simulation, factory, regional seminars and/or fellowship training, on basic and advanced levels or in refresher courses. Such training may be arranged in-country or abroad, and ICAO provides the recipient State with the management of their fellowship training programme.

2.2.4 TCB's unique expertise in field procurement will ensure that high-quality, SARPs compliant equipment is acquired at the best price to meet specific requirements, either by providing a complete procurement service or by offering assistance during specific phases of the process, including the development of technical specifications; identification of sources of supply on a worldwide basis; calls for tenders, technical/financial evaluations; negotiations with suppliers on specifications, price and delivery; preparation, award and management of purchase orders/contracts; insurance and shipping arrangements; monitoring of final site acceptance, installation and commissioning of procured equipment, including warranty administration.

2.2.5 Whilst maintaining all necessary controls and transparency expected of procurement agencies of the United Nations System, ICAO procurement rules and regulations allow for the accommodation of specific requirements, the use of particular currencies or the provision of special management reports. Furthermore, ICAO's knowledge of the market will ensure that equipment is procured in the most economical manner on an internationally competitive basis, thus achieving substantial savings to States and donors, while ensuring compliance with ICAO SARPs.

2.2.6 ICAO assistance through TCB is also provided to non-State entities (public and private) to which the State has delegated the execution of aviation functions, e.g. ANSPs and airport authorities. In addition, the ICAO Assembly has expanded the provision of technical cooperation services, upon request, to third parties implementing projects in Member States in the area of civil aviation.

2.2.7 Within the framework of its Technical Co-operation Programme, ICAO uses a variety of framework agreements and funding arrangements. ICAO has extensive experience in administering Trust Funds and Management Service Agreements to finance projects and ICAO Civil Aviation Purchasing Service (CAPS) Agreements for procurement of essential equipment.

2.3 **ICAO's Technical Cooperation Activity in the APAC Region**

2.3.1 As at 31 July 2011, there were 33 active projects in the Asia and the Pacific Regions, providing services to 43 countries and Administrative Regions. Of these, 14 are large-scale projects with an implementation volume of US\$ 4,982,048 and 19 are projects with total budgets of less than US\$ 500,000 each. It is of vital importance that Governments and Administrations select a partner with long-standing experience in developing and implementing civil aviation projects, who can offer the most objective and cost-effective solutions for the problems encountered in the civil aviation sector.

2.3.2 The support of the more financially developed States in assisting those States less able to fund projects, could enable the development of additional comprehensive work programmes as a first step in a concerted strategy to strengthen region-wide commitment to resolving deficiencies and critical issues in the areas of safety, security, environment and air navigation services. This would support the development of aviation in the Asia and Pacific Regions.

2.3.3 The Table in Appendix A provides a flavour of ICAO TCB's recent experiences in civil aviation projects in the Asia and Pacific Regions which includes establishment of autonomous civil aviation authorities, implementation of air navigation systems and regional communications networks, feasibility study for ATS surveillance and approach landing systems, conduct of a study regarding dual airport operations in the metropolitan area of a State and the professional development of civil aviation personnel. It is also worthwhile to note that ICAO is currently assisting one State in its wildlife hazard management (WHM) planning which has direct relevance to Conclusion APANPIRG 21/2 '*requesting States to implement an effective WHM plan to control wildlife at airports*'. Several new country-specific technical cooperation project initiatives are under serious consideration in Asia and Pacific States.

2.3.4 It should also be noted that a number of States have continued to utilize ICAO's Civil Aviation Purchasing Services (CAPS) in order to procure equipment and thus eliminate their AOP and CNS deficiencies. In 2010, one State procured 16 Airport Rescue & Fire Fighting vehicles through ICAO at a cost of US\$ 16,090,000 Million and the same State is currently procuring a Primary Surveillance S-Band Radar (PSR) & Monopulse Secondary Surveillance Radar (MSSR) System at an estimated cost of US\$ 10 Million and two Instrument Landing Systems/Distance Measurement Equipment (ILS/DME) & a Doppler VHF Omni Range/Distance Measurement Equipment (DVOR/DME) at an estimated cost of US\$ 3 Million. Other States/Administrations have used ICAO's procurement services, to procure an Aeronautical Message Handling System, Wireless Networking Infrastructure and more have expressed their interest in using the advantages of ICAO's CAPS for procuring AVSEC equipment, Boarding Bridges, Check-in Counters, ILS, ATC Area Control Centres and Aerodrome Simulator etc.

2.4 **Restructuring of TCB to increase service efficiency**

2.4.1 With a view to increasing the efficiency and effectiveness of the Technical Co-operation Bureau, ICAO has carried out a major restructuring of the Bureau in 2010. This includes the consolidation of the four geographical Field Operations Sections responsible for project implementation into one; the transfer of TCB project financing functions to the Finance Branch in the Regular Programme; the establishment of a new Project Financing and Development Section to explore all sources of funding for the benefit of States that are in need of assistance; the consolidation of the Regular Programme and Field Procurement functions into one Section; as well as the transfer of the Travel Unit and the TRAINAIR Central Unit to the Regular Programme.

2.4.2 Consistent with the mandate to strengthen the Regional Offices and in order to enhance the visibility and image of ICAO TCB with Member States, it was further decided to integrate more closely the field operations activities of the Technical Co-operation Bureau within the Regional Offices, taking advantage of their respective strengths and weaknesses. Some management/administrative tasks of TC projects (both regional and country specific projects) have been assigned to a Technical Co-operation Officer located in each Regional Office, reporting to the respective Regional Director. This collaborative scheme has been implemented at the Regional Offices in Bangkok, Lima, Dakar, Nairobi and Mexico. It can reasonably be expected this will result, in a yet more effective and efficient delivery of the TC Programme. APAC States/Administrations should take note that the establishment of the Technical Cooperation Officer position at the Regional Office Bangkok provides a direct avenue for requesting assistance from ICAO for the development of their civil aviation infrastructure and in elimination of Air Navigation Deficiencies.

3. **CONCLUSION**

3.1 The Technical Cooperation Programme is conducted under the broad policy guidance of the ICAO Assembly and of the Council. The "Consolidated Statement of ICAO Policies on Technical Cooperation" adopted by the 36th Session of the ICAO Assembly (Assembly Resolution

A36-17) recommends to Donor States, financing institutions and other development partners, including the aviation industry and the private sector, wherever appropriate, to give preference to ICAO for the identification, formulation, analysis, implementation and evaluation of civil aviation projects, drawing their attention to the fact that ICAO is the United Nations specialist authority for carrying out technical cooperation activities to developing countries in civil aviation.

3.2 As the specialized agency of the United Nations for civil aviation, ICAO is in a unique position to contribute the required technical and managerial expertise in an objective manner, ensuring the provision of balanced advice in the ultimate interest of recipient States. In addition, as a non-profit organization, ICAO is able to provide cost-effective services, being the ideal partner to provide assistance to the Asia Pacific States through the development and implementation of projects across the full spectrum of air transport, aimed at improving the security, efficiency, regularity and operational safety of national and international civil aviation, with a view to achieving standardization and compliance, as specified in ICAO's Standards and Recommended Practices (SARPs).

4. ACTION BY THE MEETING

4.1 The meeting is invited to:

- a) note the information provided on the role of the ICAO Technical Cooperation Programme in the implementation of civil aviation projects and advantages to States/Administrations derived from using ICAO's Technical Cooperation Programme;
- b) note the provisions of ICAO Assembly Resolution A36-17, where States are encouraged to associate ICAO in their civil aviation projects and advise donors and financing institutions, if any, accordingly;
- c) encourage States/Administrations to utilize the ICAO Technical Cooperation Programme for development and implementation of their national civil aviation projects, particularly to correct their Air Navigation Deficiencies; and
- d) urge States to contact the ICAO Asia Pacific Regional Office to request assistance under the Technical Cooperation Programme.

APPENDIX A

The following table provides a sampling of ICAO's experience in civil aviation projects in the Asia and Pacific Regions.

Table 1: Type of ICAO Civil Aviation Projects in the Asia and Pacific Regions (2009, 2010 and 2011)

Assistance to Airport Operator with CNS Expert
Enhancement of Safety Oversight Capability of CAA
Upgrading Of Training Centres by adopting the ICAO TRAINAIR Programme
Techno-Economic Feasibility Study for Greenfield Airport
Recruitment of Safety Management Systems & Aerodrome Certification Instructor
Enhancement of Aerodrome Safety Oversight Capability
Establishment of ATM Safety Oversight Capability
Study on Creation of Civil Aviation Authority
Traffic Forecast review for an International Airport
SARPs Compliance review for Second International Airport in a City
Aeronautical Study for Annex 14 compliance for an airport
Assistance with Wildlife Management Planning to an Airport Operator
Further update of Airport Master Plans
Technical Training Reviews for Civil Aviation Training Centre
Heliport Certification Review
Single and Dual Airport Study
Feasibility Study on ATS Surveillance and Approach and Landing Systems
Study of New/Revised Transportation Security Authority
Aviation Security Law Training Project
Safety Management Systems Training Project for an Airport Operator
Study of Aviation Security Arrangements and Procedures
National General Aviation and Helicopter Roadmap
Procurement of a Primary & Secondary Radar System
Procurement of Doppler VOR/DME and ILS/DMEs
Procurement of Airport Rescue & Fire Fighting Vehicles
Procurement of Aeronautical Message Handling System (AMHS)