## International Civil Aviation Organization North American, Central American and Caribbean Office

## **WORKING PAPER**

(E/CAR/NTG/6 & E/CAR/RD/4) WP/18 09/07/15

# Sixth Eastern Caribbean Network Technical Group (E/CAR/NTG/6) and Fourth Eastern Caribbean Radar Data Sharing Ad-hoc Group (E/CAR/RD/4) Meetings

Miami, United States, 13 - 14 July 2015

Agenda Item 5: Radar Data Display Request for Proposal (RFP)
5.2 Definition and revision of RFP process

## **DEFINITION AND REVISION OF RFP PROCESS**

(Presented by the Secretariat)

SUMMARY	
This paper proposes the Meeting to analyse the options to be recommend for	
conducting the RFP Process for the E/CAR Radar Data Display acquisition.	
Action	The suggested actions are presented in Section 3.
Strategic	• Safety
Objectives	Air Navigation Capacity and Efficiency
References	Fifth Eastern Caribbean Network Technical Group
	(E/CAR/NTG/5) and Third Eastern Caribbean Radar Data Sharing
	Ad hoc Group (E/CAR/RD/3) Meetings, Guadeloupe, French
	Antilles, France, 22 to 24 October 2014.

## 1. **Introduction**

- 1.1 The Fourth Meeting of the PIARCO FIR Policy Group (PIARCO/FIR/PG/4) in response to ICAO letter dated 6 January 2011 (Ref.: N1-3.10 EMX0014), for the need for a State or organization to host the radar data server in the Eastern Caribbean, agreed to accept Trinidad and Tobago's offer to provide the radar data server for the sharing/exchange/remoting of radar data in the Eastern Caribbean and adopted Conclusion *PIARCO/FIR/PG/4/2 E/CAR RADAR DATA SERVER*.
- 1.2 Following the E/CAR/DCA mandate for radar data sharing and improvement to situational awareness, the E/CAR/RD/3 Meeting agreed that the following milestones would be included in the update to the Radar Data implementation Plan concerning the E/CAR radar display acquisition:
  - ECAR Radar Display Tender- preparation of RFP: June-Oct. 2015
  - ECAR RD Tender- process: Jan.-March 2016
  - ECAR RD Selection: April 2016
  - ECAR RD Implementation: July-Dec. 2016

1.3 The agreed surveillance Data Sharing Implementation involves two phases, for which Phase 2 establishes the State acquisition of permanent display systems for either medium-term continuation of situational awareness (as decided by the States), or in the case of Antigua and Barbuda, in conjunction with the intended implementation of its own radar control service. In this regard for Phase 2, a RFI Process was conducted in order to search market potential radar data display for a medium-long term solution and be implemented as end-user equipment within the Eastern Caribbean States.

## 2. Discussion

- 2.1 From the analysis of the E/CAR Radar Data Display Proposals received in the RFI Process, each State/Territory was urged to clearly define the way forward regarding automation and that for the RFP process a scalable solution from single display to more automated functions (tracker, FDP, etc.) should be included, as detailed in WP/17.
- 2.2 For the RFP Process several options can be perform based on the States needs and formal requirements. One option from ICAO perspective is to have the acquisition and performance of the RFP Process by managed as a regional Project to ensure that all the requirements are accomplished as defined in the RFP document and under a neutral environment for the evaluation and selection process, the installation and support of ICAO. On the Appendix a briefing of the ICAO Procurement Process is provided with all its 4 phases as well as a presentation showing ICAO procurement activities.

## 3. Suggested Action

- 3.1 The Meeting is invited to:
  - a) review the ICAO Procurement process; and
  - b) take any other action as deemed necessary.

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## **ICAO Procurement Process Briefing**

The following is a briefing in an effort to provide the reader with an insight into the ICAO Technical Co-operation Bureau's Procurement Process and role in relation to the development of procurement projects for Member States.

Clearly, as with any procurement, the challenge remains to ensure technical, functional and performance compliance, as well as timely implementation of a project. In spite of the challenging problems which inevitably arise under major contracts, practically all work undertaken by ICAO has been satisfactorily completed with due regard to efficiency levels. As described hereafter, this is enabled thanks to the application of project management tools specifically developed for ICAO/TCB's procurement process based on the experience gained over the last fifty years and certified through ISO-9001 audits.

Through its knowledge of pricing structures within the aviation industry, coupled with strict but fair contract conditions and close monitoring throughout the period of contract administration, ICAO has achieved significant economies in the price of contracts placed on behalf of Member States. More than one Member State has noted that the administrative overhead charge levied by ICAO to cover the cost of administering the procurement is more than offset by the savings which ICAO has been able to obtain on behalf of the Member State.

All major procurement at ICAO is divided in 4 phases:

- 1st phase Pre-study whose main purpose is to define the requirements;
- 2nd phase Preparation to conduct the tender process and select the supplier;
- 3rd phase Execution wherein a Contract is placed with the selected supplier and the implementation of the Contract is closely monitored in terms of financial and technical obligations;
- 4th phase Termination phase with assistance on after-sale services & warranty and assessment of customer satisfaction.

There are specific tollgates during the implementation of the project where the status of the implementation is reviewed in collaboration with the Member State and formal decisions are taken to continue with the implementation of the project, such as system design, factory and site acceptance testing as well as progress review meetings. The objectives to be fulfilled for each phase are strictly monitored through ICAO's quality control system which is ISO 9001:2008 certified.

## 1. Pre-Study - What

The initial phase of the procurement entails the precise identification of the users' requirement. This stage requires a clear definition of the users' needs, whether it be for the procurement of services or equipment. When ICAO develops the technical specifications or is required to qualify a Member State's technical terms of reference, the main goal is to ensure that full compliance to ICAO Standards and Recommended Practices is adhered to, while avoiding over-specifications as it may increase the price. ICAO may field an Expert to support design configuration meetings and carry out detailed assessments of existing infrastructure if requested by the Member State.

Once all clear requirements have been defined as well as any local constraints identified,

detailed technical specifications are developed, which represent the core of the procurement. The technical specifications developed by ICAO not only define the equipment performance and functional requirements that are being sought, but also include critical requirements such as: (i) Standards that require compliance to ICAO Standards and Recommended Practices, (ii) MTBF, Availability, Life-Cycle Support, (iii) Training, theoretical and operational, (iv) Acceptance Tests Protocol, both for factory and on-site requirements, and (v) Warranty and maintenance support. It should be noted that, in an aim to promote a transparent process, all the technical specifications developed by ICAO make allowances for any potential tenderer to present alternative proposal as long as equivalent or superior technical performance and functionality can be demonstrated. Evaluation criteria are also established during that phase to ensure transparent comparison of the merits of offers and identify the best match to the requirements while minimizing the risk of the selected supplier not being able to perform the contract satisfactorily.

This phase also includes the investigation of sources of supply and the establishment of a Bidders' List. Over the past 50 years, ICAO has developed a comprehensive database of aviation related suppliers. The equipment and services provided by each supplier are classified according to designated category codes and stored in a database. This system allows ICAO to quickly and easily identify registered suppliers of the equipment and/or services required by a project and enables ICAO/TCB to expeditiously prepare a Bidders' List of potential suppliers. The database is constantly updated with the new registration process recently put in place at ICAO which allows suppliers to self-register to the database through ICAO's website at <a href="https://www.icao.int/procurement">www.icao.int/procurement</a>, rendering the tender process public and transparent.

At the end of the Pre-study phase, the Member State obtains the technical specifications, evaluation criteria and budgetary estimate for the project and is given the option of continuing the procurement process.

#### 2. Preparation - How

Once the technical premises have been established, this phase involves the formulation and issuance of the solicitation. Two main solicitation methods are used at ICAO depending on the threshold of the procurement: Request for Quotation (RFQ) and Sealed Tender (ST), the latter being a more formal tendering process.

Both types of solicitations are tendered through the ICAO tendering website and open to all suppliers. Tender packages consist of Technical Specifications with Evaluation Criteria combined with the following documentation:

- ICAO Terms and Conditions: The Terms and Conditions are standard contractual terms and conditions covering, amongst others, information and instructions on Damages, Indemnification, Termination, Settlement of Disputes and Equipment Title and Insurance, which would be applied in the case of an eventual contract award and which aim to ensure and safeguard the rights of the Member State under an eventual procurement.
- Instructions to Tenderers: The Instructions to Tenderers indicate the tender closing date, site visit information and general tender information to a potential bidder.

Tender Form: The Tender Form requests that the bidder provide detailed tender pricing, complete technical proposal, contact and financial information, references and other information necessary for the full evaluation of the tender as well as for the vetting of the company.

Following the issuance of a tender, and prior to receiving the proposals, a site survey and Technical Meeting is usually conducted with the participation of all interested companies, ICAO and the End-User Representatives. Whereas the initial site visit by an ICAO expert described in Phase 1 was to determine the end-user requirements, during the bidding phase, this site survey, guided by ICAO, serves to ensure that no technical ambiguities are present and that all potential bidders have a clear understanding of the requirements and are able to assess any local constraints that may be present. A technical meeting in which ICAO addresses all technical queries from the tenderers is also held. The purpose of this is to further clarify any outstanding issues in order to ensure that all technical needs and requirements will be met if/when contract is awarded.

The tenderers are requested to upload their tenders through ICAO tendering website before the closing date. For further transparency and integrity, the sealed tender process involves that the proposals are received and opened by an entity external to the procurement office. ICAO's Procurement Section only receives proposals after their opening with fixed price and delivery time.

With the participation of the Member State or Civil Aviation entity if they so desire, ICAO then proceeds with the technical and commercial evaluation of proposals. To maintain fairness and transparency in the evaluation process, the proposals are evaluated as per the evaluation criteria defined at the time of the tender issuance and award is based on Best Value for Money (lowest priced fully compliant proposal for equipment, best weighted scoring (technical/financial) for selection of services). Company references/project experience and local support in the end-user's country are also considered during the evaluation, as well as the financial strength of the supplier which form part of the vetting of the company before contract award is recommended.

The technical & commercial evaluation of tenders is then forwarded to the Member State. It is only when the Member State has confirmed its "no objection" to the result of the procurement process that a contract can be entered into with the recommended supplier, subject to funds availability. Decision to continue with the recommended supplier belongs to the Member Sate and constitutes a mandatory step to continue with the 3rd phase of the project.

It is worthwhile to mention that all major procurement at ICAO are subject to a review by an independent Contract's committee which provides written advice on the acceptability of the procurement process undertaken, ensures that regulations, rules and procedures were followed, as well as confirms that funds for the contractual commitment are available. Approval of the Contract's Board is also mandatory to continue with phase 3 of the process.

#### 3. Implementation – Do

Phase 3 starts with the Contract negotiation process, whose purpose is to ensure that all proper elements are in place to conclude a written agreement that protects the interest of the Member State and clearly and precisely reflects the offer made by the supplier in response to the solicitation. When required, negotiations have the potential to improve the procurement outcome by reducing uncertainties, risks and costs. When the Contract draft has been prepared to the satisfaction of the Member State and ICAO, a contract is signed by the appropriate authorized representatives of the supplier, ICAO and/or the Member State.

The procurement process at ICAO does not end when the purchase order or contract is issued. Contract administration is a vital part of the process. Administration of purchase orders/contracts encompasses the full realm of implementation and oversight, including the proactive monitoring of the performance and progress of the purchase order/contract's key milestones such as

- Review of System Design Documentation and Design Review Meeting whose aim is to provide guidance and support to confirm final design configuration and implementation schedule;
- Factory Acceptance Test Support whose aim is to perform the factory acceptance testing and ensure that equipment is operating in accordance with tendered requirements and ICAO Standard and Recommended Practices;
- Training Review and Coordination to ensure that the training is adequate and carried out to end-user's satisfaction:
- Documentation Preparation with the verification of insurance and shipping, payment, invoice;
- Site Acceptance Testing and Transfer of Title.

ICAO, with the full and active participation of the Member State/End-user, implements and oversees the contract implementation to constantly ensure that the supplier is in full compliance with the terms, specifications, conditions and provisions of the purchase order/contract and delivery occurs within the agreed implementation schedule.

## 4. Termination - Close

The close-out phase ensures that all contractual obligations have been met and that residual obligations such as warranties, guarantees and after-sales service and support are clearly defined in terms of responsibility, liability, procedures and timeframes. Contract close-out occurs when all contractual obligations have been fulfilled by the supplier.

Supplier performance reports are also filled out at that stage of the project, by ICAO and Member Sates/End-users. They are used to document performance of suppliers to eventually eliminate those with poor performances from ICAO's supplier roster. Member State satisfaction is also assessed during this last phase and allows ICAO to gather and use information to further improve its process and the continued success of future procurement actions.

At the core of the above described procurement process is the flexibility to offer the Member States the options of either a complete procurement service (from specification of the equipment through to its commissioning) or participation in specific stages of the procurement process, e.g.

- (i) preparation of specifications;
- (ii) invitation of tenders, evaluation of tenders and preparation of recommendations;
- (iii) negotiations and award of contract;
- (iv) supervision of contract awarded by ICAO or awarded directly by the Member State, up to final acceptance.

The nature of purchases already undertaken by ICAO TCB is varied and has included the procurement of flight and ATC radar simulation equipment, aircraft, navigation aids, air traffic control radar equipment and complex, large-scale activities associated with complete airport development.

ICAO, as the specialized agency of the United Nations concerned with the planning and development of international civil aviation, has specialists available to it who cover virtually all the main aviation-related disciplines. The expertise of the staff in providing advice to ensure the correct specification and proper selection of equipment has frequently proved invaluable in assisting the Member States in the acquisition of new or replacement equipment.