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

WORKING PAPER

NACC/DCA/11 — WP/19
30/05/23

Eleventh North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/11)

Varadero, Cuba, 28-30 June 2023

Agenda Item 4: NAM/CAR Regional Safety/Air Navigation Implementation
4.2 Air Navigation Implementation Matters

IMPLEMENTATION OF PROJECT RLA22801 - CARIBBEAN AIR NAVIGATION SERVICES NETWORK (CANSNET)

(Presented by the MEVA/TMG Coordinator)

EXECUTIVE SUMMARY

This working paper presents the follow-up to Project RLA22801's implementation of the activities, for its bidding/acquisition process of the Telecommunications Network for Caribbean Air Navigation Services (CANSNET).

Action:	Suggested actions can be found in Section 4.
Strategic Objectives:	• Strategic Objective 1 – Safety • Strategic Objective 2 – Air Navigation Capacity and Efficiency • Strategic Objective 4 – Economic Development of Air Transport
References:	• Thirty Third MEVA Technical Management Group Meeting (MEVA/TMG/33), Willemstad, Curaçao, 29 to 31 May 2018 • Request for Information (RFI) process of the Caribbean Air Navigation Services Network (CANSNET) • Thirty Fifth MEVA Technical Management Group Extraordinary Meeting (MEVA/TMG/35), On-line, from 27 to 29 April 2020 • Tenth North American, Central American and Caribbean Directors of Civil Aviation Meeting (NACC/DCA/10), Fort-de-France, Martinique, France, 21 to 23 June 2022 • State Letters Ref. E.OSG-NACC93575, E.OSG-NACC93748 and E.OSG-NACC95622 • Thirty-Seventh MEVA Technical Management Group Meeting (MEVA/TMG/37), Mexico City, Mexico, 8 to 10 August 2022

1. Introduction

1.1 During the MEVA/TMG/33 meeting, the Central Caribbean Member States/Organizations of the MEVA III Network identified the need to review the MEVA architecture and services to ensure that the network supported emerging requirements in a cost-effective manner.

1.2 The MEVA Technical Management Group (TMG) activated an Ad hoc Group during the MEVA/TMG/33 meeting, aimed at leading the implementation activities of the new phase of the MEVA network.

1.3 The contents of the Request for Information (RFI) document of the Caribbean Air Navigation Services Network Project (CANSNET), name agreed by Member States for the new network, was approved during the MEVA/TMG/35 meeting. This document was published by the Technical Cooperation Bureau (TCB) of the International Civil Aviation Organization (ICAO) on 1 June 2020 as RFI 22502099, free of charge.

1.4 At the MEVA/TMG/37 meeting, the Request for Proposals (RFP) document was presented to the States, and it was requested, in a coordinated effort, that they define and review the technical and operational requirements of their organizations with a view to CANSNET.

1.5 Continuing with the MEVA/TMG agreement to bid for the new network through ICAO/TCB, at the NACC/DCA/10, a collective document for the Management Services Agreement (MSA) project was shared with MEVA members present at the meeting. TMG Member States were invited to sign the collective MSA in the letters sent by the ICAO North American, Central American and Caribbean Office (NACC), Ref. E.OSG-NACC93575 and Ref. E.OSG-NACC93748.

1.6 The Project Document (PRODOC), attached to the MSA, establishes mandatory prior actions that must be executed for the bidding process to be active and ICAO/TCB to start its activities.

2 Discussion

2.1 Following up on the RFI process of the CANSNET Project, and considering the solution proposals obtained, the MEVA/TMG Ad hoc Group prepared the document RFP. This document proposed major enhancements for the migration to CANSNET, in anticipation of the increasing bandwidth demands created by new data exchange and provision technologies, such as System-Wide Information Management (SWIM) and the extended service level of the Aeronautical message handling system (AMHS) to support the dissemination of Operational meteorological (OPMET) data according to the ICAO Weather Information Exchange Model (IWXXM).

2.2 CANSNET has been conceived to be implemented as a flexible and scalable telecommunications network, with full mesh connectivity between all network nodes, and access topology determined by the operational needs of each member.

2.3 CANSNET's core infrastructure will be a fully Internet Protocol (IP) private network, for both voice and data; it is expected to be terrestrial and fully redundant. The preferred access option for providing telecommunications services to CANSNET members is a terrestrial solution. In the event that a CANSNET member site is not reachable via a ground telecommunications link, alternative options, including satellite-based solutions, may be considered for those specific sites.

2.4 CANSNET provides for interconnection with other regional networks through ICAO-defined Global IP Addressing. All nodes of the CANSNET Network and of the South American Digital Network (REDDIG) must be mutually accessible, including those that use a Very Small Aperture Terminal (VSAT) connection. The connection to the Eastern Caribbean (E/CAR) grid is also planned. The CANSNET is identified as Project RLA22801.

2.5 During the MEVA/TMG/37 meeting, MEVA/TMG members reviewed and updated the RFP document. In accordance with Decision MEVA/TMG/37/06, a new review and update process was carried out, approving the final version at the Extraordinary Meeting held on 4 December 2022. This document was distributed to MEVA Member States and Organizations in the State Letter sent by the NACC Regional Office Ref. E.OSG-NACC95622.

2.6 Project RLA22801 is in the stage of preparing the actions and documents required for the start of its bidding process in the market, as established in its PRODOC, attached to the MSA.

2.7 The collective signing of the MSA between ICAO/TCB and the member States and Organizations of Project RLA22801 gave way to the first activities of ICAO/TCB in the preparation of the CANSNET bidding and acquisition process.

2.8 In said process, ICAO/TCB has presented CANSNET cost estimate, based on the result of the market study carried out according to the offers received during the RFI process.

Article	Description	Estimated Cost (USD)
1	CANSNET equipment, installation and acceptance	5,300,000
2	Additional 8% to estimated costs (post pandemic effects)	424,000
3	Additional 10% to estimated costs (contingency)	530,000
	Project estimated cost	**6,254,000**
4	7% for ICAO/TCB administrative expenses	437,780
	Total estimated cost	**6,691,780**

2.9 This budget corresponds to the average of the prices received during the RFI, with the integration of Air Traffic Services (ATS) services in 18 nodes. The estimated cost per State/Organization depends on the number of nodes that each contract. This means that project members with 1 node have an estimated contractual cost of USD347,444.44 (USD6,254,000 divided by the 18 nodes that were included in the budget calculation).

2.10 ICAO/TCB overheads are calculated at a rate of 7%, and include all work performed by ICAO/TCB, as described in the PRODOC. This amount will be shared equally amongst the 13 members of Project RLA22801. Each State/Organization will deposit 30% of TCB's overhead prior to the start of the procurement process. The rest will be deposited once ICAO/TCB presents the evaluation report.

2.11 The PRODOC of Project RLA22801 specifies all the details related to the assistance that ICAO/TCB will provide for the CANSNET acquisition project, as well as the cost of the services provided, taking the estimated value of the project as a calculation basis. Once the project is granted, the value of said services will be adjusted taking into account the real value of the financial offer of the selected provider.

2.12 The PRODOC, like the MSA, must be signed by all CANSNET members, except United States. This State will sign a Memorandum of Understanding (MoU) with TCB, regarding the CANSNET acquisition process.

2.13 The PRODOC of Project RLA22801 establishes the following mandatory activities prior to the start of operations of the service provided by ICAO/TCB:

- Signature of the PRODOC by ICAO and all members of Project RLA22801, except United States, who will sign an MoU with TCB, referring to the CANSNET acquisition process.
- Financing required, as described in the PRODOC, to cover the estimated cost of services and administrative fees.

2.14 According to the current status of the project, it is estimated that the next activities will take place according to the following schedule:

Date	Activity
June 2023	Signing of the CANSNET PRODOC (ICAO – CANSNET members)
June – 15 July 2023	Tender documentation preparation and submission to ICAO/TCB
August - October 2023	Project tender
November – 15 December 2023	Project evaluation and granting
January – April 2024	Contract between members and Provider
April – December 2024	Project implementation

3 Conclusions

3.1 CANSNET (referred to as Project RLA22801) has been designed to support all the requirements of the ANS Service Network (ATN) of the CAR Region, with its interconnection with adjacent ICAO regions in a cost-effective manner, achieving quality, redundancy and the reliability required by the evolution of air navigation services.

3.2 Currently, Project RLA22801 is in the phase of signing the CANSNET PRODOC by members of the Project, immediately followed by the preparation and delivery to ICAO/TCB of the documentation for bidding; the signing of this document is mandatory as a step prior to the bidding of the project.

3.3 The support to these activities of the CANSNET network in their early and timely execution of each one of the tasks that concern the States and Organizations members of the Project RLA22801, constitutes a decisive factor for the successful and timely completion of CANSNET, according to the proposed schedule.

3.4 Based on the foregoing, the following draft conclusion is proposed:

<table>
<tr><td colspan="2">DRAFT CONCLUSION
NACC/DCA/11/XX SUPPORT THE EXECUTION OF THE CANSNET PROJECT ACTIVITIES</td></tr>
<tr><td>What:
That, since the new Caribbean telecommunications network (CANSNET) is required to become operational by March 2025, when the current MEVA communications network cease to operate, Member States of the network support and execute the activities necessary for the project to be successful in the short term, as follows:

a) sign the Project Document (PRODOC);
b) economic resources be assigned to provide payment to the Project during 2023; and
c) necessary resources be assigned for the implementation of the Project during 2024.</td><td>Expected impact:
☐ Political / Global
☐ Inter-regional
☐ Economic
☐ Environmental
☒ Operational/Technical</td></tr>
<tr><td colspan="2">Why:
The commissioning of the new network is a strategic and safety project for the region, and it will replace the current communication network that is in its last phase of operation.</td></tr>
<tr><td>When: Immediately</td><td>Status: ☒ Valid / ☐ Superseded / ☐ Completed</td></tr>
<tr><td>Who: ☒ States ☒ ICAO ☐ Other:</td><td>CANSNET Member States</td></tr>
</table>

4. Recommended Actions

4.1 The Meeting is invited to:

a. review the information presented in this Working Paper;
b. support the necessary actions so that the mandatory activities established in the PRODOC of Project RLA22801 are executed as soon as possible; and
c. any other action deemed appropriate.

— END —