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**Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7)**

ICAO NACC Regional Office, Mexico City, 30 August - 1 September 2022

**Agenda Item 2: Follow-up to the Conclusions and Previous Agreements of NACC/WG, CAR/SAM Planning and Implementation Regional Group (GREPECAS) and Other Related Matters**

2.2 Status of operation of the States after COVID-19

**CENTRAL AMERICAN EXPERIENCE ON THE CONTINUITY OF AERONAUTICAL SERVICES THROUGH COCESNA DURING THE COVID-19 PANDEMIC**

(Presented by Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua, members of the Central American Corporation for Air Navigation Services - COCESNA)

**EXECUTIVE SUMMARY**

This working paper summarizes the experience obtained in Central America, of the measures adopted during the COVID-19 coronavirus pandemic, with the purpose of guaranteeing the continuity of the aeronautical services provided by COCESNA despite the unprecedented economic impact, and maintaining security levels required by each of its Member States and civil aviation.

<b>Action:</b>	Suggested actions are presented in Section 6.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Security &amp; Facilitation</li><li>• Economic Development of Air Transport</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Biosafety Protocol COVID19 I&amp;E COCESNA</li><li>• COVID-19 Action Plan for essential COCESNA personnel</li><li>• Prevention Policies COVID19 PE-0086/2020</li><li>• Circular PE-001/2020</li></ul>

**1. Introduction**

1.1 The global crisis caused by the COVID-19 coronavirus and its different variants have had an unprecedented impact on the aeronautical industry, and the Central American region has not been the exception. Maintaining the continuity of air navigation services, guaranteeing the required levels of operational safety, has represented a challenge. This paper reflects how the Central American Corporation for Air Navigation Services (COCESNA) has managed to face the new reality of the industry.

## **2. Background**

2.1 In 2020, the closure of borders and movement restrictions due to the COVID-19 pandemic not only caused Central America to experience a reduction of up to 90% of its operations and income compared to 2019, it also made it difficult to execute of essential activities such as the provision of air traffic service; preventive maintenance of aeronautical equipment and systems at remote sites in the region; and in-flight inspection of radio navigation aids, among others.

2.2 The aforementioned made it necessary to verify the air navigation services management model and adapt the policies and procedures to an environment of continuous change, in order to maintain the required safety levels and increase operational and technical efficiency.

## **3. Air traffic services**

3.1 In order to mitigate the probability and impact of contagion and spread of the virus among the air traffic controllers of the CENAMER control center, biosafety protocols and action plans were developed.

3.2 The Air Traffic Flow Management unit strengthened the exchange of information with adjacent airlines and Air Navigation Service Providers (ANSPs) to develop projections of the number of operations expected in the long, medium and short term. With this information, a time schedule has been dynamically developed to ensure a balance between demand and the capacity of Air Traffic Control (ATC). During the most critical period of the pandemic, with a lower air traffic flow, there were backup personnel in case of COVID-19 infection from CENAMER CONTROL operational personnel.

3.3 Although the new variants of COVID-19 have caused positive cases in Air Traffic Services (ATS) personnel in recent months, the continuity of the traffic service and the available ATS capacity of the control center have not been affected.

3.4 Currently, air traffic recovery levels have been achieved close to those that were handled prior to the pandemic. To guarantee the availability of ATS personnel, it has been necessary to maintain biosafety measures such as the use of masks, respect for the maximum capacity allowed in the facilities, vaccination, among others.

3.5 Additionally, through a collaborative decision-making process between airlines and adjacent ANSPs, it has been possible to implement measures to increase the efficiency of air operations, such as the authorization of more direct routes, generating savings for users and reduction in CO2 emissions.

## **4. Aeronautical maintenance management**

4.1 A comprehensive analysis of maintenance management was developed, taking into consideration the routines and the frequency with which they are executed to make changes in those cases that allowed it and thereby ensure the operability of the systems and comply with the requirements of availability and reliability that the industry establishes.

4.2 Due to the above mentioned, a reinforcement of the accesses and remote monitoring and control systems of the sites that have air navigation system equipment was carried out to mitigate the effects of a reduction in face-to-face visits due to mobility restrictions in the region. This allowed to carry out many of the basic maintenance of the Communications, Navigation, Surveillance, Automation, Meteorology, Energy and Auxiliary systems remotely. In those cases where the analysis determined that the implementation of remote management was not feasible, face-to-face maintenance was maintained as established, and during the periods with greater mobility restrictions established by the Governments of the region, safe-conduct procedures were carried out with local authorities so that technical staff could be mobilized as staff providing essential services. This was possible thanks to the capacity of the remote management and performance evaluation systems that COCESNA already had prior to the pandemic and the improvements that were quickly implemented.

4.3 The continuous monitoring of the systems and the results of the performance and safety indicators have shown that the changes made have maintained the efficiency in the maintenance management provided by the Corporation, without affecting the required levels of safety. Once mobility restrictions have been eased. COCESNA has continued to maintain critical infrastructure in order to prevent its deterioration, mainly those remote sites with more severe environmental conditions. In general, the established measures continue to be evaluated to determine which are still applicable and which must be suspended or modified to adapt to the new conditions, always seeking to achieve the greatest efficiency in management and ensure the safe provision of services.

4.4 In the case of the inspection of radio navigation aids, it was necessary at the time for COCESNA to establish strict biosafety procedures and protocols that complied with the conditions and regulations of the States of the region, ensuring the well-being of the crew of the COCESNA aircraft, the achievement of verification missions and compliance with applicable regulations to guarantee the optimal operation of radio aids in Central America.

## **5. Project management**

5.1 In a proactive manner, COCESNA took measures to reduce expenses, reviewing the projects in execution as part of its Comprehensive Investment Plan and immediately freezing the strategic and operational projects that had not started and did not represent an obligation for the organization, leaving only those critical investments that already had a contract and that were essential for the continuity of COCESNA and its Member States.

5.2 COCESNA held meetings with stakeholders, including critical suppliers, to take additional extraordinary measures such as cancelling not started contracts, freezing components of non-critical contracts, suspending and/or rescheduling activities for the years 2021 and 2022, and reviewing the payment terms to improve cash flow. The support of suppliers in times of crisis was important for COCESNA, and the Member States, for which we appreciate all the collaboration provided.

5.3 In addition, COCESNA approached financing institutions to improve financing conditions, all of the above based on the Corporation's financial model, considering different revenue recovery projections/scenarios in order to safeguard the strategic reserve to guarantee the continuity of the operations of COCESNA and the Member States, making informed decisions based on timely risk management.

5.4 The challenge has been enormous, we continue to support the measures taken by the Corporation, by controlling each outflow of one dollar and making only those critical investments to guarantee the continuity of the Air Navigation Services and achieve the economic recovery that allows the development of a new Plan Comprehensive Investments to guarantee essential services and the implementation of operational improvements in accordance with the Global Air Navigation Plan. The aforementioned according to the new reality and needs of the region with a positive cost-benefit so that no country is left behind and we get out of this crisis.

5.5 COCESNA, despite the economic crisis, has continued executing critical projects for the benefit of COCESNA and its Member States.

**6. Suggested actions**

6.1 The Meeting is invited to:

- a) take into consideration the best practices and initiatives carried out by COCESNA in the Central American region for the efficient management of air navigation services under its responsibility; and
- b) that ICAO promote the development of guidelines to respond to future events, in coordination with States and taking into account experiences at a global level, in such a way that action is taken in the most coordinated and expeditious manner with the least impact on the aviation.