

### COCESNA/Central America Airspace Redesign Project "Enhancing Safety and Efficiency"



## Introduction

• Central America's airspace is a strategic region for international aviation due to its geographic location, serving as a vital link between North and South America, with approximately 650 daily operations. This region, composed of Guatemala, Belize, El Salvador, Honduras, Nicaragua, and Costa Rica, has unique characteristics that make its optimization essential for ensuring safe and efficient air traffic management.





## SCOPE



 Due to its diverse topography, concentrated air traffic in specific corridors, and the separation between lower airspace (managed by each state individually) and upper airspace (managed by COCESNA), a comprehensive diagnose of routes, procedures (STARs Approaches and Departures), and sector assignments is necessary. This project must be carried out in an integrated manner by the Central American states and COCESNA to enhance safety, efficiency, and capacity, while adapting to traffic growth, new technologies, and evolving operational needs.



#### Key Considerations: Operational Requirements

Airspace structures should be based on operational needs, regardless of national borders, and should not be restricted by the division between upper and lower airspace. The design process must be transparent, allowing stakeholders to understand and consult on decisions. It should balance safety, capacity, and environmental aspects.



#### Key Considerations: Traffic Demand & Connectivity

Present and forecasted traffic demands at both regional and local levels must be considered, alongside performance targets to meet the needs of main traffic flows and airports.

Airspace redesign must ensure vertical and horizontal connectivity between terminal and enroute airspace structures, avoiding bottlenecks and ensuring seamless flow.



#### Key Considerations: Stakeholder Proposals & Adaptability

Proposals from stakeholders will be considered to address operational requirements, Free Route Airspace, and flexible route options. Airspace structures must be designed for flexible routing options, traffic flows, and sector configurations, allowing for continuous improvement as operational demands evolve.

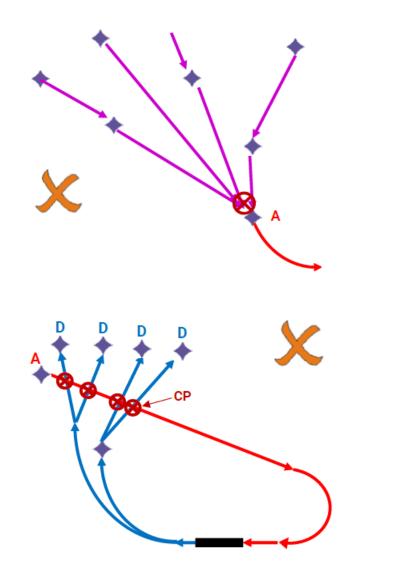


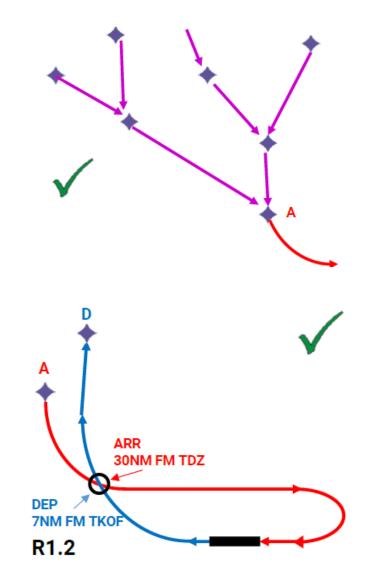
## **KEY STEPS**



- Feedback from Airlines: We expect airlines to provide suggestions for improvement, such as identifying overly long procedures, inappropriate published altitudes, or challenges in completing specific procedures.
- Statistical Data Collection: We will gather and analyze traffic and operational data, focusing on key performance metrics to identify bottlenecks and areas requiring optimization.
- Operational Analysis: An in-depth analysis of current traffic flows and procedures will be conducted to identify critical areas for redesign.
- Documentation of the Diagnostic: A comprehensive diagnostic report will be prepared, guiding future phases of the project.









# **Questions?**