



ICAO

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

INFORMATION PAPER

CIIFRA-T/05— IP/02
02/08/22

5th Meeting of the CIIFRA Team (CIIFRA-T/05)
Miami, United States, and on-line 2 to 4 August 2022

Agenda Item 6: IATA/Airline Discussion

STRATEGIC DIRECT ROUTING (SDR) IN SOUTH AMERICA

(Presented by IATA)

EXECUTIVE SUMMARY

This information paper aims to share the status/strategy of Strategic Direct Routing (SDR) Implementation in SAM

<i>Strategic Objectives:</i>	<ul style="list-style-type: none">• Air Navigation Capacity and Efficiency
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1. Introduction

1.1 The implementation of Strategic Direct Routing (SDR) in South America is based on Global Air Navigation Plan – ASBU FRTO B0/1, with the following objectives:

- Provide airspace users with additional flight planning, with route options on a larger scale across FIRs, so that planned distances can be generally reduced compared to the fixed route network.
- SDR will be established at national and regional level and is made available for flight planning (with published terms of use). The SDR shall be considered as a transition to the implementation of the free route airspace (FRA) concept. SDR enable airspace users to optimise flight and fuel planning.

1.2 The SDR could be implemented in a limited manner, for example:

- a) Time restriction (fixed or subject to traffic/availability);
- b) Traffic restriction (based on traffic flow and/or level);
- c) Flight level;
- d) Lateral restrictions;
- e) Entry/exit points.

1.3 The following procedures and processes may need to be considered:

- a) Identify SDR airspace volume (lateral y vertical) and applicable time;
- b) Direct routes may coexist with the ATS route structure;
- c) Adapt airspace design to ensure horizontal and vertical connectivity with SDR.
- d) ATFM procedures for SDR;
- e) Review the LoAs with adjacent ATS units;
- f) Publish data relevant to SDR in theAIP;

- g) Airspace management procedure for the implementation of direct routes;
- h) ATC procedures for SDR coordination, including handover, path changes in direct routing, conflict detection.

1.4 Operational and dependent relationship with other ASBU elements:

- a) NOPS-B0/1 Initial integration of collaborative airspace management with air traffic flow management - The integration of airspace management and air traffic flow management is a desirable requirement, with a view to optimising SDR implementation.
- b) FRTO-B0/2 -Airspace planning and Flexible Use of Airspace (FUA) - The application of FUA could optimise SDR implementation considering that DCT routes could enter special use airspace, in accordance with pre-established procedures.
- c) FRTO-B0/4 -Basic conflict detection and conformance monitoring - Medium-Term Conflict Detection (MTCD) and Conformance Monitoring tools are considered as requirements to reduce the workload of air traffic controllers in high air traffic volume settings. Accordingly, they can be considered as desirable requirements and should be considered when upgrading ATM systems.
- d) FICE-B0/1 - Automated basic interfacility data exchange (AIDC) - Similarly, AIDC is considered a desirable tool for SDR implementation, with a view to reducing ATCO workload, especially in high air traffic volume operational environments, particularly when there is handover of SDR flights in both FIRs.

2. Discussion

2.1 SDR was implemented in some extent in 6 South American States (Brazil, Chile, Ecuador, Guyana, Peru, and Venezuela), applying procedures published via AIP amendment or AIC, based on an aeronautical publication model developed by Airspace Study and Implementation Group (GESEA) - **Appendix A** to this information paper (Spanish only).

2.2 Aeronautical publications related to the implementation of SDR of the mentioned 6 States are attached as **Appendix B**.

2.3 Based on the UPR implementation process led by CIIFRA, GESEA started a similar process, aiming to obtain benefits in States that are not yet able to implement SDR or in portions of airspace not covered by SDR in States that have already implemented it.

3. Action by the Meeting

3.1 The Meeting is invited to use the information provided in this Information Paper in the SDR implementation process in Central America and Caribbean.