



Agenda Item 2: Analysis of Version 05 of the SAM ATS routes network and SAM-CAR inter-regional ATS routes

CAR/SAM ATS ROUTES NETWORK OPTIMIZATION PROPOSAL

(Presented by Jamaica)

SUMMARY	
The following proposal is being made to the Meeting for consideration and implementation after all safety, environmental and economic issues are analysed to determine benefits to be derived.	
References:	
– SAM ASTRO Meetings – NACC PBN Implementation Meetings	
ICAO Strategic Objectives	<i>A. Safety B. Air Navigation Capacity and Efficiency D. Economic Development of Air Transport E. Environmental Protection</i>

1. Introduction

1.1 Over the next years it is Kingston's intention to restructure its flight information region (FIR) which will encompass few uni-directional routes in an effort to increase our capacity, increase safety and manage our demand.

1.2 In achieving this objective, we will strategically realign, create or utilize current routes to reduce the impact on our adjacent FIR operations.

1.3 Most States are moving away from ground base navigational aids (VORs) to satellite based (GNSS) technology due to precision and reliability. To airline operators (AO), these routes will provide savings on fuel, reduce flying distance and lessens airborne time.

2. Proposal

2.1 Southbound only PUTUL BUTAL creating a new point on MKJK/SKEC boundary west of KILER (new)

2.2 Northbound only KILER EPSIM (realign and rename UG430) [SAM SC 5-21]

2.3 Southbound only EMABU OTAMO (realign and rename UA301)

2.4 Northbound only EGAP0 BEMOL (realign UL417)

- 2.5 BOBKA VIKRO remains bi-directional
- 2.6 Northbound only UGUPI ATUVI (SAM SC 5-22 Proposal)
- 2.7 Notwithstanding the waypoints specified, States may give consideration to extend the route further south after collaboration with their adjacent FIR.

3. **Justifications**

- 3.1 These uni-directional routes are currently in use between Havana ACC and Miami ACC to efficiently manage the flow of traffic in and out of airports in Florida. This has reduced safety concerns which existed and increase their capacity.
- 3.2 As a result of 3.1, Havana has introduced those routes to Kingston ACC; a few of which are already implemented to the north.
- 3.3 Reduces complexity within the airspace, departures are easily integrated into traffic flow because there is no opposition directional traffic to separate.
- 3.4 Arrivals are effortlessly transitioned from the stratum to Approach Control using the tunnelling tools available in air traffic flow management.
- 3.5 Similarity to the Direct Routing system which some States currently utilizes.
- 3.6 More aircraft operating at optimal flight level reducing CO2 emissions.
- 3.7 Facilitates CCO and CDO by allowing pilots to manage the configuration to their aircraft making it more fuel and cost efficient.

4. **Suggested actions**

- 4.1 The Meeting is invited to:
- a) Take note of the information provided in this Working Paper;
 - b) adopt this principle as a high priority for the region to improve operational efficiency, expedite air traffic flow and improve safety;
 - c) revise the regional route structure to integrate and fully utilise uni-directional routes where there are operational benefits; and
 - d) Due consideration be given to implement during February 2020 allowing all stakeholders sufficient time to analyse and offer feedback. Also, this should align with AIRAC Cycle for the period
