

**Sixteenth Meeting of the Cross Polar Trans East Air Traffic Management Providers' Work Group
(CPWG/16)**

(Ottawa, Canada 3-6 December 2013)

Agenda Item 5: Provide Status on CPWG/15 Actions

**Update on Requested Enhancements to the Dynamic Ocean Track System- Plus (DOTS+) and User
Trajectory Planning**

(Action Item #CP15-02)

(Presented by the Federal Aviation Administration)

SUMMARY

This paper presents information on the current status of the Dynamic Ocean Track System-Plus (DOTS+) and development of additional planning tools as part of the Federal Aviation Administration's NextGen program.

1 Introduction

1.1. As part of its Next Generation Air Transportation System (NextGen) program, the United States Federal Aviation Administration (FAA) is developing tools to improve efficiencies and collaborative decision making (CDM) for stakeholders. While tools such as the Dynamic Ocean Track System-Plus (DOTS+) have improved efficiencies, there are limitations to many pre-planning capabilities that stakeholders would like to see.

2 Discussion

2.1. The FAA's DOTS+ is designed to organize air traffic so as to provide for a safe, orderly, and efficient flow of traffic across the westbound Pacific Organized Track System (PACOTS) and Anchorage Trans-Polar routes. Operators submit gateway requests for flights that include track, requested flight level, and time over the requested gateway fix. The DOTS+ program then generates a Gateway Reservation List (GRL) that includes constraints like flow and altitude restrictions along each track.

2.2. While tools such as DOTS+ On-Line (DPO)/On-Line Track Advisory (OLTA) allow operators to interface with the DOTS Track Advisory (TA) function, there are limitations on what data may be obtained. During CPWG/15, several operators expressed a desire to see additional enhancements (e.g. access to early intent data) to the DOTS+ platform. Unfortunately, DOTS+ is being maintained in its current state with no future plans of expanding its capabilities.

2.3. The FAA is currently developing the User Trajectory Planning in Pre-Oceanic Phase program. This new system is more in line with the spirit of CDM and offers many of the features that airline operators have expressed a desire to see. Some of the enhancements include the following:

- a. Interactive flight plan collaboration between the FAA and aircraft operators
- b. Operator input of intended 4D oceanic trajectory and feedback about likelihood of achieving that trajectory based on the intended trajectory of other oceanic flights. Feedback would be provided prior to entry into oceanic airspace, whether pre-flight or in-flight.

- c. Operator reservation requests would consist of a prioritized list of user preferred trajectories (UPTs) with acceptable variation for each UPT. System designed to recognize and equitably handle variations.
 - d. Will support increased use of UPTs by encouraging deconfliction even in complex airspace.
- 2.4. Prototype currently in development. Operational trials and implementation are currently to be determined.

3 Recommendation

- 3.1. The Meeting is invited to note the information provided in this paper.