

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 6: Aeronautical navigation issues

- 6.2 Navigation policy issues in the light of present and envisaged GNSS services
: and architectures, integration and back-up options**

ROADMAP FOR PERFORMANCE-BASED NAVIGATION

(Presented by the United States)

SUMMARY

This paper presents the U.S. Federal Aviation Administration's (FAA) Roadmap for Performance-Based Navigation, Implementation Strategy for Area Navigation (RNAV) and Required Navigation Performance (RNP) Capabilities, 2003 - 2020. The information paper is intended to complement the material presented in AN-Conf/11-WP/122.

1. INTRODUCTION

1.1 This paper presents the FAA's Roadmap for Performance-Based Navigation, Implementation Strategy for Area Navigation (RNAV) and Required Navigation Performance (RNP) Capabilities, from 2003 through 2020. The Roadmap contains near-, mid-, and long-term goals and milestones.

1.2 The aviation community worked together for the past year to produce this Roadmap. By adopting performance-based navigation standards and leveraging existing and emerging navigation capabilities, we will be able to improve airspace design and air traffic procedures. This will increase access, reduce delays, and improve the efficiency of the U.S. National Airspace System.

1.3 The FAA is committed to moving to a performance-based system that produces the highest levels of safety and security. This system will have measurable capacity, efficiency, and environmental performance goals. Key parts of this performance-based system include communications, navigation, and surveillance. The FAA's new RNP Office now has the strategies it needs to implement the performance-based system for navigation. The FAA will issue detailed strategies for other components as we develop them with the help of our domestic stakeholders and international counterparts.

1.4 The Roadmap defines operational goals and concepts, identifies steps and milestones to achieve those goals, presents key policy and technical issues we need to address, and outlines critical decisions we need to make along the way. It gives our stakeholders guidance to help them make business, equipage, maintenance, and training decisions consistent with the performance-based system.

1.5 The FAA will update the specific implementation details in this Roadmap periodically as we learn from our current efforts, evaluate the effectiveness of our decisions, and incorporate the work of the Joint Planning Office on the development of a long-term national air transportation plan.

1.6 The Roadmap can also be found online at <http://www.intl.faa.gov>.

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