International Civil Aviation Organization
CAR/SAM Regional Planning and Implementation Group (GREPECAS)

INFORMATION PAPER

GREPECAS/20 — IP/26
15/11/22

Twentieth Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/20)
Salvador, Brazil, 16 – 18 November 2022

Agenda Item 7: Other business

CHARTING AVIATION'S FUTURE: OPERATIONS IN AN INFO-CENTRIC NATIONAL AIRSPACE SYSTEM

(Presented by the United States)

EXECUTIVE SUMMARY	
The United States Federal Aviation Administration has published a vision for the future that describes the need for the National Airspace System to accommodate a diverse set of airspace users (crewed and un-crewed) in the 2035 timeframe. This vision also supports evolution towards a more digital information environment for decision-making and ensuring continued safe and efficient operations.	
Strategic Objectives:	• Air Navigation Capacity and Efficiency
References:	• None

1. Introduction

1.1. The United States (US) Federal Aviation Administration (FAA) has published its *Operations in an Info-Centric National Airspace System (ICN)*[1] vision document. It details the transition from traditional operations to the digitized and total performance system, in the 2035 timeframe, that is envisioned in the GANP Conceptual Roadmap. The *ICN* vision document explains how the US will leverage the information and connectivity revolution and integrate technologies, like autonomous vehicles, electric aircraft, supersonic jets, and spacecraft.

1.2. The vision recognizes exciting new opportunities emerging in aviation and aerospace. Significant investments are advancing the research and development of autonomous vehicles, environmental friendly electric aircraft, high-speed and long-endurance solar powered aircraft flying in airspace above conventional fixed-wing aircraft, and new types of space vehicles. Success with these new technologies and vehicle types will not only introduce new ways to transport people and goods for large and small communities, but will also expand aviation's role beyond transportation. The future National Airspace Systems (NAS) must accommodate the resulting changes in operations.

[1] https://www.faa.gov/about/office_org/headquarters_offices/ang/icn

1.3. The ICN Vision Document and its companion Concept of Operations build upon the previous NextGen program initiatives and outlines how the FAA will manage new airborne vehicles that have non-traditional missions previously outlined in the Conceptual Roadmap. The ICN vision document also shows how the US will scale to meet the expected growth in these operations with new traffic management services tailored to new entrant characteristics while coexisting with traditional air traffic services. It illustrates operations serving both the traditional air traffic management community and the new entrant extensible traffic management community in a safe, seamless, efficient and equitable manner ultimately leading to a more agile and flexible NAS.

1.4. This vision provides the foundation for full dialogue with all parts of the aviation community on assumptions, opportunities, and timelines to meet those opportunities. This document is a basis to start that conversation.

2. Conclusion

2.1 Information on the content of the US FAA Info-Centric NAS vision document can be found at: https://www.faa.gov/about/office_org/headquarters_offices/ang/icn.

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