Concept Note on the AFI Template of National Air Navigation Plan

Executive Summary

The AASPG/1 meeting encouraged States to develop national air navigation plans aligned with the Global Air Navigation Plan (GANP) and the AFI ANP, serving as reference documents for infrastructure investment and modernization.

Although ICAO plans to release an online template for national air navigation Plans via the GANP portal, this resource is not yet available. Therefore, the meeting tasked the Airspace and Aerodrome Operations Sub-Group (AAO/SG) and the Infrastructure and Information Management Sub-Group (IIM/SG), through AASPG/1 Decision 1/30, to develop a regional template to guide States of the AFI region in a harmonized manner.

The Article 28 of the Convention on International Civil Aviation (Doc 7300) requires contracting States to provide aerodrome and air navigation facilities and services to facilitate international air navigation. To ensure that the necessary facilities and services are being consistently provided in accordance with the international obligation and the legal requirements, the National Air Navigation Plan (NANP) serves as the strategic planning and implementation directory.

This Concept Note provides guidance on the nature, and structure of the document to be developed as Template of Air Navigation Plan for the AFI region.

1. Nature of the Air Navigation Plan

1.1. Since its sixth edition, the Global Air Navigation Plan (GANP) has been organized into a multilayer structure with each layer tailored to different audiences. This allows for better communication with both high-level and technical managers with the objective that no State or stakeholder is left behind.

1.2. The four-layer structure is made up of global strategic and technical, regional and national levels, and provides a framework for alignment of regional and national plans. The four-layer structure facilitates decision making by providing a stable strategic direction for the evolution of the air navigation system and, at the same time, timely relevance in the technical content.

1.3. The regional level addresses regional and sub-regional needs aligned with the global objectives. As such, it contains the ICAO Regional Air Navigation Plans (ANPs) and considers other regional initiatives.

1.3. The provisions of the Regional Plan should be implemented by States at the national level. This requires an adequate national planning and implementation mechanism. As such, the National Air Navigation Plan involves several stakeholders beyond the aviation community, including but not limited to ministries of transports, defense, finance, planning and development, infrastructures, etc. Furthermore, to ensure the sustainability of the National Air Navigation Plan, it should be included in the State's National Development Plan. All these factors make the NANP a high-level strategic document within the State.

2. Structure of the Template of National Air Navigation Plan

2.1. The following key features are proposed as a minimum to be covered in the regional template:

a. Strategic vision of the State;

b. Governance of the Plan;

c. Alignment with the Regional Plan;

d. Traffic statistics and forecast;

e. Current Air Navigation System;

f. Future Air Navigation System;

g. Implementation Roadmap;

h. Performance Monitoring.

3. Strategic vision of the State

3.1. The strategic vision should clearly articulate the State's medium-term and long-term goals and aspirations for the development and modernization of its air navigation system, aligned with national development objectives and international commitments.

3.2. It should emphasize safety, efficiency, environmental sustainability, and the integration of emerging technologies to support the evolving needs of air transport and economic growth.

4. Governance of the Plan

4.1. The governance framework should define the roles and responsibilities of all stakeholders involved in the development, implementation, and oversight of the NANP, including government ministries, regulatory authorities, air navigation service providers, airport operators, and industry partners.

4.2. It should establish coordination mechanisms to ensure effective communication, decision-making, and resource allocation, as well as mechanisms for periodic review and update of the plan.

5. Alignment with the Regional Plan

5.1. The NANP must be aligned with the AFI Regional Air Navigation Plan (ANP) and other relevant regional initiatives to ensure harmonization and interoperability across borders.

5.2. This alignment facilitates coordinated infrastructure investment, operational improvements, and the implementation of global and regional air navigation system enhancements.

6. Traffic statistics and forecast

6.1. This section should provide a comprehensive analysis of current air traffic volumes, including passenger, cargo, and aircraft movements, segmented by relevant categories such as domestic, international, and overflight traffic.

6.2. The traffic forecasts based on historical data, economic trends, and anticipated developments in the aviation sector would support capacity planning and infrastructure development.

7. Current Air Navigation System

7.1. This section should describe the existing air navigation infrastructure, services, and capabilities, including communications, navigation, surveillance, air traffic management systems, and aerodrome facilities.

7.2. It should then identify current challenges, limitations, and gaps that affect safety, efficiency, and capacity, to support the needs for improvements.

8. Future Air Navigation System

8.1. This section will outline the planned enhancements and modernization initiatives to address identified gaps and meet future operational requirements, incorporating emerging technologies and operational concepts such as ASBU elements.

8.2. It would be important to highlight expected benefits in terms of safety, efficiency, environmental impact, and capacity improvements.

9. Implementation Roadmap

9.1. This section should present a phased implementation plan with clear timelines, milestones, and resource requirements for each phase. This roadmap should prioritize initiatives based on their impact on safety, efficiency, and capacity, as well as the availability of funding and technical resources.

9.2. To guarantee a successful implementation, it would be beneficial to include risk management strategies to address potential challenges during implementation; and define responsibilities for monitoring progress and ensuring adherence to the plan.

10. Performance Monitoring

10.1. Key performance indicators (KPIs) should be established to measure the effectiveness of the implemented air navigation systems and services against the objectives set out in the NANP. These indicators should cover safety, operational efficiency, environmental sustainability, and cost-effectiveness.

10.2. Mechanisms should be defined for regular data collection, analysis, and reporting to support continuous improvement. The monitoring process should also include provisions for periodic review and updating of the NANP to reflect changing operational needs and technological advancements.