



Agenda Item 2: Optimisation of SAM airspace

NEW STRUCTURE OF THE GLOBAL AIR NAVIGATION PLAN

(Presented by the Secretariat)

SUMMARY	
<p>This working paper presents the multi-layered structure proposed for the sixth edition of the Global air navigation plan (GANP), which highlights the importance of global, regional and national planning alignment. It elaborates on the global strategic level of the multi-layered structure, whose goal is to drive the evolution of the air navigation system by providing global strategic guidelines. To that end, the global strategic level should encompass a vision, efficiency aspirations, and a conceptual roadmap.</p>	
References:	
<ul style="list-style-type: none"> • Global air navigation plan (Doc 9750) • Global air traffic management operational concept (Doc 9854) • Manual on air traffic management system requirements (Doc 9882) 	
ICAO strategic objectives:	<i>Safety and capacity and efficiency</i>

1. Introduction

1.1 The Global air navigation plan (GANP, Doc 9750) is the highest air navigation strategic document. It is the plan driving the evolution of the global air navigation system and takes into account the Global air traffic management operational concept (GATMOC, Doc 9854) and the Manual on air traffic management system requirements (Doc 9882). The GANP also supports planning for local and regional implementation.

1.2 The 39th Session of the ICAO Assembly endorsed the fifth edition of the GANP, which includes updates to the Aviation System Block Upgrades (ASBU) framework and additional information while maintaining a stable structure as had been requested by the aviation community.

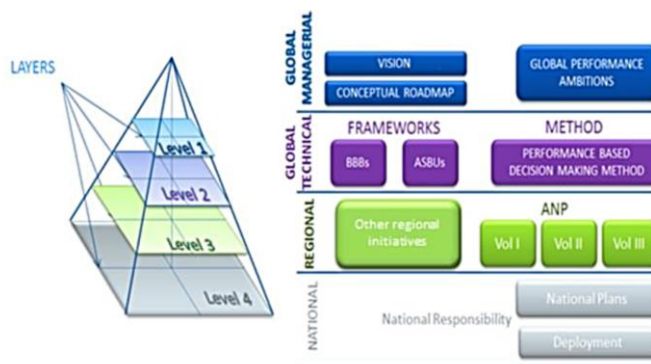
1.3 However, the Assembly also highlighted the need for a more comprehensive update of the sixth edition with further enhancements as part of the evolution towards a performance-driven strategic planning environment which interacts with regional and national research, development and implementation programmes.

2. Discussion

Multilayer structure

2.1 The 39th Session of the Assembly instructed the Secretary General to promote, make available and effectively communicate the GANP. Therefore, to better communicate with high-level and technical managers and to not leave any State or stakeholder behind, a multilayer structure, tailored for the various audiences, is proposed for the sixth edition of the GANP.

2.2 This four-layer structure, as illustrated below, is made up of global (strategic and technical), regional and national levels, and will provide a framework for alignment of regional, sub-regional and national plans.



2.3 The global strategic level will provide high-level strategic direction for decision makers to drive the evolution of the global air navigation system. To this end, the global strategic level will include a common vision, global performance aspirations and a conceptual roadmap.

2.4 ICAO, with the support of States, international organisations and industry stakeholders, is developing and will maintain this level of the GANP.

2.5 The global technical level is also being developed and will be maintained by ICAO in partnership with all stakeholders. This level will support technical managers in planning implementation of basic services and new operational improvements in a cost-effective manner and according to specific needs, while ensuring interoperability of systems and harmonisation of procedures. It will contain:

a) two global frameworks:

- the Basic Building Blocks (BBB) framework will outline the foundation for any robust air navigation system by defining the basic services to be provided for international civil aviation; and
- the ASBU framework will outline the performance benefits expected from specific air navigation operational improvements under certain operational conditions.

b) a performance-based method for implementation planning of air navigation operational improvements, including a catalogue of performance objectives and indicators.

2.6 The regional level will address regional and sub-regional needs aligned with the global objectives. As such, it will contain the ICAO regional Air Navigation Plans (ANPs) and consider other regional initiatives. The fourth level, under responsibility of the States, will focus on national planning. The development by States, in coordination with relevant stakeholders, of air navigation plans as a strategic part of their national development plans (AN-Conf/13-WP/24 refers) and aligned with regional and global plans is crucial to achieve the common vision being developed in the GANP. These air navigation plans will serve as reference documents for national investment in air navigation infrastructure.

2.7 For all stakeholders to have ready access to the vast amount of information contained in the multilayer structure of the GANP, ICAO is developing the GANP portal

<https://www4.icao.int/ganpportal/>

where the different users will be able to find the most relevant information to fit their specific context. This web-based platform will ensure consistency between content on the different GANP levels, as well as provide more comprehensive information through a single interface.

The GANP vision

2.8 The GANP vision will lay out the ultimate objectives of the air navigation system, as well as the emerging challenges and opportunities stemming from aviation and technology trends. The evolution driven by this vision will yield a high-performing global air navigation system to meet the needs of society in general and the Air Traffic Management (ATM) community in particular.

The performance ambitions

2.9 Supporting air transport requires sometimes difficult decisions and strong commitment from the air navigation system stakeholders. In addition to the three fundamental aviation performance principles of safety, security, and environmental and economic sustainability, there are several performance requirements that the air navigation system must meet to fulfil the needs of society. Performance should drive the evolution of the system and it is for this reason that the sixth edition of the GANP will propose performance ambitions.

2.10 These performance ambitions will serve as a call for action, as a catalyst for change and to help set global priorities. Therefore, they should not be seen as targets to continuously monitor and against which to report performance. Expressed in a qualitative but focused way, these performance ambitions will be met by pursuing specific performance objectives in each planning region based on relevant regional challenges.

2.11 Although the selected performance objectives will serve as the regional and local drivers for performance improvement, the analysis of operational needs at the local level will still be necessary.

The conceptual roadmap

2.12 The ATM service community must also embrace the transformational change required to achieve performance ambitions by following a unified path laid out in a conceptual roadmap.

2.13 The proposed conceptual roadmap consists of four evolutionary steps: flight operations in a digital rich environment; time-based operations enabled by an information revolution; trajectory-based operations enabled by full connectivity through the internet of aviation; and a total performance management system focused on business/mission needs.

2.14 Improved digital data quality, enhanced processing capability and sharing of information for better decision-making based on agreed performance levels are the key components of this roadmap. The conceptual roadmap will be the basis for identifying new operational improvements for the ASBU framework.

2.15 A draft of the GANP vision, performance ambitions and conceptual roadmap can be found at:

<https://www4.icao.int/ganpportal/ganpdocument>

3. **Conclusion**

3.1 To effectively communicate the GANP, a multilayer structure is needed for the sixth edition. For easier access, GANP information will be available via a single user interface (the GANP portal) to be created by ICAO, a web portal where different users will be able to find the most relevant information for their specific needs.

3.2 A successful implementation of air navigation improvements starts with their development, it is therefore necessary to have a common vision, performance ambitions and conceptual roadmap to drive the evolution of the global air navigation system.

4. **Suggested action**

The States participating in the Meeting are invited to take note of the information provided in this working paper, and analyse the impact of the new structure of the sixth edition of the GANP on SAM/IG and/or GREPECAS activities, for appropriate action.
