



WORKING PAPER

ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 28: Aviation Safety and Air Navigation Policy

GANP GUIDANCE AND ANALYTICAL TOOL

(Presented by Saudi Arabia)

EXECUTIVE SUMMARY

The *Global Air Navigation Plan* (GANP, Doc 9750) is an essential tool to enhance the aviation systems in order to accommodate and safely manage the expected growth in air traffic. The individual implementation of each aviation system block upgrade (ASBU) modules/elements might not accomplish the global objectives of the GANP if it's not supported by appropriate study of need and cost-benefit analysis. There is a need for a holistic guide mechanism to assist different levels of stakeholders in order to choose the appropriate modules/elements to maximize the safety, operational and financial benefits within a timeline framework.

Action: The Assembly is invited to:

- a) recommend that ICAO develop a GANP tool to assist States, regions and the globe in implementing the appropriate ASBU modules/elements;
- b) encourage States and stakeholders to take action to achieve the objectives of the GANP tool and provide the recommended data and information; and
- c) encourage States to share their experience on the implementation of ASBU modules/elements including analysis methodologies used to select specific applications.

<i>Strategic Objectives:</i>	This working paper relates to all Strategic Objectives.
<i>Financial implications:</i>	The activities referred to in this paper will be undertaken subject to the resources available in the 2019-2022 Regular Programme Budget and/or from extra budgetary contributions.
<i>References:</i>	Doc 9750, <i>Global Air Navigation Plan</i> (Sixth Edition, A40-WP/24) Doc 9854, <i>Global Air Traffic Management Operational Concept</i>

1. INTRODUCTION

1.1 The GANP indicates the need for global harmonization and integration in air navigation systems at both regional and State levels in order to address future air traffic growth. ASBUs in the GANP are the form of technology provided in time series blocks. Regions and States can utilize these

technologies to enhance the effectiveness of their air navigation services according to the priorities and need.

1.2 Setting priorities of the ASBU within regional and State level will consider different aspects including safety, financial and efficiency implications. The aim of this paper is to recommend that ICAO develop a tool to assist regions and States to implement the most appropriate module according to the current available and forecasting data.

1.3 There is a need for more integrated aviation planning at both the regional and State level and addresses required solutions by introducing the consensus-driven ASBU systems engineering modernization strategy.

1.4 When considering the implementation of ASBU modules/elements that require significant investment in resources, the selection of the appropriate module is crucial for helping the decision makers to determine and justify the return of investment.

2. DISCUSSION

Vision and Objective

2.1 ICAO introduced the GANP as guidance to enhance global harmonization of air navigation services. The global harmonization started from the state, sub-regions and then regions. Although the GANP identified through the ASBU blocks and modules the implementation of enhanced air navigation system in order to accommodate future traffic growth, the need for master guidance to assist States and regions in prioritizing the implementation is highly recommended.

2.2 The recommended guidance and analytical tool can play the role of master guidance to highlight “best-fit” the priority for implementing the preferred modules that are expected to enhance or resolve specific operational requirements and corresponding benefits.

2.3 The integrated Safety Trend Analysis and Reporting System (iSTARS) web-based tool that ICAO introduced to assist States and regions provided significant analytical information that helped States and regions to monitor and improve the civil aviation systems accordingly. iSTARS collects data from multiple resources such as Universal Safety Oversight Audit Programme (USOAP), OAG, ICAO Air Transport Bureau (ATB), Federal Aviation Administration (FAA), ICAO Regional Offices and Member States.

2.4 Similarly, by utilizing the data and information that ICAO is collecting globally in a central database, a tool can be developed using this database to provide a holistic analysis regarding to the preferred ASBU’s modules and elements recommended to be implemented in a State or a region.

2.5 Where additional data and information may be required to fulfil the execution of the tool, states should play their role in assisting ICAO to provide it.

Benefits and expected improvements

2.6 Although the GANP is a global plan, the starting point is the State. The State investments that need to be justified through measurable and monetised performance benefits can be considered the threshold of implementing the GANP modules/elements.

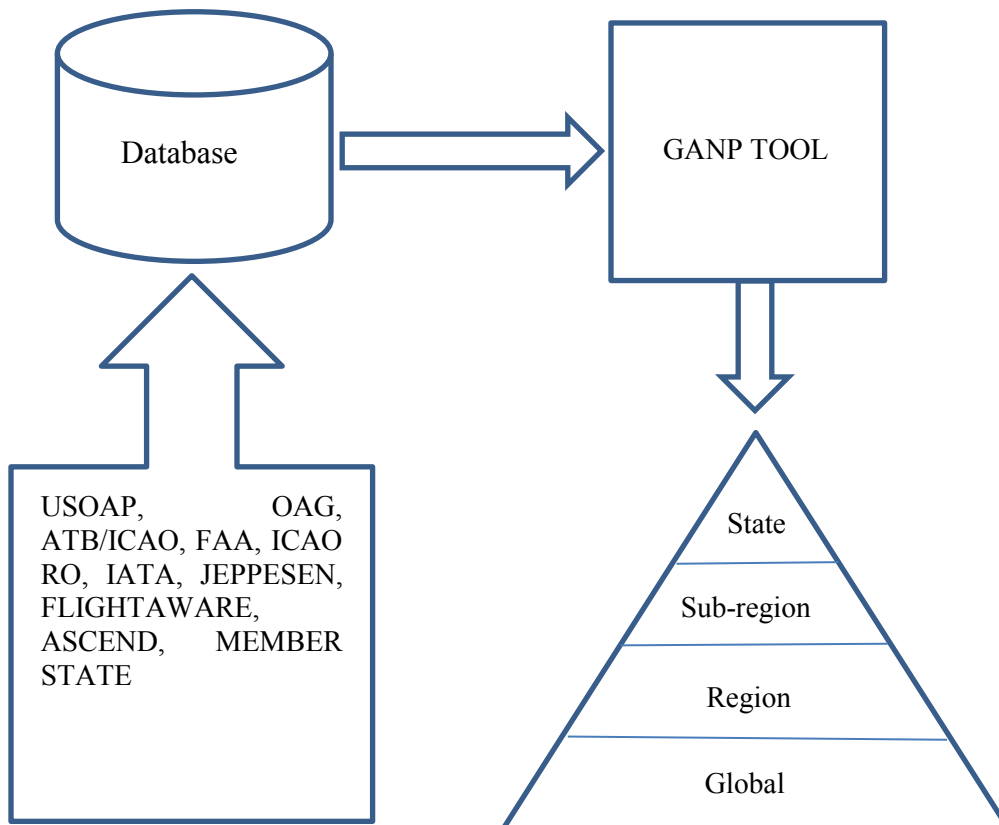
2.7 The tool can help towards a performance-driven strategic planning environment which interacts with State, regional and global development and implementation programmes.

2.8 The tool can provide orientation and framework for national/regional performance management and also as justification, for the implementation guidance of the ICAO provisions in relation to the modules and elements of the GANP.

2.9 The benefit of the tool will not be limited to the GANP implementation but will also consider the *Global Aviation Safety Plan* (Doc 10004, GASP) as a complementary plan to the GANP. By enhancing the overall operation of the aviation system, a consequential improvement to safety will be achieved.

2.10 Regional safety oversight organizations (RSOOs), planning and implementation regional groups (PIRGs) and regional aviation safety groups (RASGs) will all have a better planning and level of implementation as the guidance and analytical tool will offer clear view of the ways to move forward with the introduction of appropriate modules/elements with consequential safety improvements.

2.11 The tool will assist in establishing of the No Country Left Behind initiative by helping States choose the most suitable modules that improve their safety and operation needs.



4. **CONCLUSION**

4.1 The GANP guidance and analytical tool will allow States and all stakeholders to have a holistic view on the most needed ASBU's modules and elements to be implemented in order to enhance the efficiency of the operation and safety for the civil aviation. By utilizing the existing data and information that ICAO already collect from different sources and with the collaboration of the States the tool will help in improving the implementation of the GANP in different levels (State, regional and global), in addition it will provide a clear vision for the regional safety oversight organizations (RSOOs), planning and implementation regional groups (PIRGs) and regional aviation safety groups (RASGs) for better planning.

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