



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

WORKING PAPER

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Twenty-first Meeting of the CAR/SAM Regional Planning and Implementation Group (GREPECAS/21)

Santo Domingo, Dominican Republic, 15 to 17 November 2023

Agenda Item 3: Global and Regional Developments

3.2 Work report on the CAR/SAM Regional Air Navigation Plan Vol. III and Regional Progress

GANP PERFORMANCE EXPERT GROUP UPDATES FOR GANP/8

(Presented by ICAO GANP Performance Expert Group (PEG))

EXECUTIVE SUMMARY

The Global Airspace Navigation Plan (GANP) Study Group has created the GANP Performance Expert Group (GANP-PEG) which is charged with reviewing the guidance in ICAO Document 9883 and recommending improvements for GANP/8. This includes simplifying the language used to describe the 6-Step Process, updating the glossary of key terms, and as necessary updating the recommended Key Performance Indicators that are available on the GANP Portal. It is understood that the recommended indicators require specialized data streams and can also require other analysis to attribute performance to an action that can be influenced by the state.

The purpose of this paper is to introduce GREPECAS to the GANP-PEG work actions and to help establish contacts between GREPECAS and the GANP-PEG as GREPECAS works to update Volume 3 of its Air Navigation Plan (ANP).

Strategic Objectives:	 Safety Air Navigation Capacity and Efficiency Environmental Protection
References:	 Environmental Protection ICAO Document 9883 The GANP Portal (https://www4.icao.int/ganpportal)

1. Introduction

1.1. Since GANP's Ed5, ICAO has promoted the PBA to support data-driven updates to the GANP. ICAO PIRGS are also working to embrace PBA by setting up Data Analysis groups to help inform PIRG work programs. This is occurring in the Asia-Pacific, Latin America-Caribbean Region and the North Atlantic with the recent establishment of the Common Metrics Task group. These groups are aware

- of the GANP Key Performance Indicators (KPIs) but may need assistance in understanding how these KPIs can best support PIRG's goals.
- 1.2. ICAO Document 9883 provides significant details on the six-step performance-based approach with a chapter dedicated to "Getting Started". However, there is feedback that this document is difficult for groups beginning work in this area. The document was last updated in 2009 and does not have information on the current GANP KPI's and recent developments in data sources available to analytical teams.
- 1.3. As an alternative to a static document, ICAO has produced the GANP PORTAL (former Doc 9750) which includes basic information on the 11 ICAO Key Performance Areas (KPAs), Performance Objectives, and recommended KPI definitions. A web-based environment has the potential advantage of having items updated with greater frequency.
- 1.4. Beginning in 2019, ICAO introduced the GANP Portal (https://www4.icao.int/ganpportal) which provides current information on the overall GANP. It includes sections on Performance KPA's (Called Performance Ambitions) and more specific information on Key Performance Metrics under a page titled "Performance Framework". The tab includes a list of Performance Objectives which attempts to catalogue goals linked to a Performance Ambition with an ICAO endorsed KPI associated with this PBA process. The objectives however may be overly compartmentalized and may not always reflect the experience of groups using KPIs to improve performance.

2. Updates for GANP/8

- 2.1. It is recognized that there are key differences between ICAO Document 9883 and the guidance provided in the GANP Portal. Doc 9883 spends a lot of time on what is needed to establish a Performance Analysis capability and have this capability begin working within a group's organizational environment. An organization first makes a commitment to invest in a Data Analysis Group (DAG) which then uses data to help inform the Organization and set priorities. The ICAO 6-Step process is reasonable as most organizations will have this type of procedure using information of some kind to set goals and monitor progress. There is also attention given to setting up data archiving and processing. However, many groups have reported that the 6-step process, as described in doc 9883, is very difficult to read and understand.
- 2.2. Where Doc 9883 is weak on KPIs, the GANP Portal reflects more modern guidance on demonstrated measures that are currently in use to support PBA. The GANP Portal also includes Performance Objectives. However, these should be reviewed for effectiveness as objectives have strong correlation; positive or negative (Trade-Offs). Groups involved in effective use of ASBU elements are concerned with safely managing Demand/Capacity imbalances and this may be a simpler and perhaps easier to understand way of assessing objectives and setting priorities.
- 2.3. The key element, for which there is limited elaboration in Doc 9883 or the GANP Portal, is understanding "Why" a metric demonstrates inefficiency and then using data to make a recommendation to address the source of the problem. This recommendation needs not only relate to ASBU/ ATM modernisation, but it could be a series of manpower upgrades; and Concept of Operations evolution. To do this, both the guidance and the Performance Groups should invest time in recording Causal Factors associated with performance, a definition of prioritization criteria and setting achievable targets. This is addressed at the margins of Doc 9883 through discussion of "Filtering Criteria", "Operating Condition" and potentially in the Discussion of "Risk" where it is recognized that external events can prevent meeting Operational Performance targets.

2.4. Overall, the goal of the updated GANP portal is to simplify the ICAO Doc. 9883 guidance and provide clear recommendation to groups just getting started and working with limited resources. Groups can start with basic tracking of flight activity or setting goals for enablers. Over time, capabilities can be added that make use of data from Traffic Management systems.

3. KPIs for Outcomes vs. Activities/Enablers

- 3.1. The current GANP Portal provides definitions for 23 KPIs with many having a variant. These KPI's are largely outcomes such as reduced airline schedule delay or reduced flight track distance. There is one enabler KPI (KPI03) on ATFM slot compliance which assesses one quality element associated with a traffic flow program. In general, "enablers" are more in the control of the ANS providers and less influenced by external factors. Outcomes, such as delay and flight distance, are more directly linked to costs that can be monetized for investment decisions. Better measures for enablers should lead to better outcomes.
- 3.2. For GREPECAS/20, there were examples of activities or enablers (%PBN Implementation) and Outcomes (Reduced flight time for optimized routes). While, these may not be exactly specified in the current GANP KPI portal, these KPI's and one's similar may be very useful for tracking performance in the region. A key part of the 6-Step process is on monitoring performance based on the data available using KPI's that have buy-in from the stakeholders. Lack of data for GANP KPI's should not discourage data driven performance management if other KPI's can be monitored that relate to the objectives of the region.

4. Recommendations and Next Steps

- 4.1. The meeting is invited to:
 - 4.1.1. Note the content discussed in this working paper.
 - 4.1.2. Discuss how the GREPACAS can work with GANP-PEG to find the best way to use limited resources and get the most benefit out of PBA. Using data as part of improving Volume 3 of the ANP will be a significant undertaking, especially for groups new to data analytics or who have existing KPIs that require support.

4.1.3. Note that GANP-PEG has the following contacts that may be reached by GREPECAS to help support PBA and improve the GANP portal for GANP/8 and beyond.

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