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# Challenges and Objectives

## Regional Work

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**COMMUNICATIONS, NAVIGATION AND SURVEILLANCE**

**MEXICO, MAY 2019**





## AGENDA

Global Air Navigation Plan (GANP)

Basic Building Block (BBB)

GANP Structure

RPBANIP objectives

Regional Priorities

Nacional Priorities

Recommendations



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# GLOBAL AIR NAVIGATION PLAN GANP

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



# GLOBAL AIR NAVIGATION SYSTEM

- ✈ The GANP is an important planning tool for setting global priorities to drive the evolution of the global air navigation system and ensure that the vision of an integrated, harmonized, globally interoperable and seamless system.



# Introduction

- ✈ the GANP is a key contributor to the achievement of ICAO's Strategic Objectives and has an important role to play in supporting the United Nations 2030 Agenda for Sustainable Development. A key goal that relates to the GANP is Sustainable Development Goal (SDG) 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. In addition to developing the GANP, ICAO has developed global plans for the specific areas of safety and security: the Global Aviation Safety Plan ([GASP, Doc 10004](#)) and the Global Aviation Security Plan ([GASeP, Doc 10118](#)).
- ✈ **These three global plans are complementary.**



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## MULTILAYER STRUCTURE OF THE GANP

GLOBAL STRATEGIC

GLOBAL TECHNICAL

REGIONAL

NATIONAL



# Four levels of the GANP.

## ✈ GLOBAL STRATEGIC LEVEL

- ✈ The global strategic level is presented as an electronic document, written in executive language and available in the six working languages of ICAO. It provides high-level strategic direction for decision-makers to drive the evolution of the global air navigation system.



# Four levels of the GANP.

## ✈ GLOBAL TECHNICAL LEVEL

- ✈ Derived from the global strategic level, the global technical level is designed to support technical managers in planning the implementation of basic services and new operational improvements in a scalable and cost-effective manner and according to specific operational and performance needs, while ensuring interoperability of systems and harmonization of procedures.





# Four levels of the GANP.

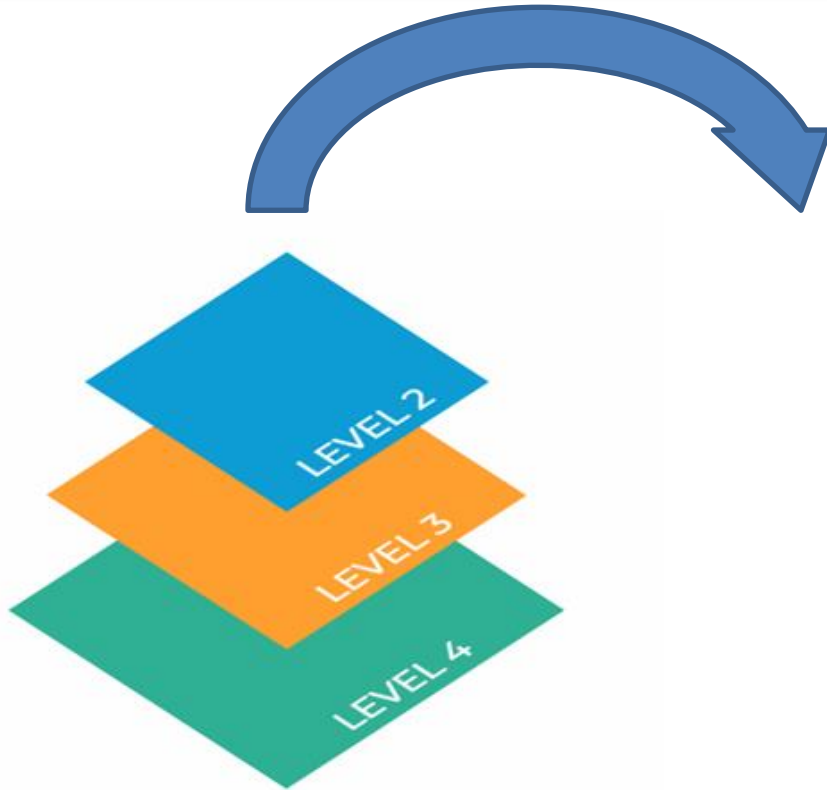
## ✈ REGIONAL AND NATIONAL LEVELS

- ✈ The regional and national levels of the GANP ensure consistency from the development of operational improvements to their implementation. Such levels provide the global aviation community with a common basis for short- and medium-term implementation planning.



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## **GLOBAL STRATEGY**

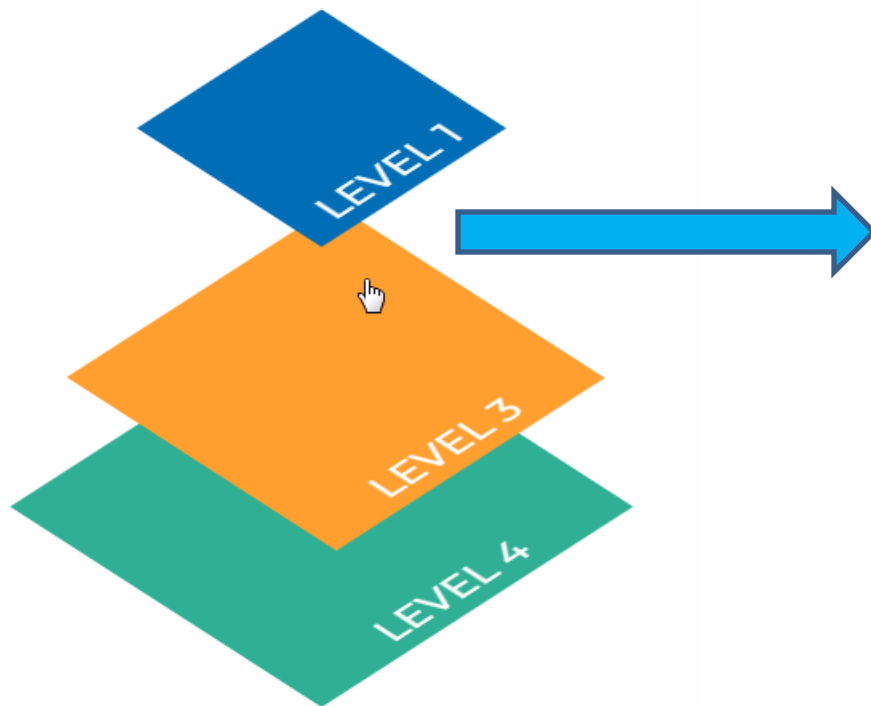
Provides high level strategic guidelines for the decision-makers to drive the evolution of the global air navigation system towards an agreed common vision.

**Doc. 9750**  
**Global Air Navigation Plan**



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### GLOBAL TECHNICAL

Supports technical managers planning the implementation of air navigation basic services and in affordable new operational improvements.



ASBUs



AN-SPA



BBBs



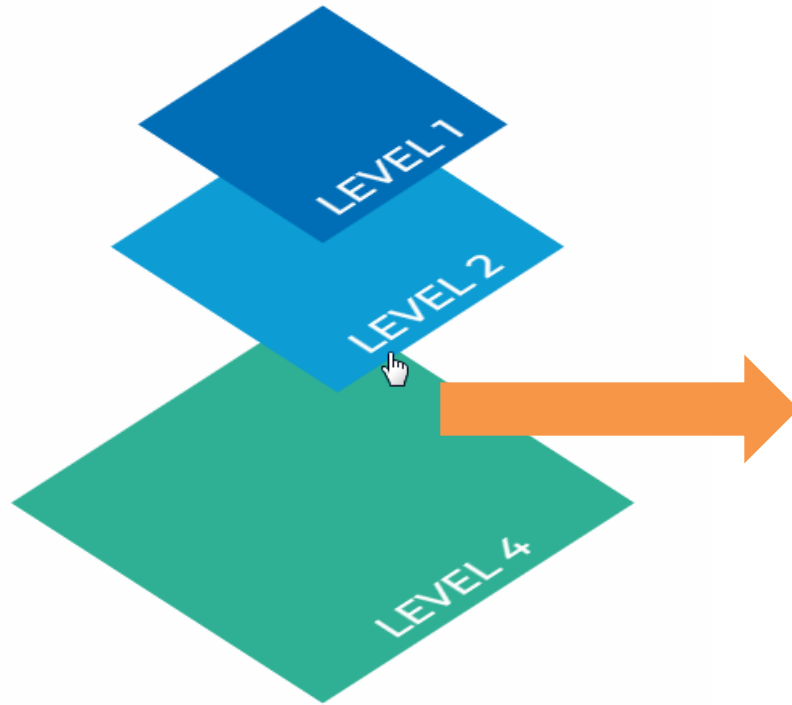
# The Basic Building Block (BBB)

- ✈ The Basic Building Block (BBB) framework outlines the foundation of any robust air navigation system.
- ✈ Identify essential services to be provided for international civil aviation in accordance with ICAO Standards.
- ✈ Defined essential services in the areas of aerodromes, air traffic management, search and rescue, meteorology and information management.
- ✈ BBB framework identifies the end users of these services as well as the assets (communications, navigation, and surveillance (CNS) infrastructure) that are necessary to provide them.
- ✈ *BBB constitute the baseline for any operational improvement.*



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## REGIONAL

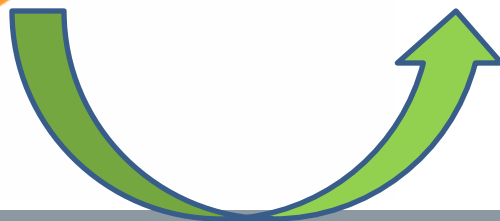
Addresses regional and subregional necessities aligned with the global objectives

	AFI ANP		APAC ANP
	EUR ANP		MID ANP
	NAM ANP		NAT ANP
	CARSAM ANP		



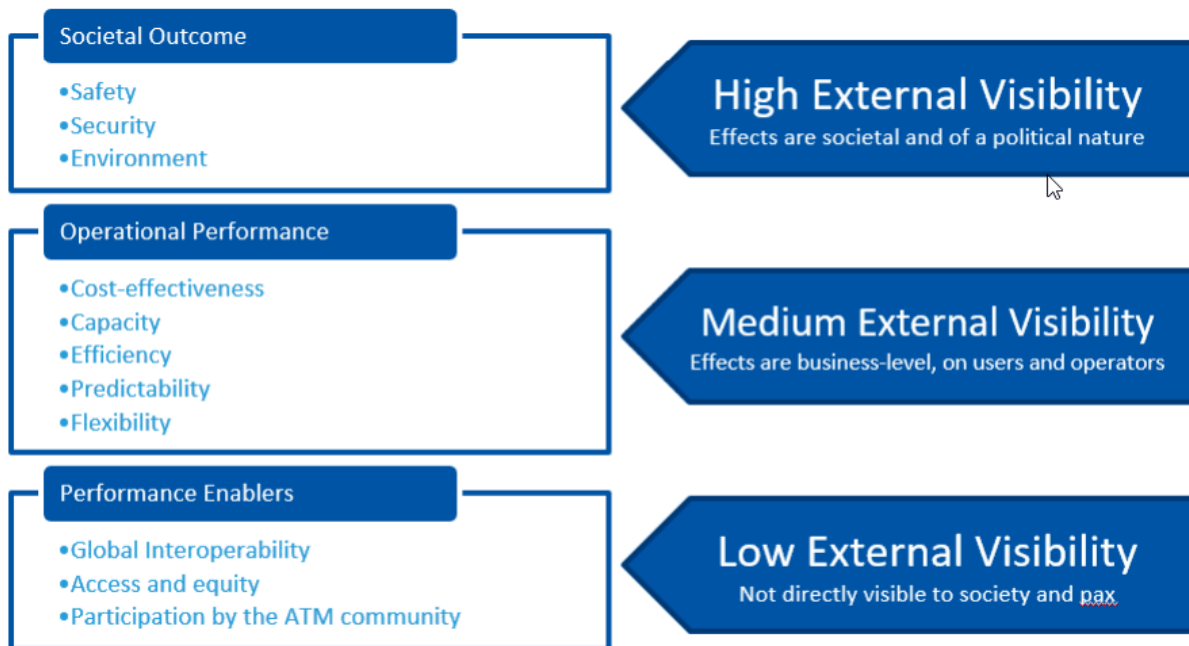
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# The eleven KPAs of the GANP



# REGIONAL LEVELS







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## CAR REGIONAL PERFORMANCE-BASED AIR NAVIGATION IMPLEMENTATION PLAN (RPBANIP)

### WHY IS RPBANIP IMPORTANT?

- The RPBANIP is the Regional Plan that establishes the Regional Air Navigation Implementation Agreements
- The RPBANIP reflects regional priorities in air navigation
- The current plan is applicable for 2016-2018 and the new version will be applicable for 2019-2021



## National Level

- ✈ The fourth level, under the responsibility of States, focuses on national planning. The development by the States, in coordination with stakeholders, of air navigation plans, aligned with regional and global plans, is crucial to achieve the common vision that is being carried out in the GANP. These air navigation plans serve as reference documents for national investment in air navigation infrastructure.

# Air Navigation Plan

- ✈ States must integrate in their air navigation plans, not only global and regional objectives, also all internal and external Stakeholders needs to ensure Air Navigation Plan success implementation.





## WHY CHANGE ANI/WG?

- ✈ The mechanisms that have been used, are not the best ones.
- ✈ We have conclusion and decision open through time, without any improve.
- ✈ Development aeronautical project and implementation of new system without any operational benefit.
- ✈ Bought equipment, software, that never have been use.
- ✈ Lack of integration because lack of technical and operational standardization.



## WHY CHANGE ANI/WG?

- ✈ We must implement more quickly.
- ✈ We must define objectives and be able to measure the benefit of those objectives implementation.
- ✈ We must be constantly prepared for the changes.
- ✈ There are new challenges in front of us that we must manage.



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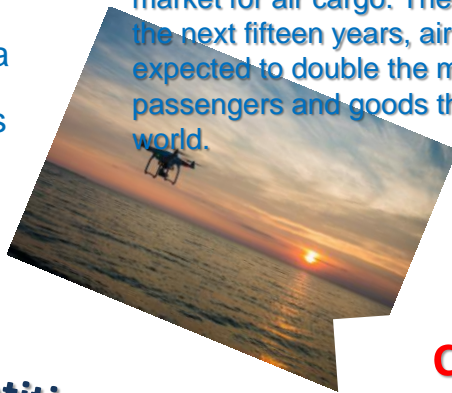
## Human Talent Management



✈ The aviation industry provides personal and social benefits. Gather people: families, friends and business colleagues. It gives people the freedom to be almost anywhere in just 24 hours and has turned a great planet into a small world full of huge and infinite opportunities. But this is just the half of the story.



World population and the growth of prosperity will make air travel accessible to more people. Similarly, the current trend towards economic globalization will further strengthen the need to rapidly move high-value goods around the world, creating a growing market for air cargo. Therefore, within the next fifteen years, air traffic is expected to double the movement of passengers and goods throughout the world.



## Cybersecurity

## Competitiveness

## Connectivity



Enabling technologies, such as increasingly autonomous systems and artificial intelligence, encompass a wide range of aviation capabilities ranging from the capabilities of today's automatic systems, such as autopilots and remote pilots, to the highly sophisticated systems that would be necessary for air traffic management systems to perform complex tasks.

## Environment-friendly

# Revolutionary Technologies in the Aviation Industry

Inteligencia artificial



Robótica



Internet de las cosas y beacons





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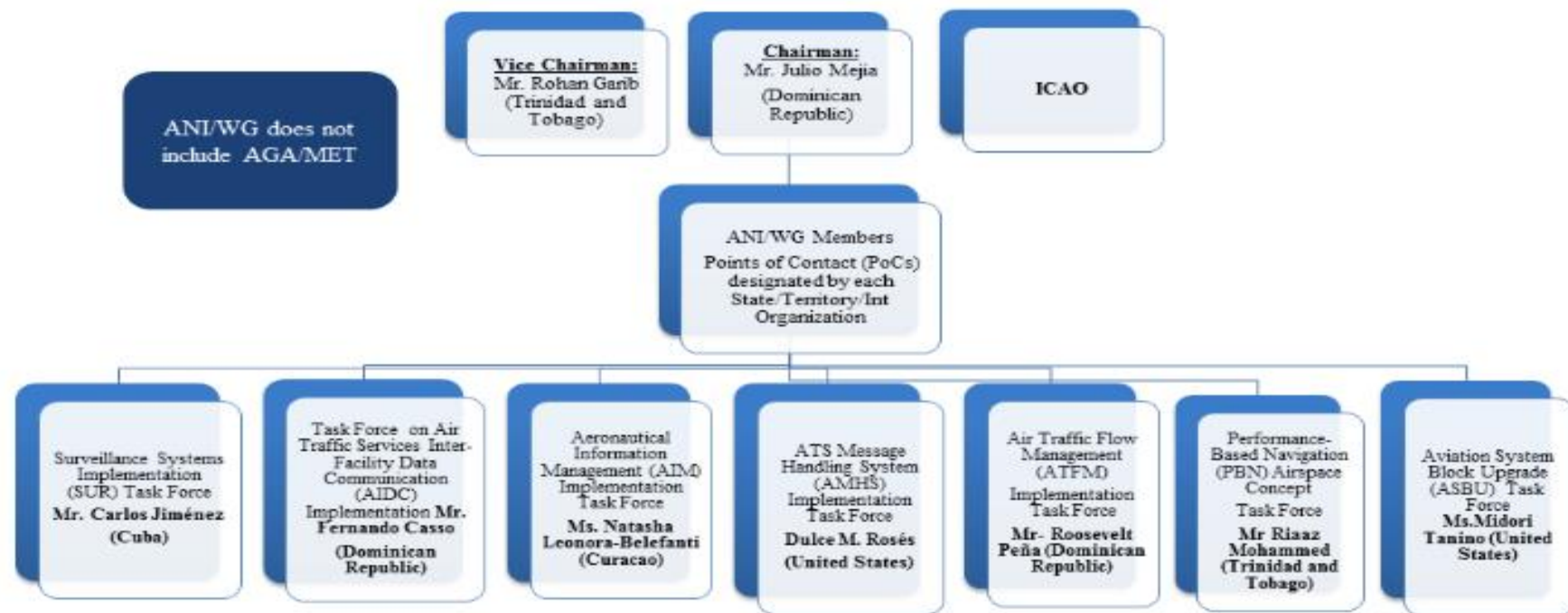
# New Proposals to RPBANIP changes



# ANS OPERATION PLAN 2019

AREA	2019 OPERATING PLAN	TASK FORCE	AREA	ANS BENEFITS 2019-2020	ACTIVITIES AND PLANNED TARGET
AIM	CAP/NACC.2		Aeronautical Information		Promove SWIM implementation
	(IM) Assist States in the implementation of policies and provisions on Information Management (ANWIP : ENB-IV)	AIM TF			
ATM	ANM		Operational Implementation	<b>Efficiency</b> Longitudinal reduction to applicable separation	Support AIDC implementation, radar data sharing, improve communication and air navigation infrastructure
	CAP/NACC.3	PBN TF			
	Assist States in the implementation of policies and provisions, to optimize airspace and airport usage (ANWIP : RO-OS)	ATM TF			
	ATM	SAR/RESCUE			
CNS	CAP/NACC.1		Infraestructure	<b>Predictability/Flexibility</b> Standardization of Aeronautical Information	Gradual and standarized PBN implementation through regional goals
	(CNS) Assist States in the implementation of policies and provisions on Communication, Navigation and Surveillance (CNS) (ANWIP : ENB-CNS)	MEVA/AMHS TF			
	CNS	AIDC/IFL IT			
		ASRU TF			
MET	CAP/NACC.3		Enviornental Protection	<b>Enviornment</b> CO2 Emissions reduction	Integrated ANS measure mechanisms in all areas.
	(MET) Assist States in the implementation of policies and provisions on Meteorology (ANWIP : ENB-MET)				
	MET				
	ENB/NACC.1, 2, 3				
	States' action plans on CO2 emissions reduction, assessment of environmental benefits which are associated to the implementation of operational improvements and environmental protection				
	MET				

# NAM/CAR Air Navigation Implementation Working Group (ANI/WG) and North American, Central American and Caribbean Working Group (NACC/WG) Structure





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## **ICAO NACC Regional Office propose:**

## Propose 1:

- ✈ That States ensure the integration of global, regional and national priorities in their air navigation plans.
- ✈ That ANI/WG meeting define a deadline for States to inform to ICAO NACC Regional Office of their national priorities.





## Propose 2:



- ✈ That ANI/WG Task Force groups analyze the global and regional requirements and update their work action plans to ensure:
  - ✈ Develop tasks with the objective of achieving the three regional objectives proposed by ICAO NACC Regional Office.
  - ✈ Be sure to identify common activities to be development for each task force.
  - ✈ Finally, it is recommended that ANI/WG meeting define a deadline to Task Force to update their Action plans.

## Propose 3:

- ✈ That different aviation organizations, industry, connect with the region and integrate themselves into this work so that the goals are common and can be achieved in less time.





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✈ Support the activities of the different Task Force.





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Central African  
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Southern African  
(ESAF) Office  
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Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU