



ICAO

UNITING AVIATION
A UNITED NATIONS SPECIALIZED AGENCY

ASBU TF Progress Report

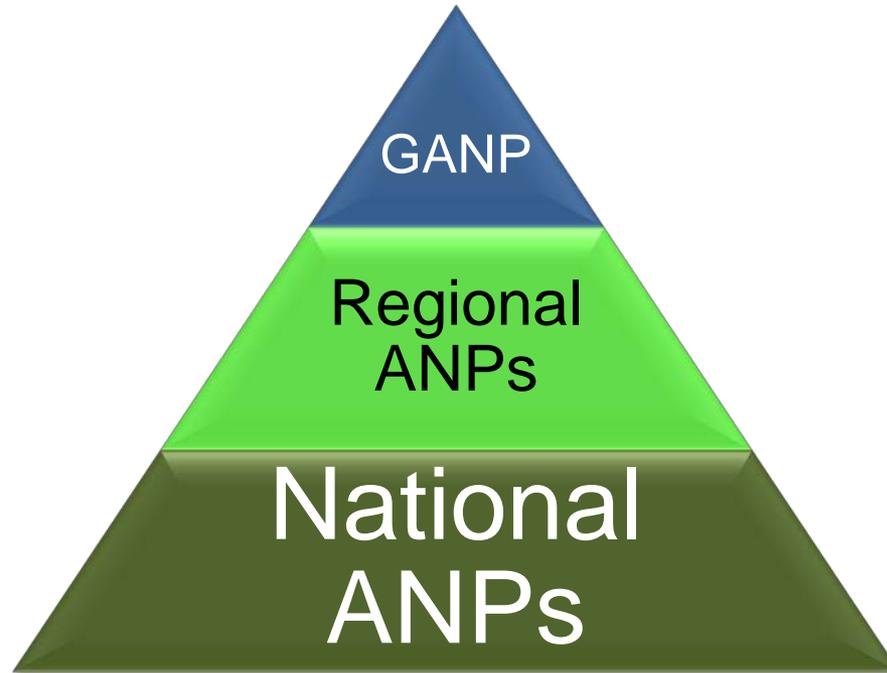
For: ANI/WG/5
Prepared by: ASBU TF Rapporteur
Date: May 27 – 31, 2019



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1. ICAO NACC National Air Navigation Plan (ANP) Workshops
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5. Regional Performance-Based Air Navigation Implementation Plan (RPBANIP)
6. NAM/CAR ASBU Implementation Status Report
7. Sixth Edition (2019) of GANP/ASBU

ICAO NACC National ANP Workshops



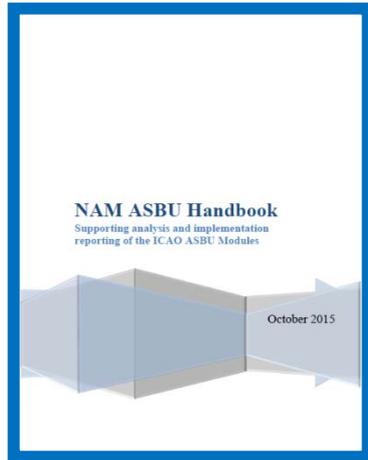
The 1st WS hosted by ICAO NACC at MEX in March 2018

The 2nd WS hosted by COCESNA at TGU in August 2018

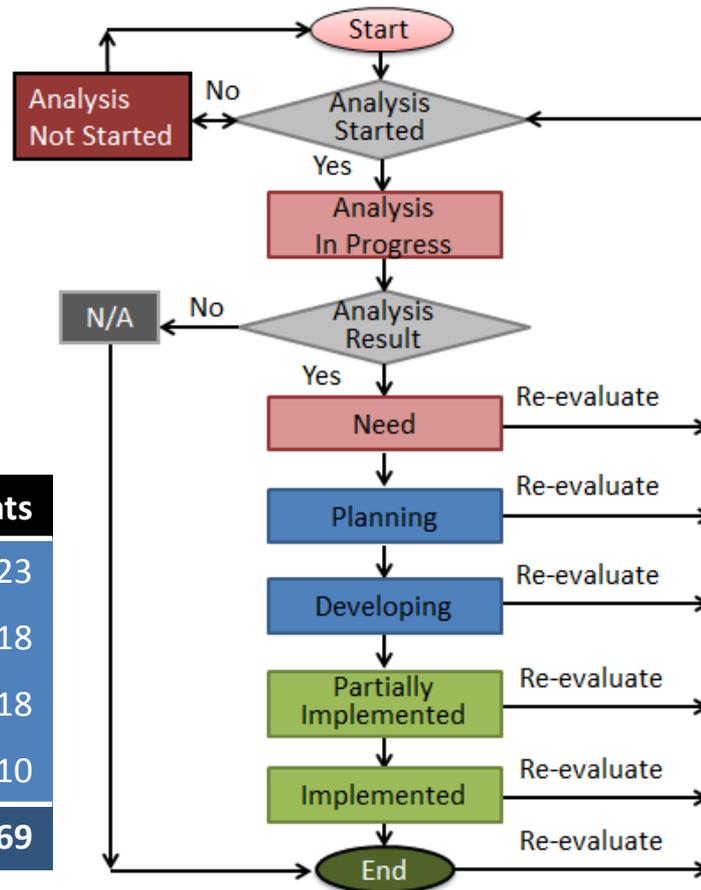
The 3rd WS hosted by BCAA at BPB in November 2018

ICAO NACC National ANP Workshops

Simple and Realistic Process

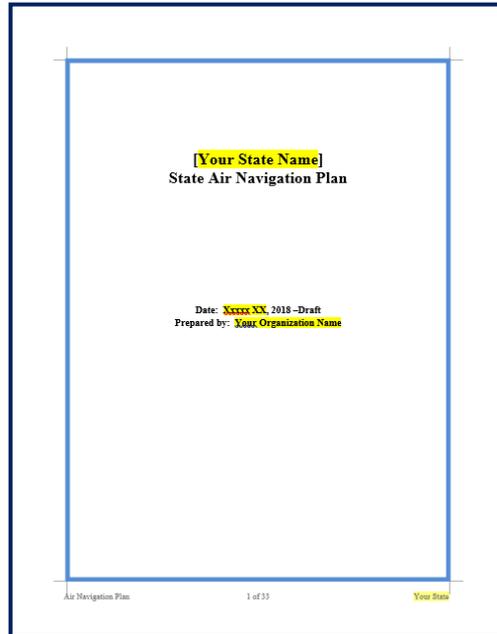


BO PIA	Modules	Elements
PIA 1	5	23
PIA 2	3	18
PIA 3	7	18
PIA 4	3	10
Total	18	69



[STATE] ASBU Air Navigation Reporting Form (ANRF)					
PIA	#	Block - Module	BO - CDO	Date	Month Day, Year
PIA 4					
Module Description: Performance-based approach and arrival procedures allowing aircraft to fly their optimum profile using continuous descent operations (CDOs). This will optimise throughput, allow fuel efficient descent profiles, and increase capacity in terminal areas.					
Element Implementation Status					
1		Element Description: (Derived from Element 1) Procedure changes to facilitate CDO	Date Planned/Implemented	Status	
Status Details:					
2		Element Description: (Derived from Element 1) Route changes to facilitate CDO	Date Planned/Implemented	Status	
Status Details:					
3		Element Description: (Derived from Element 2) PSN STARS	Date Planned/Implemented	Status	
Status Details:					
Achieved Benefits					
Access and Equity					
Capacity					
Efficiency					
Environment					
Safety					
Implementation Challenges:					
Ground system Implementation					
Avionics Implementation					
Procedures Availability					
Operational Approvals					
Notes					

Using the Template

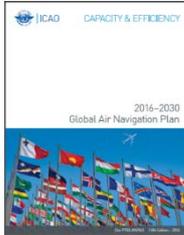


- ASBU
- RASI
- SASI

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GANP

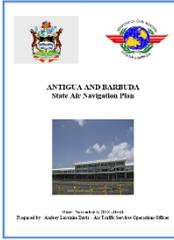


RPBANIP



ANP

For CAR, there will be 21 ANPs:
19 States
1 Territory
1 Organization



Antigua & Barbuda



Bahamas



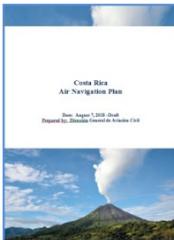
Barbados



Belize



COCESNA



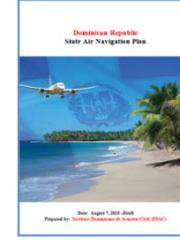
Costa Rica



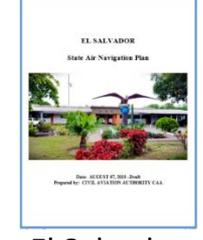
Cuba



Curacao



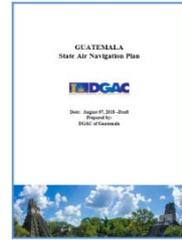
Dominican Republic



El Salvador



Grenada



Guatemala



Haiti



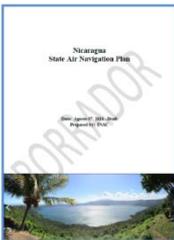
Honduras



Jamaica



Mexico



Nicaragua



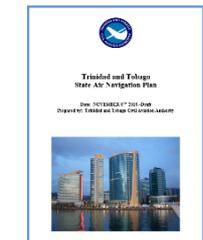
St Kitts & Nevis



Saint Lucia



St. Vincent & Grenadines

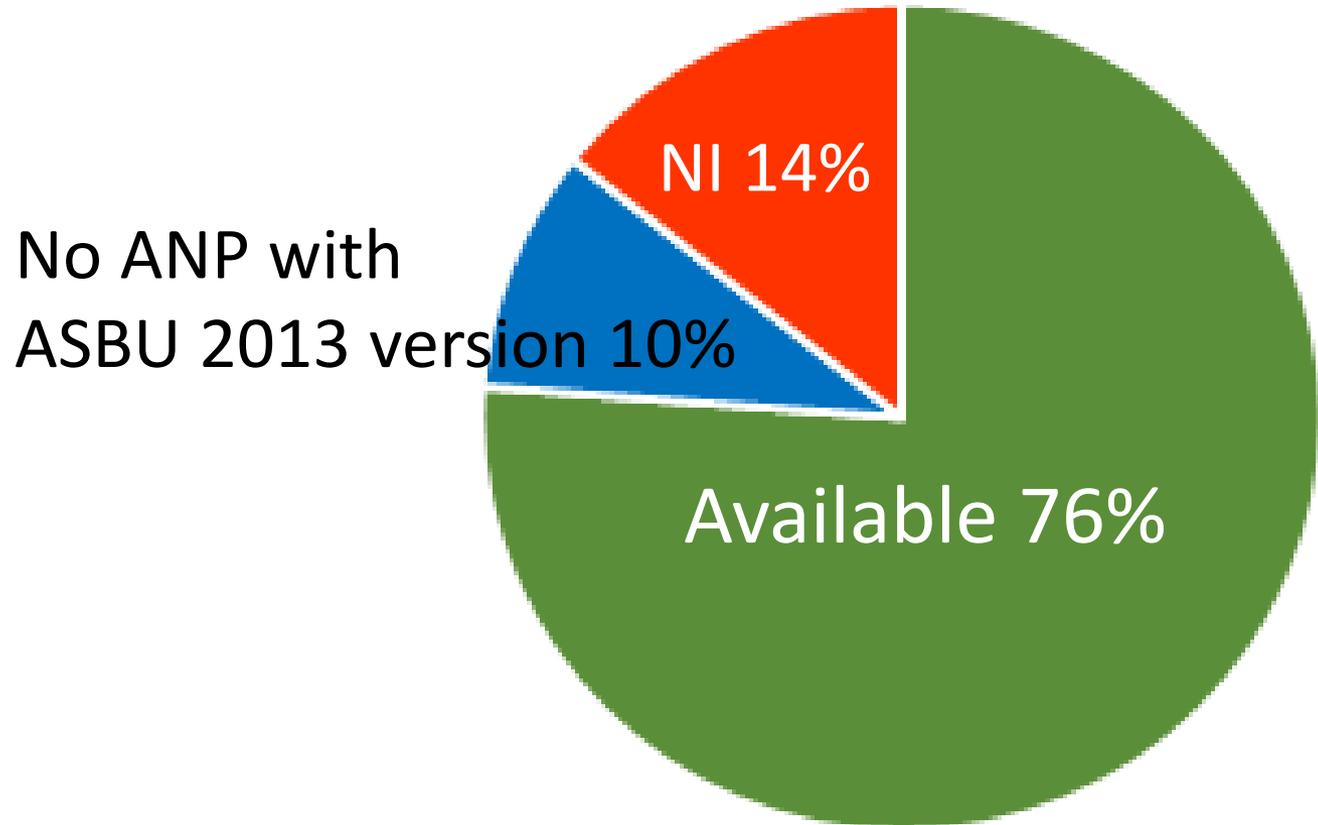


Trinidad & Tobago

(As of Nov 2018)

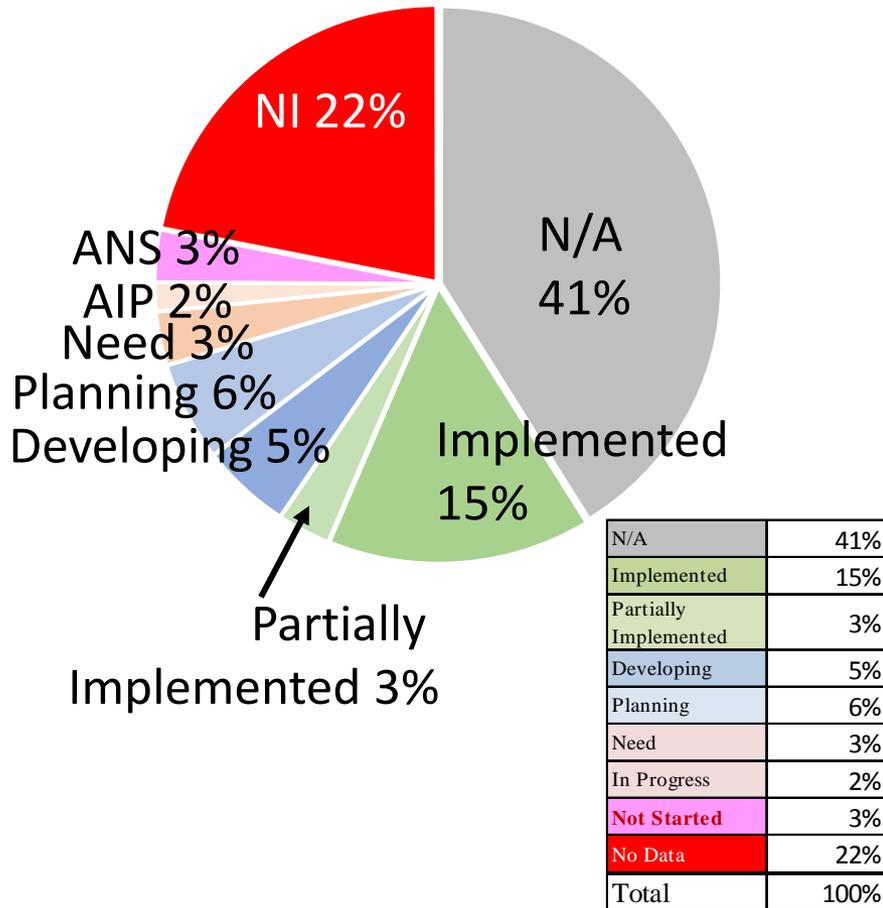
CAR ASBU B0 Implementation Status

National ANP and ASBU B0 Information Availability Central America and Caribbean Region

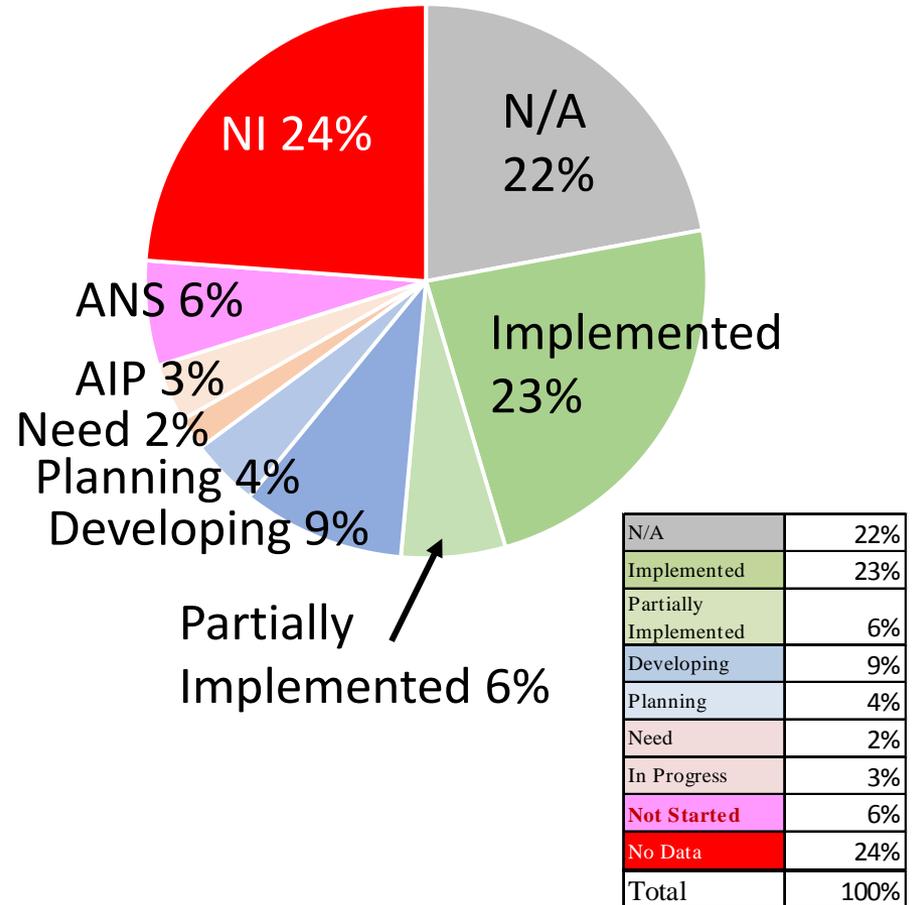


ASBU B0 Implementation Status Central America and Caribbean Region

Airport-centric Elements

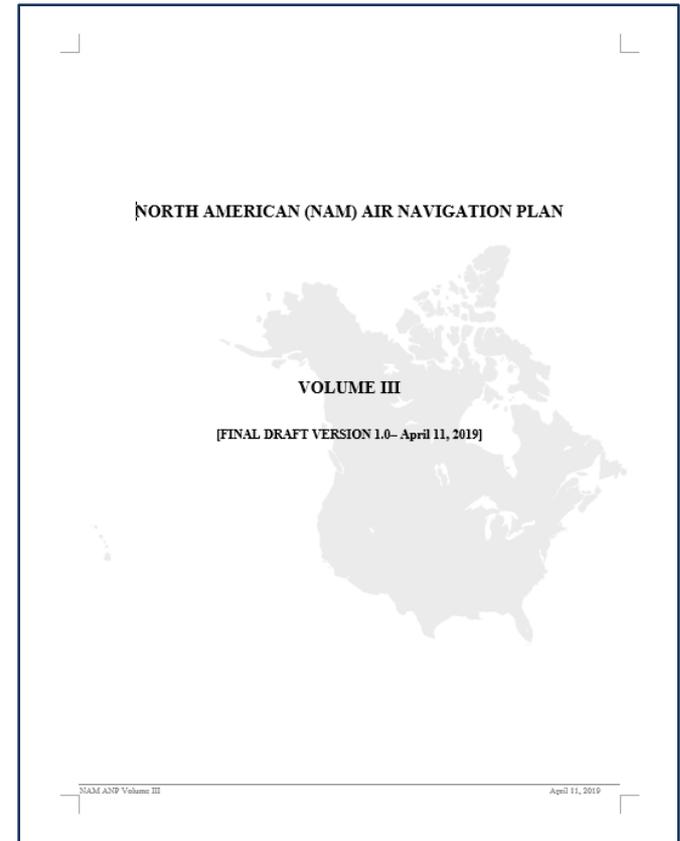


State-centric Elements



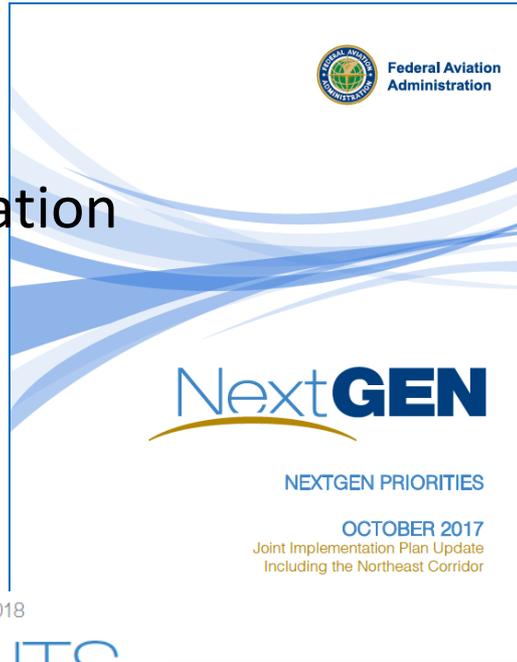
NAM ANP Volume III

- Guidance from ICAO NACC RO
- Two states: Canada and USA
- ASBU B0 Implementation Status
- NAM Regional Aviation System Improvements (RASI)
- Target delivery: Fall 2019



NAM's National ANP

FAA: NextGen Implementation Plan



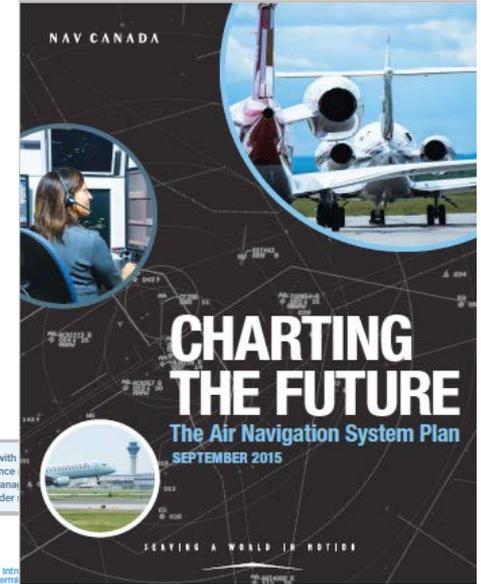
NEXTGEN IMPLEMENTATION PLAN 2018

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PROGRAMS

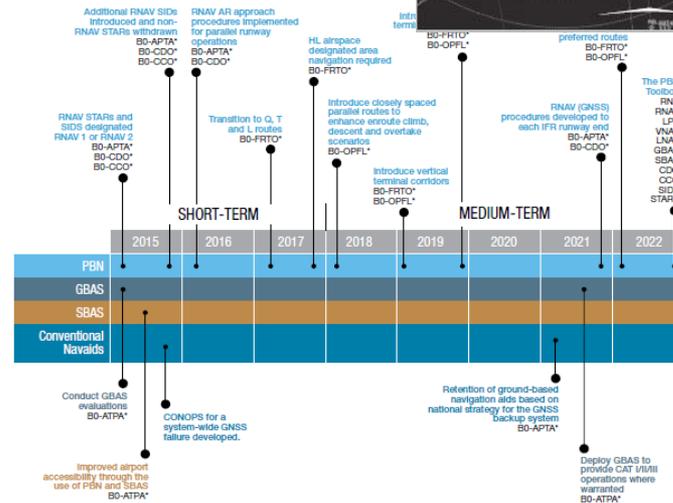
- 4 AUTOMATIC DEPENDENT SURVEILLANCE-BROADCAST
- 9 DATA COMMUNICATIONS
- 13 AUTOMATION
- 18 SYSTEM WIDE INFORMATION MANAGEMENT
- 26 NAS VOICE SYSTEM

NAV CANADA: The Air Navigation System Plan



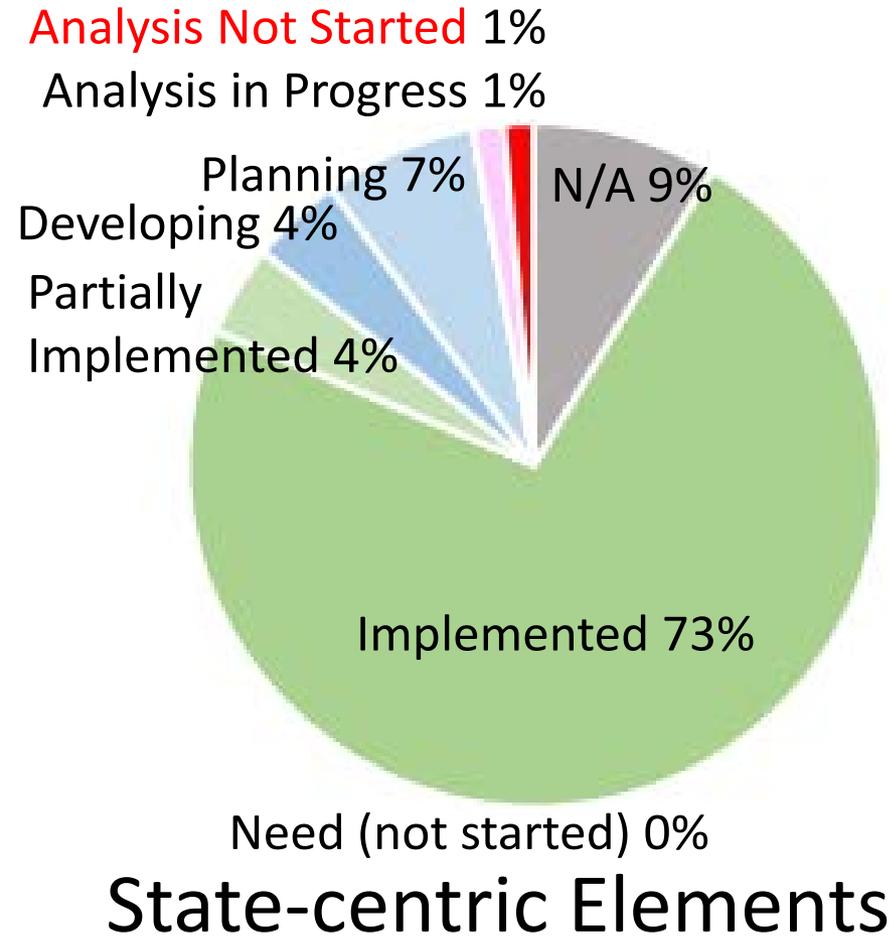
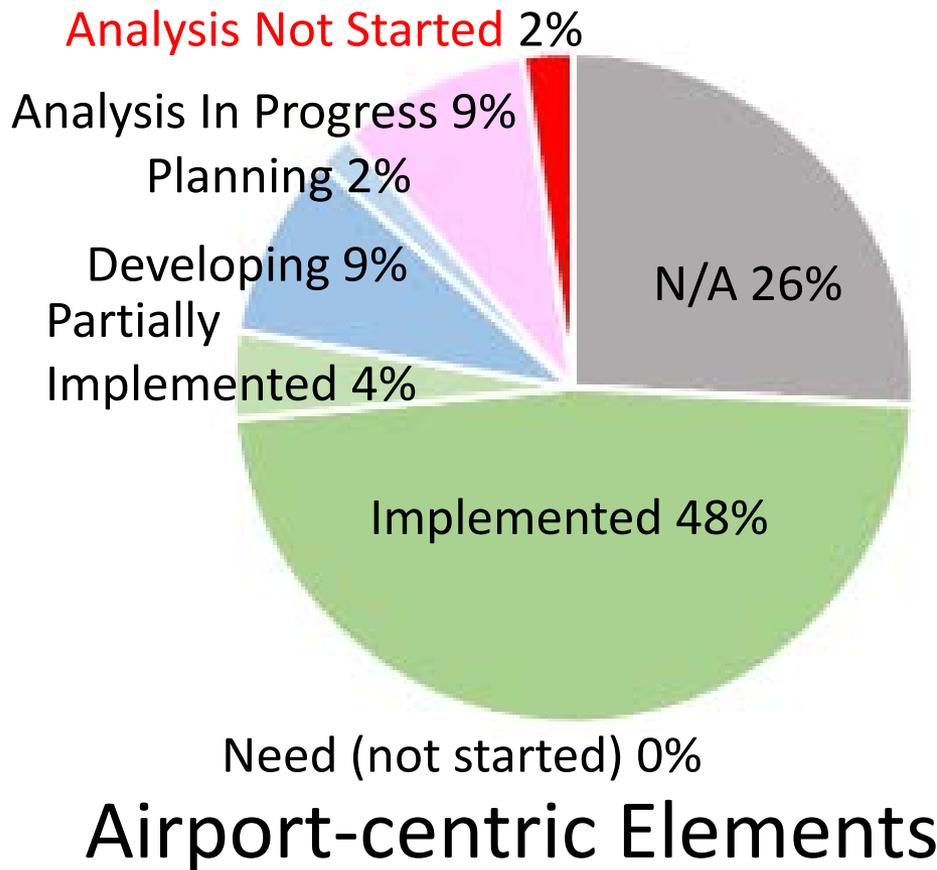
PBN TIMEFRAME

Implementation will be based on priorities that are cognizant of regulations (current and future) as well as customer requirements and capabilities. The requirement is for a total system capability to enable an air operation and therefore implementation will be aligned with surveillance Traffic Management stakeholder



NAM Region (as of Nov 14, 2018)

ASBU B0 Implementation Status



Central America and Caribbean Region - ANP Status

(inc. ASBU B0 Implementation Status)

- **Performance target:** All 21 states/organizations to have ANPs that are aligned with the GANP/Regional ANP



- Bidirectional feedback between RPBANIP and state/organization ANPs

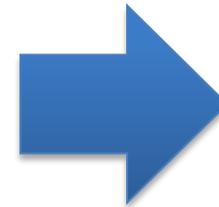
RPBANIP

ICAO NACC Regional ANP

RPBANIP ver 3



21 state/
organization
ANPs



RPBANIP ver 4

NAM/CAR ASBU Implementation Status Report



MID AIR NAVIGATION PLAN

VOLUME III

ICAO MID States ASBU Implementation Status Report

TABLE B0-APTA/CCO/CDO 3-1

Int'l AD (Ref. MID ANP)	RWY	Conventional Approaches			APTA			CCO				CDO			Remarks	
		Precision		VOR or NDB	PBN PLAN Update date	LNAV / VNAV	PBN RWY	RNAV SID	PER AD	CCO	PER AD	RNAV STAR	PER AD	CDO		PER AD
		xLS	CAT													
BAHRAIN																1
OBBI	12L	ILS	I	VORDME		Y		Y					Y	Y		
	30R	ILS	I	VORDME		Y		Y					Y			
Total	2	2		2	Y	2	0	2	0	0	0	0	2	1	0	0
%		100		100	Dec 2016	100	0	100	0	0	0	0	100	100	0	0
EGYPT																7
HEBA	14															
	32	ILS	I			Y		Y	Y	Y						
HESN	17			VORDME		Y		Y	Y	Y			Y	Y		
	35	ILS	I	VORDME		Y		Y	Y				Y			
HECA	05L	ILS	I	VORDME		Y		Y								
	05C	ILS	II	VORDME		Y		Y								
	05R	ILS	II			Y		Y								
	23L	ILS	II	VORDME		Y		Y								
	23C	ILS	II	VORDME		Y		Y								
	23R	ILS	I	VORDME		Y		Y								
HEGN	16L			VORDME		Y	Y	Y	-	Y			-	Y		
	16R			VORDME		Y	Y	Y								
	34L			VORDME		Y	Y	Y	Y				Y			
	34R	ILS	I	VORDME		Y	Y	Y	Y				Y			
HELX	2	ILS	I	VORDME		Y		Y	Y	Y			Y	Y		
	20	ILS	I	VORDME		Y		Y	Y				Y			
HEMA	15			VORDME		Y		Y	Y	Y			Y	Y		
	33			VORDME		Y		Y	Y				Y			
HESH	04L	ILS	I	VORDME		Y	Y	Y	Y	Y			Y	Y		
	04R			VORDME		Y	Y	Y	Y				Y			
	22L			-		Y	Y	Y	Y				Y			
	22R			-		Y	Y	Y	Y				Y			
Total	22	12		17	Y	21	8	21	13	6	0	0	12	5	0	0
%		55		77	Oct 2017	95	36	95	59	86	0	0	55	71	0	0
IR. IRAN																9
OIKB	03L															
	03R			VORDME / NDB												
	21L	ILS	I	VORDME / NDB												
	21R															
OIFM	08L			VORDME / NDB												
	08R			VORDME / NDB												
	26L			VORDME / NDB												
	26R	ILS	I	VORDME / NDB												

B0 – CCO: Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)				
Elements	Applicability	Performance Indicators/Supporting Metrics	Targets	Timelines
PBN SIDs	OBBI, HESN, HESH, HEMA, HEGN, HELX, OIIE, OISS, OIKB, OIMM, OIFM, OIFM, ORER, ORNI, OIAM, OIAI, OIAQ, OKBK, OLBA, OOMS, OOSA, OTHH, OEJN, OEMA, OEDF, OERK, HSNM, HSOB, HSSS, HSPN, OMAA, OMAA, OMDDB, OMDW, OMSJ	Indicator: % of International Aerodromes/TMA with PBN SID implemented as required. Supporting Metric: Number of International Aerodromes/ TMAs with PBN SID implemented as required.	100% (for the identified Aerodromes/TMAs)	Dec. 2018
International aerodromes/ TMAs with CCO	OBBI, HESN, HESH, HEMA, HEGN, HELX, OIIE, OIKB, OIFM, ORER, ORNI, OIAM, OIAI, OIAQ, OKBK, OLBA, OOMS, OOSA, OTHH, OEJN, OEMA, OEDF, OERK, HSNM, HSOB, HSSS, HSPN, OMAA, OMDDB, OMDW, OMSJ	Indicator: % of International Aerodromes/TMA with CCO implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with CCO implemented as required.	100% (for the identified Aerodromes/TMAs)	Dec. 2018

ICAO EUR States ASBU Implementation Status Report



3.5 B0-CCO

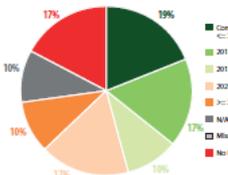
This module is about Improved flexibility and efficiency in departure profiles - continuous climb operations (CCO).

It consists in the deployment of departure procedures that allow an aircraft to fly its optimum aircraft profile taking account of airspace and traffic complexity with continuous climb operations.

The pictures indicate the implementation progress statistics, the correspondent status and planning dates for B0-CCO.

A slow progress for B0-CCO (19%) with only 2% increase when compared to the previous cycle, however an important increase is expected by 2018 (17%).

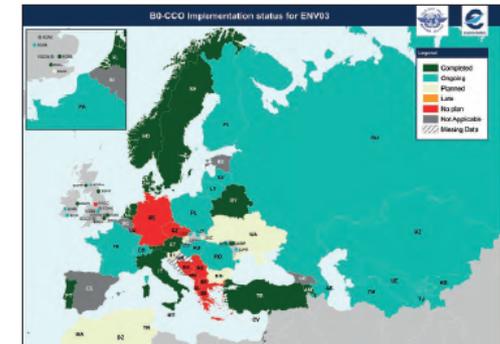
It must be noted that 10% of States declared this module as "Not applicable" and 17% have no final Plan yet.



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4.5 B0-CCO

IMPROVED FLEXIBILITY AND EFFICIENCY IN DEPARTURE PROFILES (CCO)
ENV03 Continuous Climb Operations



1. Progress for States in the LSSIP mechanism

Main 2017 developments:

The Objective is in its first year of monitoring. As it is a Local Objective, reporting is on a voluntary basis. However, this Objective should be considered in relation to Objective ENV01-Continuous Descent Operations. A total of 84 Airports reported on its implementation status. By end of 2017, 42 airports reported the completion of this Objective. Another 30 reported that the implementation is in this Objective should be considered in relation to Objective ENV01-Continuous Descent Operations. Twelve (12) Airports reported that the implementation is "Planned" with the latest projected implementation date for EGKK-London Gatwick by December 2024.



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CAR Region



Sixth Edition of GANP/ASBU

- The 40th Session of the ICAO Assembly
 - ICAO's 193 Member States and a large number of international organizations are invited to the Assembly, which establishes the worldwide policy of the Organization for the upcoming triennium.
 - Scheduled for 24 September to 4 October 2019.
- Approval of the 6th Edition of GANP/ASBU

NANP Template
CBA Checklist

WELCOME TO THE GLOBAL AIR NAVIGATION PLAN PORTAL

The GANP Portal is a web portal where all aviation stakeholders will be able to find the most relevant information related to the GANP

THE GLOBAL AIR NAVIGATION PLAN

The Global Air Navigation Plan (Doc 9750) is the ICAO's highest air navigation strategic document and the plan to drive the evolution of the global air navigation system, in line with the Global Air Traffic Management Operational Concept (GATMOC, Doc 9854) and the Manual on Air Traffic Management System Requirements (Doc 9882). It also supports planning for local and regional implementation.

In order to better communicate with technical and high-level 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. This multilayer structure of four layers, two global levels, a regional level and a national one, would also provide a framework for alignment of regional, sub-regional and national plans.

MULTILAYER STRUCTURE OF THE GANP

Click a level to navigate

GLOBAL STRATEGIC

GLOBAL TECHNICAL

REGIONAL

NATIONAL

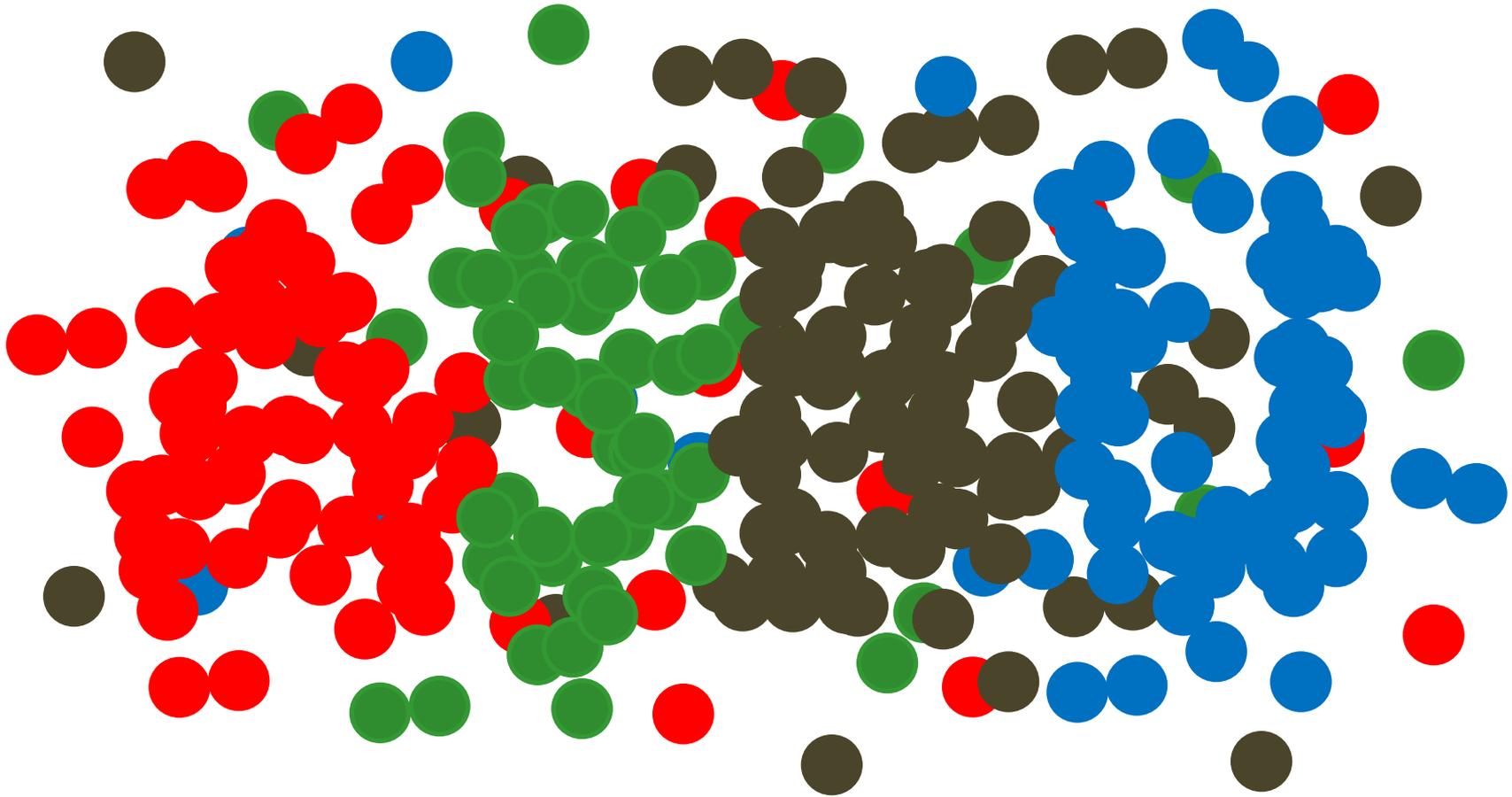


The GANP drives the evolution of the global air navigation system to meet the ever growing expectations of the aviation community. The purpose of the GANP is to equitably accommodate all airspace users operations in a safe, secure and cost-effective manner while reducing the aviation environmental impact. To this end, the GANP provides a series of operational improvements to increase capacity, efficiency, predictability, flexibility while ensuring interoperability of systems and harmonization of procedures. The GANP supports the implementation of the GANP by promoting the effective implementation of safety oversight and a safety management approach to oversight, including safety risk management to permit innovation in a managed way.

Sixth Edition of GANP/ ASBU

ICAO GANP Portal

Collecting and Connecting Dots



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Midori.Tanino@faa.gov

