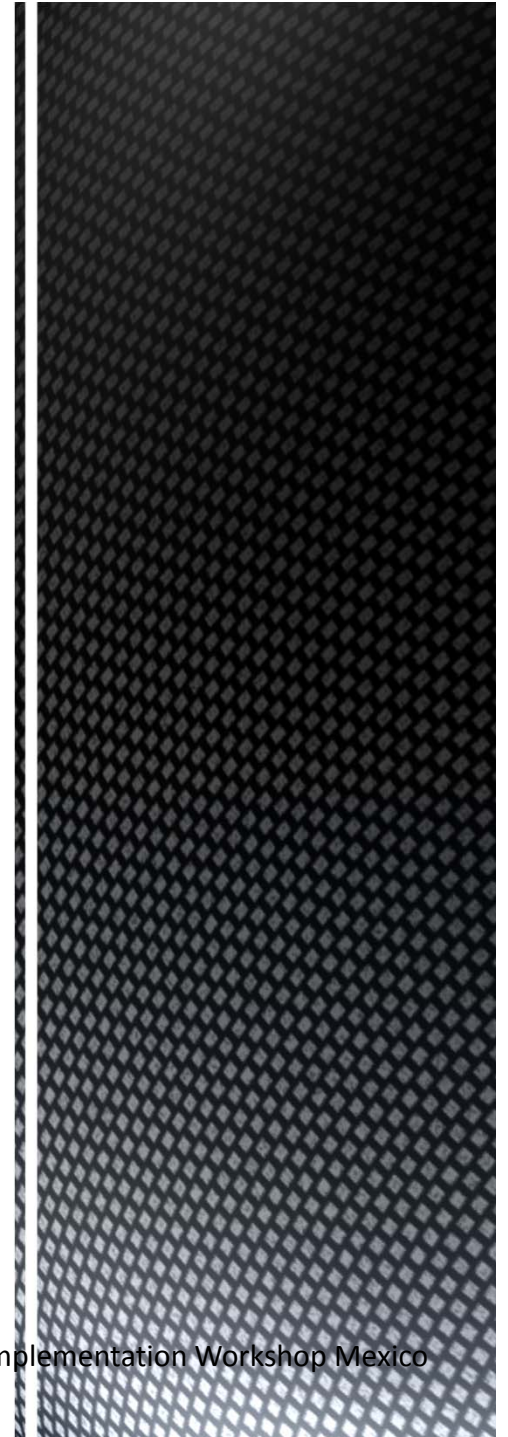


# HAITI AIR NAVIGATION PLAN

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# SUMMARY

1. **Expectations from the Workshop: Better harmonization with the GANP and CAR/SAM eANP**
2. **Objectives of the Air Navigation Plan**
3. **Framework of the AN National Plan**
  - **Basis of the AN development plan**
  - **Considerations**
  - **Fundamentals**
  - **Implementation methodology**
  - **Structuration of the document**
3. **Alignment with ASBU Modules**
4. **Prioritization of activities**
5. **Challenges to proceed National Plan focusing on ASBUs and AN**



# EXPECTATIONS/WS

- ❧ A better understanding of the new ANP format aligned with ASBU
- ❧ Regional harmonization on the presentation of ANP contents
- ❧ Better synchronization for better decision making
  - ❧ interoperability
  - ❧ Compatibility
  - ❧ Technology awareness
  - ❧ Appropriate timing
- ❧ Regional planning practices
- ❧ Standard air navigation reporting format

# Objectives

- ▣ Provide required guidance to define the operational path
- ▣ Define actions to be undertaken for the modernization of air navigation services within the Haitian FIR
- ▣ Align national planning along with regional planning
- ▣ Adopt ASBU methodology

# FRAMEWORK OF THE AIR NAVIGATION PLAN

- **Basis of the AN development plan**
- **Considerations**
- **Fundamentals**
- **Implementation methodology**
- **Structuration of the document**

- Current prevailing situation as the starting point
- Resource availability
- Traffic forecast for the airports
- ICAO recommendations
- Regional planning

**Basis of the Haitian ANP  
development**

- The future system architecture should accommodate the needs for both short and long terms.
- The new technologies are based on available systems not requiring specific developments
- The implementation of new systems should allow to reinforce capacity building and improve aeronautical safety
- Training should be sequenced in a way to allow for smooth transition to the new systems
- The strategy for the system architecture is based on current standards, technology availability and interoperability with adjacent FIRS and airspace users.

## Considerations

- Temptatives to align plan with ASBU cycles
- Regular planification review
- Most achievements due in the short term
- The need to fill performance gaps
- Considerations on Stakeholder needs
- Prioritization of actions

**Fundamentals**



- Address institutional framework aspect
- Invest in ANS infrastructure
  - New building
  - Equipment and systems
- Human aspect
  - Reliable availability of human resources
  - Consider immediate training
- Prioritization of activities
- Risk management

**Implementation methodology**

- Using CAR/SAM ANP model to format presentation
- Based on air navigation components AGA, CNS, ATM AIM MET SAR
- Aligned with ASBU modules
  - ASBU modules selection
  - Timeline determination
- Development of action plans

## STRUCTURATION OF THE DOCUMENT

# ALIGNMENT WITH ASBU MODULES

- High level analysis to support decision making
- ASBU modules selection
  - Based on traffic configuration
  - Availability of resources
  - Cost-benefit analysis
- Operational environment
- Technical environment
- Expected results

# AGA: ASBU MODULES

ational onment AGA	Concepts						
	AMAN DMAN	A-CDM	Meteo	A-CWP	Safety net	Runway Capacity	Surface radar A-SMGCS
<b>MODULES</b>		<b>B0-A- CDM</b>	B0- AMET		B0-SNET		B0-SURF
p		X	X		X		
f		X	X		X		

# CNS: ASBU MODULES

Operational Environment	Concepts			
	Ground systems Interoperability	Ground Surveillance	Safety net	Air- ground datalink
	X	X	X	

# ATM: ASBU MODULES

ational onnement ute	Concepts									
	Ground systems Interoperability	CCO/C DO	RNAV/ PBN	AMAN/ DMAN	AIM	Met eo	ENROU TE Tracks	Ground Surveilla nce	Safety net	Air-groun d datali nk
<b>MODULES</b>	<b>B0-FICE</b>	<b>B0-CCO / B0-CDO</b>	<b>B0-APTA</b>		<b>B0-DAIM</b>	<b>B0-AM ET</b>		<b>B0-ASUR</b>	<b>B0-SNET</b>	<b>B0-TBO</b>
	X	X	X		X	X		X	X	

# COMPLIANCE WITH THE GANP

<b>ABSU</b>	<b>OFNAC Action</b>	<b>Conformity</b>
BO-APTA	SID and STAR procedures	✓
BO-DATM	aeronautical information management data, computerized databases	✓
BO-AMET	ATIS	✓
BO-A-CDM	Improved coordination with AAN and airlines	✓
BO-FICE	Traffic management system	✓
BO-ASUR	Ground surveillance	✓
BO-SNET	Safety net tools	✓
BO-CCO and BO-CDO	Procedures of continuous up and down – mid-term	✓
BO-FRTO	Flexible routes – long term	✓
BO-TBO	Data links – long term	✓
BO-SURF	Ground control – long term	✓

# PRIORITIZATION OF ACTIVITIES

- ◉ Space management P1
  - Sectorisation
  - databases
- ◉ Air navigation services P1
  - Operational concept
- ◉ ATM Systems P1
  - Bidding process
- ◉ Human Resources p1
  - HR plan
  - Recruitment
  - training
- ◉ SAR Implementation P1
- ◉ Meteorological data P1
- ◉ Aeronautical Information P1
- ◉ Infrastructure p1



# CHALLENGES

- ① Budget
- ① Bidding process
- ① Human resources
- ① Respect of timelines and planning targets
- ① Project management
- ① Infrastructure

# EXPECTED OUTPUTS



## ∞ Performance indicators

- ∞ Capacity
- ∞ Flight efficiency
- ∞ Flight safety
- ∞ Predictability
- ∞ Environmental protection

## ∞ Air traffic growth within the FIR and on international airports

# CONCLUSION

- \* Successful implementation linked to regional harmonization
- \* ASBU scheme to be a powerful tool
- \* The need to continue harmonizing planning for better decision making at a national level
- \* Closed follow-up through NCLB strategy for a safer and more efficient ATM in the region