



ICAO

UNITING AVIATION

NO COUNTRY LEFT BEHIND



SIXTH MEETING OF THE APIRG INFORMATION AND INFRASTRUCTURE MANAGEMENT

SUB-GROUP (IIM/SG6)

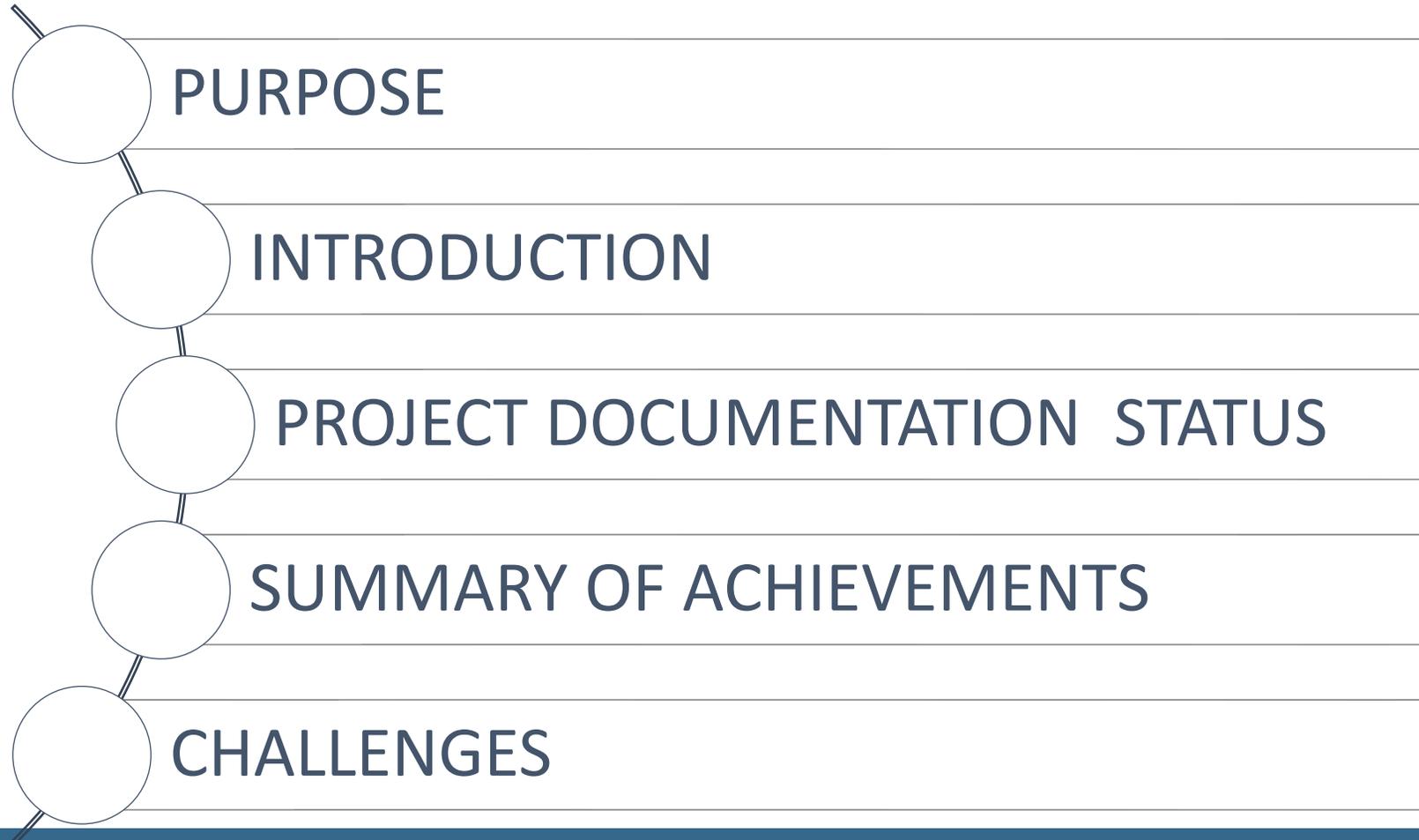
31 July to 03 August 2023

**Implementation of conventional NavAids  
and GNSS (Core and Augmented)  
aimed at enabling the implementation of PBN**

*NFONGANG Gerald ETTA, Cameroon*



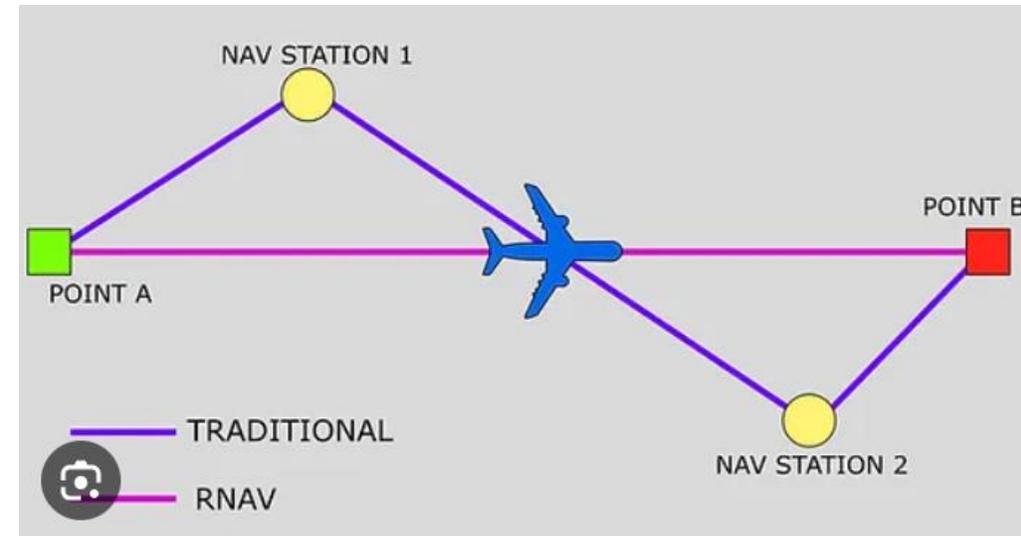
# Headline



# Introduction

The objectives of the navigation project is to assist States in the implementation of Aeronautical Navigation Service by the effective implementation of:

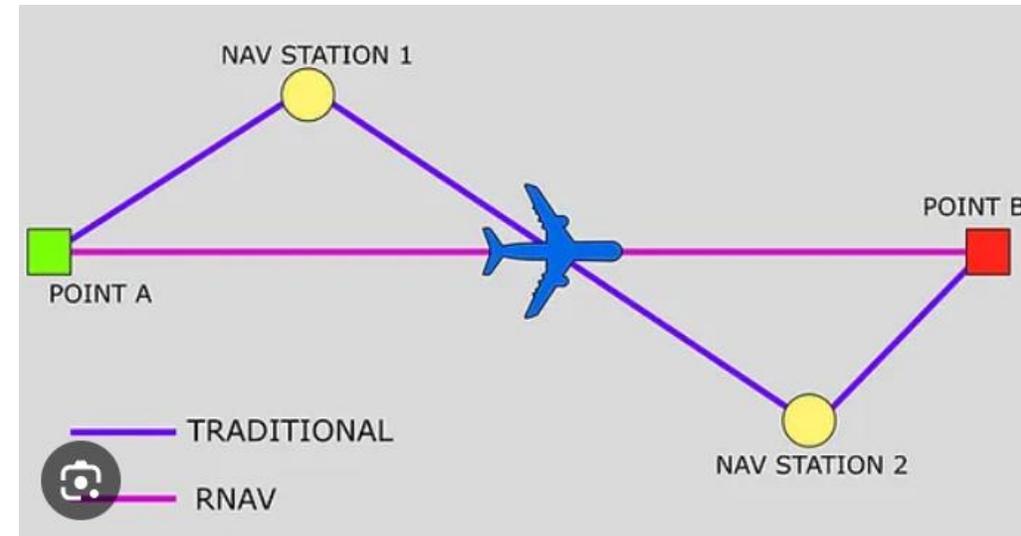
- Aeronautical conventional Radio Navigation Systems (VOR, DME ILS);
- Global Navigation Satellite systems (GNSS core and augmented).



# Introduction

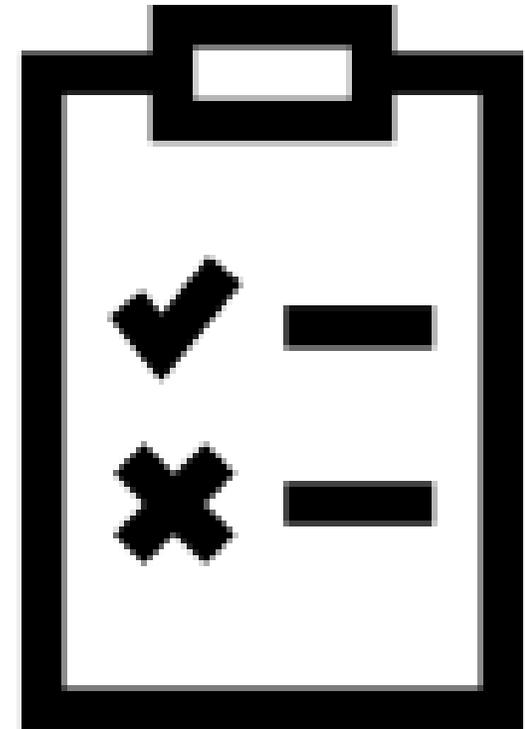
By capturing data with which to:

- Measure the rate of implementation of conventional nav aids w.r.t the ANP
- Determine the operational status of these nav aids (operational availability)
- Determine the extent of development of GNSS regulations in the region (Number of FIRs with regulation)
- Determine the status of implementation of augmented of GNSS



# Project documentation

- Project terms of reference ✓
- Project questionnaire ✓
- Project organisation : Revision in progress
- Project costing : in progress



# Achievements

Project team  
reconstitution

## Initially

- Cameroon
- Côte d'Ivoire
- Senegal
- Kenya
- Mauritania
- South Africa
- Uganda
- Ghana
- IATA
- ASECNA



## Now

- Cameroon
- Gabon
- Equatorial Guinea
- Burkina Faso
- Kenya
- Mauritania
- South Africa
- Uganda
- SATNAV Africa JPO
- ASECNA



# Achievements

Successful conduct of a series of meetings since March 2023

- Difficulty with attendance
- Deviation from the article on the quorum in our terms of reference with justification from the procedural handbook.
  - \* Update team members list
  - \* Attempted data collection from frequency finder 
  - \* Attempted data collection from State AIPs with the

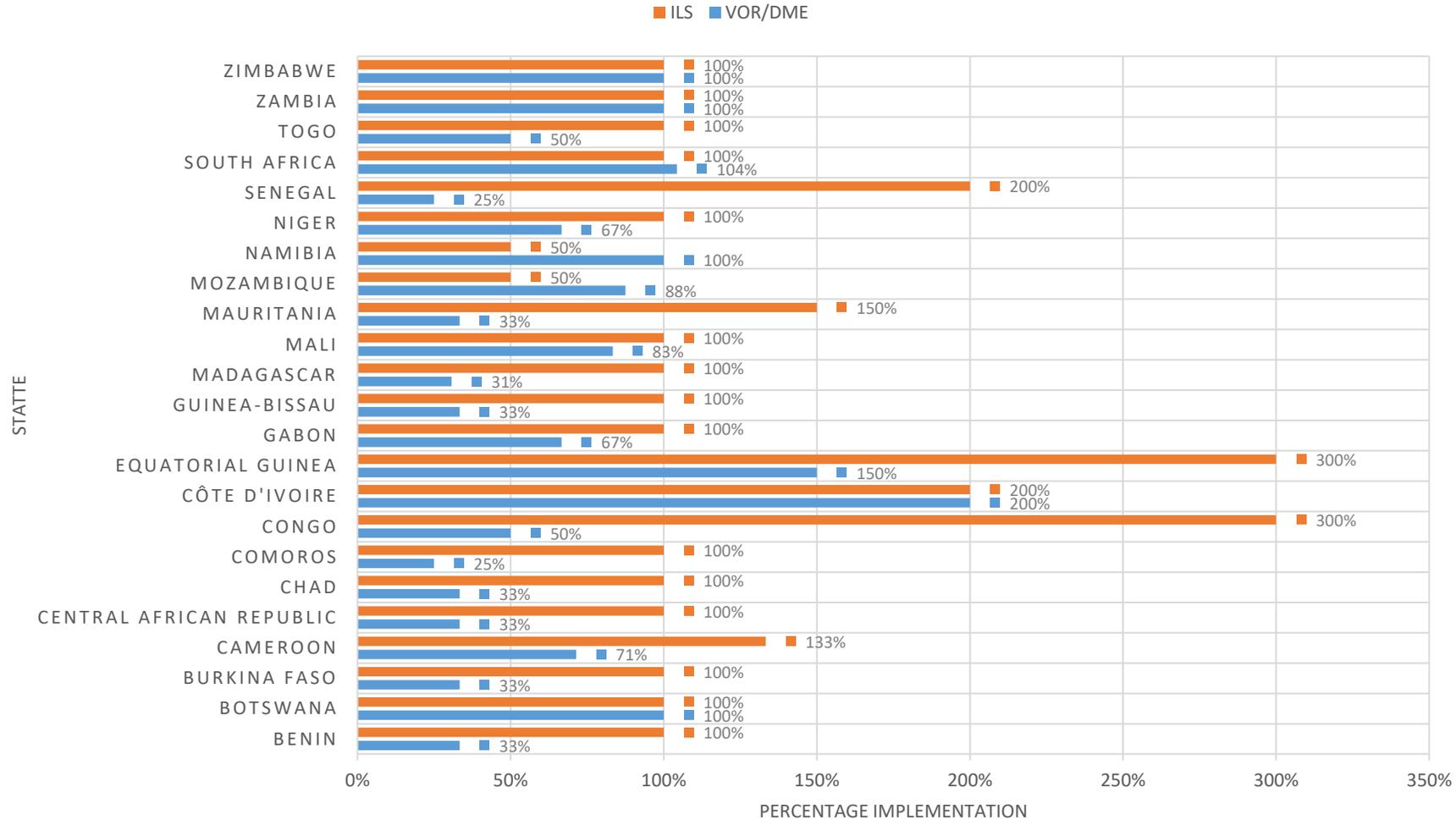
following observations

## Achievements

- ❖ We could only access some States
- ❖ The data is not necessarily up to date
- ❖ Operational availability is not easily traced
- ❖ Little or no GNSS data



PERCENTAGE IMPLEMENTATION NAVAIDS



## Challenges

- Unavailability of reliable data which we believe only States can provide.
- Team members not showing up (hopefully resolved, going forward)





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and Caribbean  
(NACC) Office  
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Central African  
(WACAF) Office  
Dakar

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Middle East  
(MID) Office  
Cairo

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

Asia and Pacific  
(APAC) Sub-office  
Beijing

Asia and Pacific  
(APAC) Office  
Bangkok



THANK YOU