## QUESTIONNAIRE

# Implementation of Conventional Nav'Aids and GNSS (Core and Augmented)

#### NAME OF STATE/FIR: \_\_\_\_\_

## Section 1 : Effective implementation of Aeronautical radio navigation Systems

#### A. Conventional Navaids

- a. Has your State implemented conventional radio navigation stations (NDB, VOR, DMEs)?
   □Yes
   □No
  - b. If yes, how many?

VOR	
NDB	
VOR/DME (Co-Located)	
DME/DME	

c. What are the coordinates (Location) of your NDB/VOR/DME Stations?

	Latitude	Longitude	Antenna height (m)
Facility 1			
Facility 2			
Facility n			

- d. On a scale of 0 100%, how would you rate the average monthly availability of your NDB/VOR/DME Stations in the last one year?
- e. Do you have additional comments regarding the availability of your NDB/VOR/DME Stations?

2. a. Has your State implemented Approach and landing radio navigation stations (LOC/Glide/DMEs)?

□Yes

□No

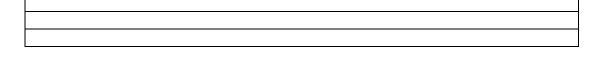
b. If yes, how many?

LOC	
GLIDE/DME	

c. What are the coordinates (Location) of your Approach and landing radio navigation stations (LOC/Glide/DMEs)?

	Latitude	Longitude	Antenna height (m)
Facility 1			
Facility 2			
Facility n			

- d. On a scale of 0 100%, how would you rate the average monthly availability of your Approach and landing radio navigation stations (LOC/Glide/DMEs) in the last one year?
- e. Do you have additional comments regarding the availability of your Approach and landing radio navigation stations (LOC/Glide/DMEs)?



#### B. <u>GNSS</u>

C. Has your State promulgated National Regulations related to Global Navigation Satellite system (GNSS)?

□Yes

□No
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b. Are there Aerodromes in your State with implemented GNSS Augmentation Systems (GBAS/SBAS)?

□Yes

□No

C. How many?

d. Has your State developed and implemented Global Navigation Satellite system (GNSS) procedures for the existing aerodromes?

e. How many?

- f. Has your State promulgated National regulations related to PBN operations?
- g. Has your State developed and published a Performance Based Navigation (PBN) implementation Plan?
   □Yes □No

h. How many?

i. How many fleet operating Augmented GNSS in Approach and landing phases are registered in your State?

- j. Number of Aircraft equipped with ABAS (GPS certified to TSO C-129a)
- k. Number of Aircraft equipped with SBAS (GPS certified to TSO C-145 or C-146)
- l. Number of Aircraft equipped with GBAS (GPS certified to TSO C-145 or C-146)
- m. Do you have additional comments regarding the implementation of the GNSS and PBN in your State?

## **Section 2**: Frequency spectrum Available for CNS Service

## A. <u>Preparation of ITU WRC</u>

- a. Is the CAA in your State involved in the ATU WRC preparation?
- b. If yes, which mechanism is used to bring the ICAO position into consideration in the scope of the ITU WRC preparation?
- c. Do you have additional comments regarding the ATU WRC preparation in your State?
- B. Monitoring and reporting interferences on Aeronautical spectrum
- a. Has your State developed a regulation for the reporting of identified interferences on aeronautical spectrum?

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- b. Has your State developed a mechanism for the monitoring of frequency spectrum interference?

□Yes

 $\Box No$ 

c. If yes, which mechanism is implemented in this regard?

- d. On a scale of 0 100%, how would you rate the average number of identified frequency interference reported in your State during the last one year?
- e. Do you have additional comments regarding the monitoring and reporting of interferences on aeronautical spectrum?

## Section 3 : Others

A. CNS data collection

#### B. Security of CNS infrastructure

- a. Has your state registered the assigned frequency of the aeronautical spectrum at the ITU?
   □Yes
   □No
- b. Is the navigation infrastructure in your State protected against unauthorized access?
   □Yes
   □No
- c. If yes, which mechanism is implemented in this regard?
- d. Do you have additional comments regarding the monitoring and reporting of interferences on aeronautical spectrum?

### C. <u>Contingency and backup</u>