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FUTURE.**



| ICAO

AIM SG/11  
(Amman, Jordan, 22 - 23 January 2025)



## GNSS Information in States AIPs

# ICAO Standards and Guidelines for Publishing GNSS Information in State AIP

3

## GNSS-related elements in aeronautical information

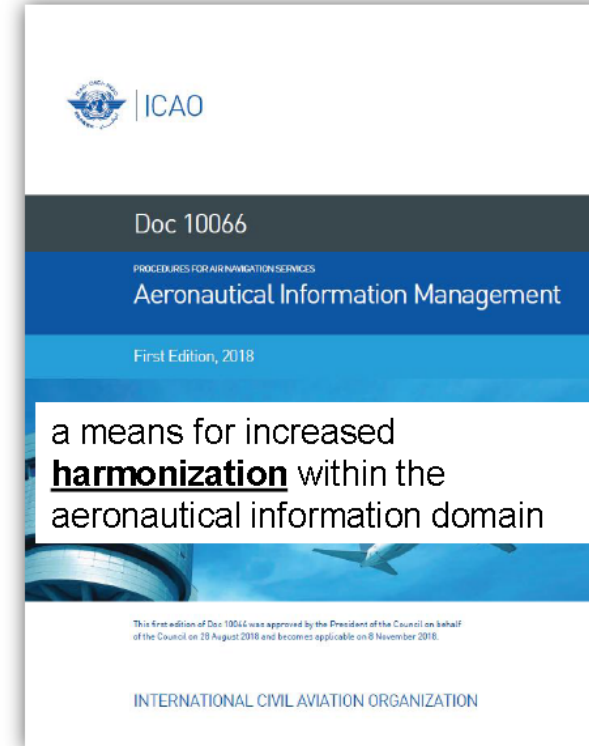
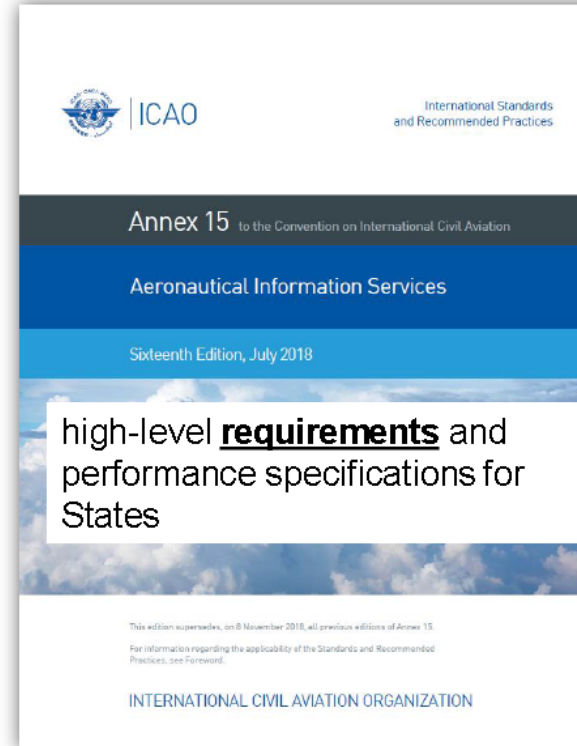
### \*\*\*\* AD 2.19 Radio navigation and landing aids

Detailed description of radio navigation and landing aids associated with the instrument approach and the terminal area procedures at the aerodrome, including:

1. c) type of supported operation for ILS/MLS/GLS, basic GNSS and SBAS;
- .
3. frequency(ies), channel number(s), service provider and reference path identifier(s) (RPI(s)), as appropriate; [...] states as follows: 6. [...] for SBAS, the to the nearest metre or foot;



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\*Same information is required for AD 3.18 (Heliports)

## **ENR 4.3 Global navigation satellite system (GNSS)**

A list and description of elements of the global navigation satellite system (GNSS) providing the navigation service established for en-route purposes and arranged alphabetically by name of the element, including:

- 1) the name of the GNSS element, (GPS, GLONASS, EGNOS, MSAS, WAAS, etc.);
- 2) frequency(ies), as appropriate;
- 3) geographical coordinates in degrees, minutes and seconds of the nominal service area and coverage area; and
- 4) remarks.

If the operating authority of the facility is other than the designated governmental agency, the name of the operating authority shall be indicated in the remarks column.

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## EADD AD 2.19 RADIO NAVIGATION AND LANDING AIDS

Type of aid, MAG VAR, Type of supported OPS (for VOR/ILS/MLS, give declination)	ID	Frequency	Hours of operation	Position of transmitting antenna coordinates	Elevation of distance- measuring equipment (DME) transmitting antenna	Service volume radius from the GBAS reference point	Remarks
1	2	3	4	5	6	7	8
GPS NPA	N/A	1575.42 MHz	H24	N/A	N/A		Transmitting antennas are satellite based
WAAS LPV	N/A	1575.42 MHz	H24	N/A	N/A		Transmitting antennas are satellite based
GBAS CAT I	ERWN	133.000 MHz	H24	522244.4N 0315536.4W	N/A		

Doc 8126

Aeronautical Information Services Manual

Seventh Edition, 2022

Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION



# ICAO Standards and Guidelines for Publishing GNSS Information in State AIP

## ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)

Name of GNSS element	Frequency	Coordinates	Remarks
		<u>Nominal SVC area</u> Coverage area	
1	2	3	4
GPS	1 575.42 MHz	Statewide	En-route, terminal and non-precision approaches (NPA). No GPS NOTAM has been published.  Subject to availability of at least one WASS satellite.
WAAS	1 575.42 MHz	Statewide to approximately N600	



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# ICAO Standards and Guidelines for Publishing GNSS Information in State AIP

A State Aeronautical Information Publication (AIP) covering the implementation and uses of GNSS should include the following aspects:

- a clear statement of terms and conditions, procedures and such things as training requirements;

- background information about GNSS technology and its operational applications.

- Current information that can assist AOs in planning for the acquisition of avionics

- Information updates

- WGS-84 coordinate system



Doc 9849

Global Navigation Satellite  
System (GNSS) Manual

Third Edition, 2017



Approved by and published under the authority of the Secretary General

INTERNATIONAL CIVIL AVIATION ORGANIZATION

I have checked all available States AIPs

AIP JORDAN		ENR 4.3-1 01 MAY 2007	
ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)			
Name of GNSS elements	Frequency	Coordinates Nominal SVC area Coverage area	Remarks

ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)
(To be developed)

ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM ( GNSS )
-----------------------------------------------------

AIP SUDAN	ENR 4.3-1 12 SEP 2019
ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)	
INCOURSE OF PREPARATION	

ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM - GNSS
Note : see <a href="#">GEN 1.5.5</a>

AIP SYRIA	ENR 4.3.1 01 NOV 2020
ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS).	

AIP LEBANON	ENR 4.3-1 21 JUL 2016
ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)	
-NIL	

ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)
NIL.



→ Only 1 have published this information

**ENR 4.3 GLOBAL NAVIGATION SATELLITE SYSTEM (GNSS)**

<i>Name of GNSS element</i>	<i>Frequency</i>	<i>Coordinates Nominal SVC area Coverage area</i>	<i>Remarks</i>
1	2	3	4
GPS	1575.420 MHZ 1227.600 MHZ	Jeddah FIR airspace	En-route, terminal and non presicion approaches (NPA).

- There is no uniformity when publishing this data among the states;
- Inconsistency among different parts of the AIP;
- Need of harmonised AIP publication and inclusion of GNSS-related elements;
- To provide Regional guidance enabling harmonised AIP publication of GNSS elements.
- Due to the identified inconsistencies, it is essential for the PBN SG and AIM SG to collaborate to establish a clear and standardized approach for capturing and publishing GNSS information in the State AIP.
- The PBN SID and STAR Charting Ad Hoc Working Group continues its efforts beyond the current mandate and timeline.

Given that the harmonization is crucial for promoting safety, efficiency, and standardization, the PBN SG/9 meeting agreed to the following Draft Decision:

*Draft Decision 9/5: GNSS Information in States AIPs*

*That, the PBN SIDs and STARs Charting Ad Hoc Working Group continues its efforts beyond the current mandate and timeline and tasked to:*

- a) provide Regional Guidance enabling harmonised AIP publication of GNSS elements.*
- b) establish a clear and standardized approach for capturing and publishing GNSS information in the State AIP.*

## Action by the meeting

The meeting is invited to :

- a) take note of the information contained in this presentation;
- b) discuss any relevant matters as appropriate; and
- c) Agree to the PBN SG/9 Draft Decision 9/5.

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# Thank You

