

GALILEO HAS HIGH ACCURACY SERVICE

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CNIG – Commission Géo-Pos

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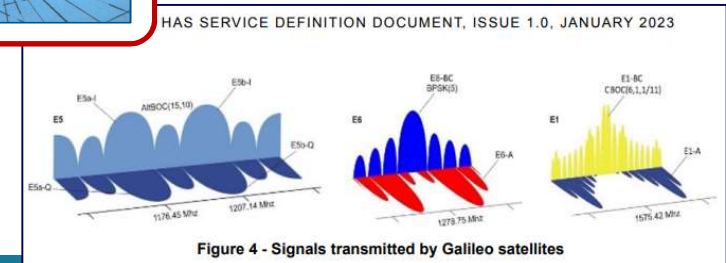
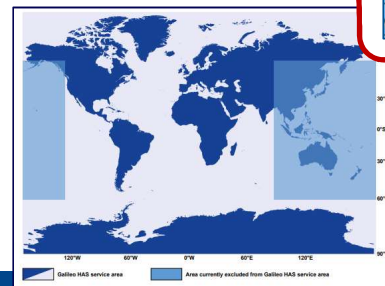
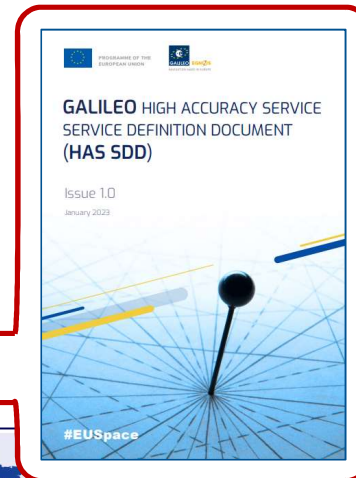
High Accuracy Service (HAS)

- Signal in Space corrections testing in 2021 - [Achieved](#)
- HAS Initial Service Declaration at the 15th EU Space Conference on 24/01/2023 - [Achieved](#)
- HAS Initial Service Provision: very good and stable performances

Voir site EUSPA : <https://euspa.europa.eu>

Et site GNSS Service Centre : <https://www.gsc-europa.eu>

- Note Codes E6 B/C → janvier 2019
- HAS Information Note → mars 2021
- HAS Signal in Space Interface Control Document → mai 2022
- HAS Service Definition Document → janvier 2023



HAS – Deux niveaux de service

HAS	SERVICE LEVEL 1	SERVICE LEVEL 2
COVERAGE	Global	European Coverage Area (ECA)
TYPE OF CORRECTIONS	PPP - orbit, clock, biases (code and phase)	PPP - orbit, clock, biases (code and phase) incl. atmospheric corrections
FORMAT OF CORRECTIONS	Open format similar to Compact-SSR (CSSR)	Open format similar to Compact-SSR (CSSR)
DISSEMINATION OF CORRECTIONS	Galileo E6B using 448 bits per satellite per second / terrestrial (internet)	Galileo E6B using 448 bits per satellite per second / terrestrial (internet)
SUPPORTED CONSTELLATIONS	Galileo, GPS	Galileo, GPS
SUPPORTED FREQUENCIES	E1/E5a/E5b/E6; E5 AltBOC L1/L5; L2C	E1/E5a/E5b/E6; E5 AltBOC L1/L5; L2C
HORIZONTAL ACCURACY 95%	<20 cm	<20 cm
VERTICAL ACCURACY 95%	<40 cm	<40 cm
CONVERGENCE TIME	<300 s	<100 s
AVAILABILITY	99%	99%
USER HELPDESK	24/7	24/7

HAS – Internet Data Distribution (HAS IDD)

Site du GNSS Service Centre : <https://www.gsc-europa.eu>



Galileo High Accuracy Service - Internet Data Distribution Interface Control Document (HAS IDD ICD)

This document is only available after registration to the Galileo HAS Internet Data Distribution

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What is Galileo
High Accuracy Service?
Find out here



Galileo - HAS: Next Steps

- HAS Initial Service (Phase 1): Now focusing on User segment development
 - HAS uptake strategy and action plan 2023 under consolidation (HAS enabled RX, HAS applications, R&D, etc.)
 - HAS Reference Algorithm documentation and software implementation publication
- HAS Full Service (Phase 2):
 - System Design and Reqs Review closed in Q4 2022.
 - Focus on HAS requirements flow down to the key elements of Galileo ground segment (G1G : GSC, HAS Data Generator ; G2G IOV)
 - Full Service : Q4 2025 (TBC)