



EDAS for added value applications

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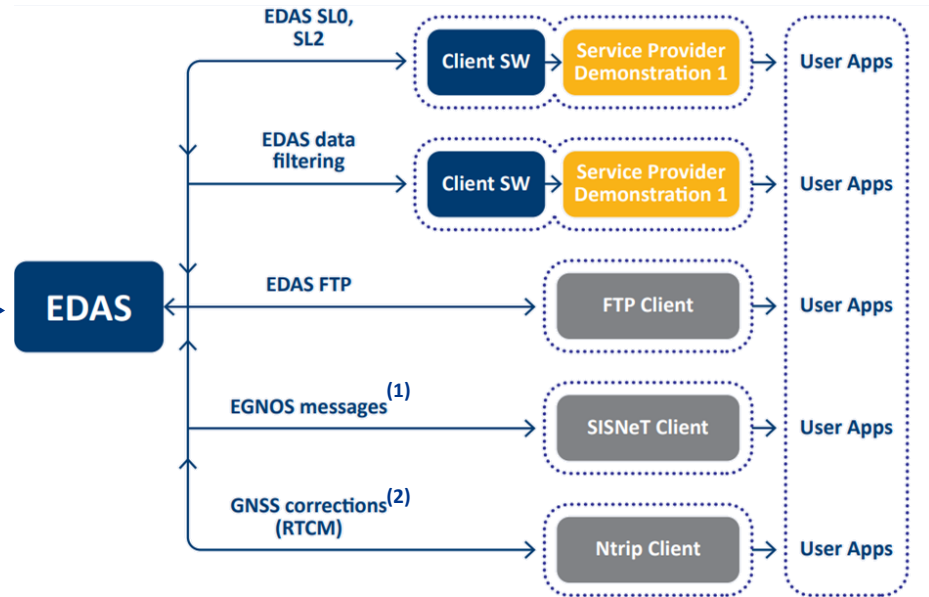
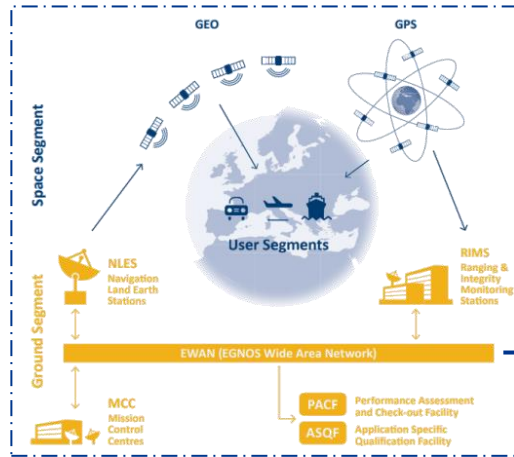


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EDAS Overview



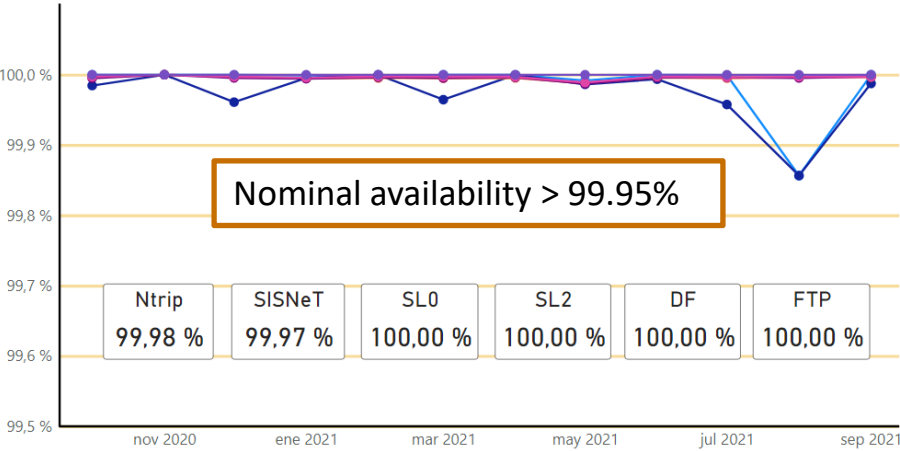
⁽¹⁾ Ephemeris and EGNOS Messages request (TTFF)

⁽²⁾ EDAS Ntrip enables other position techniques (DGNSS, RTK)

EDAS Performance

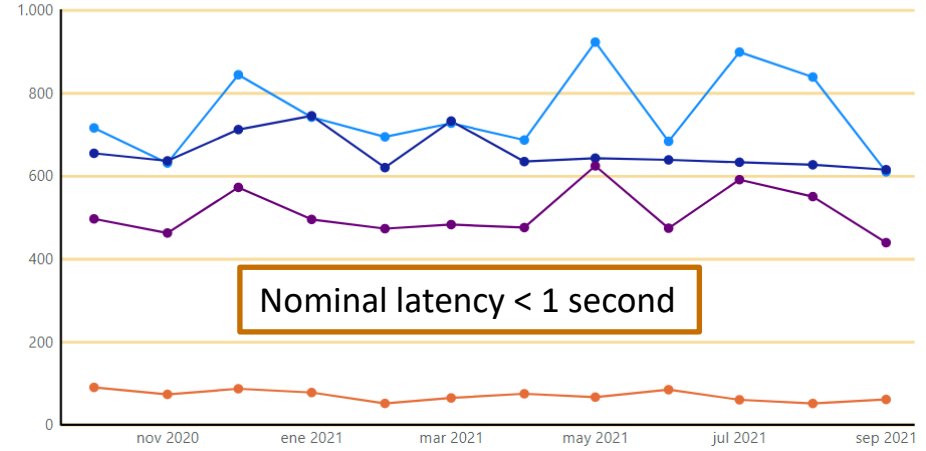
EDAS Availability (%)

● Ntrip ● SISNET ● SL0 ● SL2 ● Data Filtering ● FTP



EDAS Latency (ms, p95)

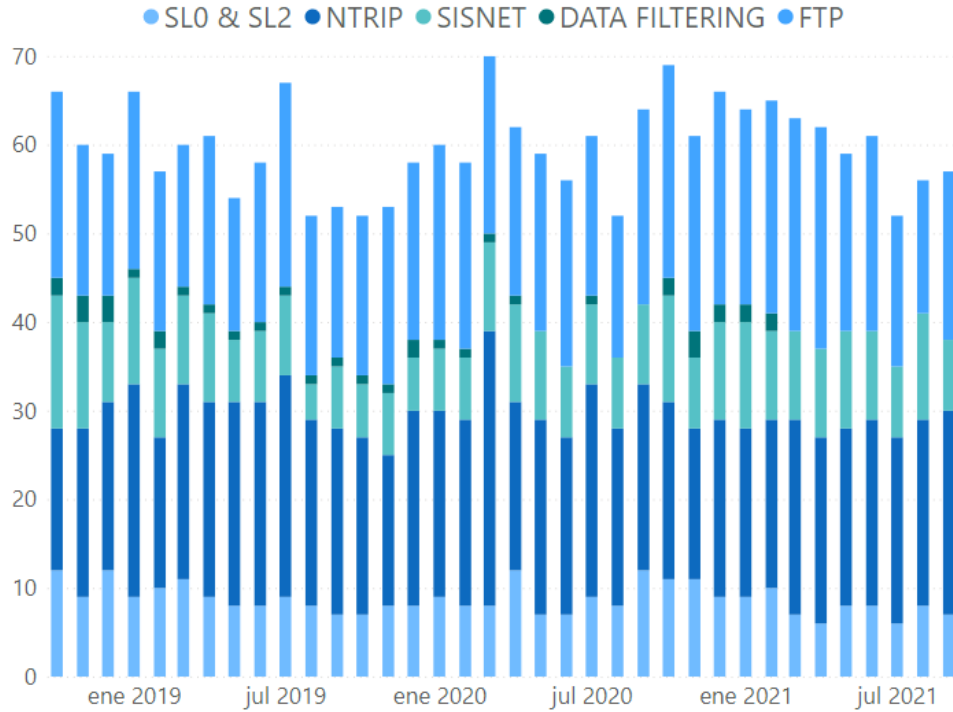
● SL0/2 ● Ntrip ● SISNET ● Data Filtering



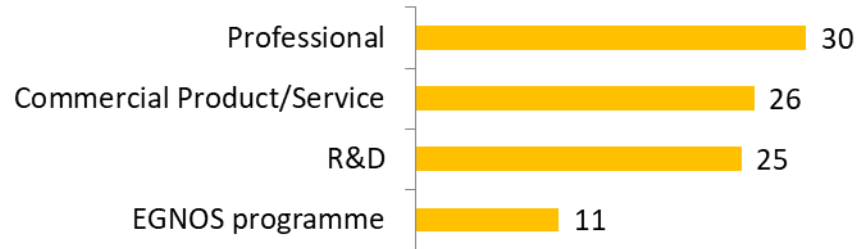
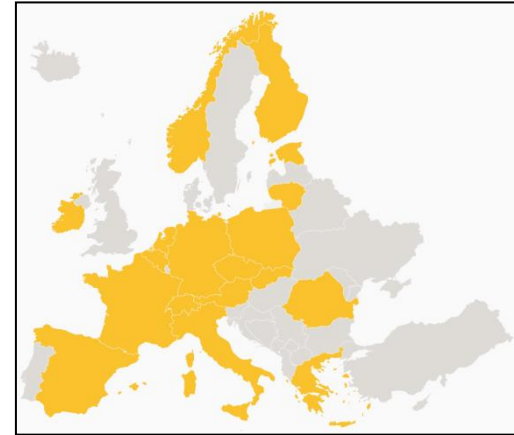
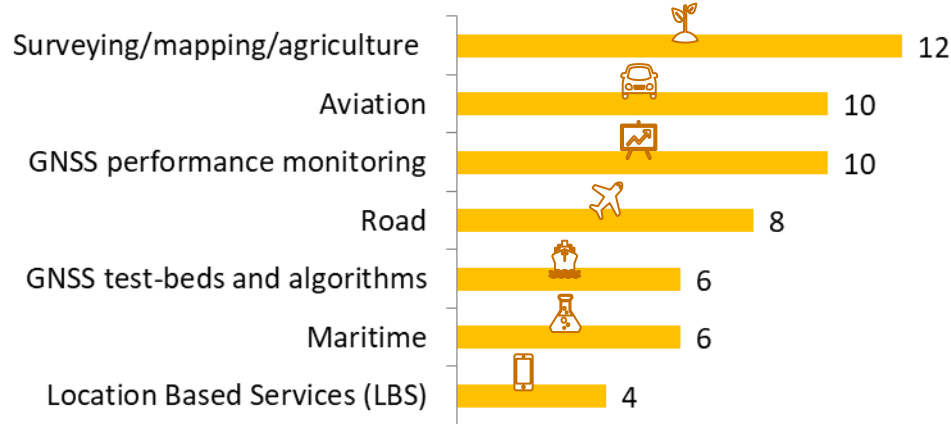
High availability – 24/7 service operation



EDAS Active Users



Users Per Segment



Use Cases Examples

Aviation

- Aviation Dashboard on EUSW
- ICAO Space Weather Service
- Definition of the conditions under which GNSS systems can be operationally used
- Monitoring of ionospheric disturbances on airborne receivers
- Debugging of issues on commercial airborne receivers
- Tracking of assets/fleet management at airports
- Tracking & tracing of RPAS

Road

- Fleet management solutions
- Tracking of goods
- Integration in Advanced Driver-Assistance Systems (ADAS)
- Solutions for Intelligent Transport Systems (ITS)



Maritime

Recapitalization of DGNSS infrastructure for maritime and inland waterways



Use Cases Examples

GNSS Perfo. Monitoring

- GNSS/EGNOS Performance Monitoring (EUSW)
- Performance monitoring tools
- Ionospheric scintillation mapping
- Monitoring of ionospheric disturbances on GNSS
- Performance comparison versus real-time positioning services
- Scientific applications (e.g. algorithms development)

Agriculture

- Precision farming (Variable Rate Applications)
- Farm machinery guidance
- Land surveying for forestry and agronomist applications
- Soil sampling services
- Data input for CORS networks



LBS

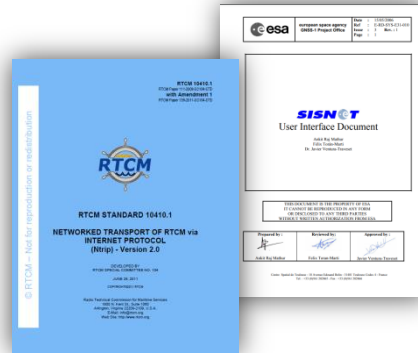
- Enhancement of GNSS standalone position
- Input for corrections generation in High Accuracy Assistance services
- Assets and workforce management



What's new

EDAS Library For Android (ELFA) is an Android-Native **library** aimed at easing the connection to **EDAS SISNeT** and **Ntrip** services

It provides an **API** to access the decoded EGNOS information (e.g. **slow, fast and ionospheric** corrections) and the **DGPS** corrections.



Method	Arguments	Return	Description
getSatRangeCorrection	int pm, Calendar currentTime	double correction	Method to obtain the PRC + RRC Correction of a satellite
getSatUdrel	int pm	int udrel	Method to obtain the UDRE of a satellite
getSatDeltaX	int pm	double deltaX	Method to obtain the delta for the X position of a satellite
getSatDeltaY	int pm	double deltaY	Method to obtain the delta for the Y position of a satellite
getSatDeltaZ	int pm	double deltaZ	Method to obtain the delta for the Z position of a satellite
getSatDeltaClock	int pm	double deltaClock	Method to obtain the clock offset of a satellite
getSatDeltaVX	int pm	double deltaVX	Method to obtain the delta for the X velocity of a satellite
getSatDeltaVY	int pm	double deltaVY	Method to obtain the delta for the Y velocity of a satellite
getSatDeltaVZ	int pm	double deltaVZ	Method to obtain the delta for the Z velocity of a satellite
getSatDeltaVClock	int pm	double deltaVClock	Method to obtain the delta for the Clockdrift a satellite
getRefTime	int pm	double timeRef	Method to obtain the applicability time of the last long correction with vel_code=1 for a satellite
getSatFastTimestamp	int pm	Calendar timeStamp	Method to obtain the time of the las fast corrections of a satellite
getSatIntegrityTimestamp	int pm	Calendar timeStamp	Method to obtain the time of the last integrity corrections of a satellite
getSatLongTimestamp	int pm	Calendar timeStamp	Method to obtain the time of the Long corrections of a satellite
getSatVelocityCode	int pm	int velocity code from last pm long correction	Method to obtain the velocity code of the received corrections for a satellite
getIgpVertDelay	Coordinates igpCoords	double vertical delay for an IGP	Method to obtain the vertical delay of an IGP
getIgpVel	Coordinates igpCoords	int giveI for an IGP	Method to obtain the GIVEI of an IGP



Android PVT engine using SBAS and DGPS corrections obtained from ELFA is under development.



SISNeT and SBAS decoding library will be soon available in **python** as well.



Thanks for your attention!



**Now it is
your turn**