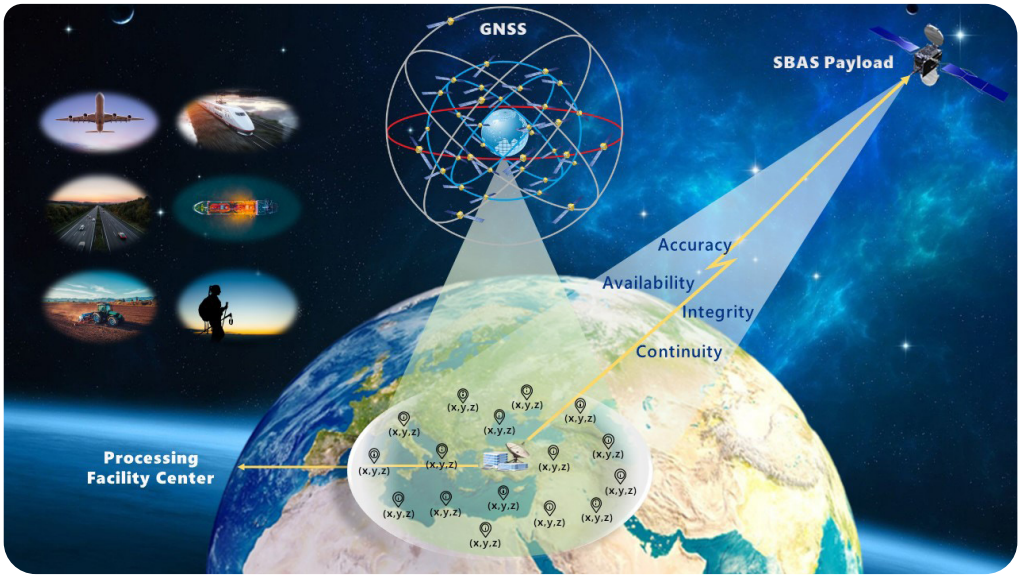
LOCUS | SBAS
aselsan

SBAS DEVELOPMENT PROJECT

#SatelliteandSpace



aselsan

LOCUS | SBAS
aselsan

SBAS DEVELOPMENT PROJECT

By broadcasting the augmentation information prepared by Processing Facility Center with SBAS from satellites in GEO orbit, position improvement is provided in addition to the position information provided by GNSS satellites.

In addition to position improvement, it is also aimed to ensure the accuracy/integrity and continuity/availability parameters of GNSS signals.

The primary aim of the Monitoring Station Network is to track GNSS Satellites and forward observations to the Processing Facility Center (PFC). In PFC, after processing all the input datasets, estimation of satellite orbit corrections, clock corrections, ionospheric and tropospheric corrections will be performed. Also, PFC performs integrity monitoring to ensure the reliability and trustworthiness of the correction messages generated. The PFC generates correction messages according to RTCA-DO-229 standard.

After signal generation as well as PRN encoding, Satellite Control Center (SCC) will relay SBAS messages to the GEO satellite. Also, Signal synchronization and timing between GPS and SBAS will be performed in SCC.

The GEO satellite payload transmits the Ku-Band augmentation signal from the ground to the target coverage area over the L-Band.

GEO payload equipment is designed by ASELSAN.

Technical Specifications

- GEO satellite coverage (operation capability)
- Payload capable of transmittting in L1 and L5 GNSS band
- Augmenting GPS
- RTCA-DO-229 compatible message format
- Coverage in Türkiye and its immediate neighborhood
- 3m horizontal and 4m vertical accuracy (95% confidence interval)
- Capability to create SBAS network time
- Supports open, safety of life and data access services

HBT - LOCUS SBAS -12.2024

CALL CENTER +90 850 360 10 30 | P: +90 (312) 592 10 00 F: +90 (312) 354 13 02 | hbtmarketing@aselsan.com

aselsan