

## HIGH RESOLUTION EARTH REMOTE SENSING SYSTEM BASED ON CONDOR-E SSC PLATFORM

### ADVANTAGES

- All-weather and round-the-clock monitoring of the Earth surface
- High spatial resolution of the obtained data
- High responsiveness of Earth remote sensing data collection using mobile points of data receiving and processing and centres of SSC control
- Reduction of costs deployment of orbital group at the expense of small mass and modular technology of SSC

### DESIGNATION

Earth remote sensing space system based on Condor-E SSC is designed for round-the-clock, all-weather monitoring of the Earth surface to collect real-time detailed data about the observed ground objects. The system can be used for mapping of territories, control of natural resources, ecological monitoring, prevention of disasters and acts of God, oceanographic surveys.

### COMPOSITION

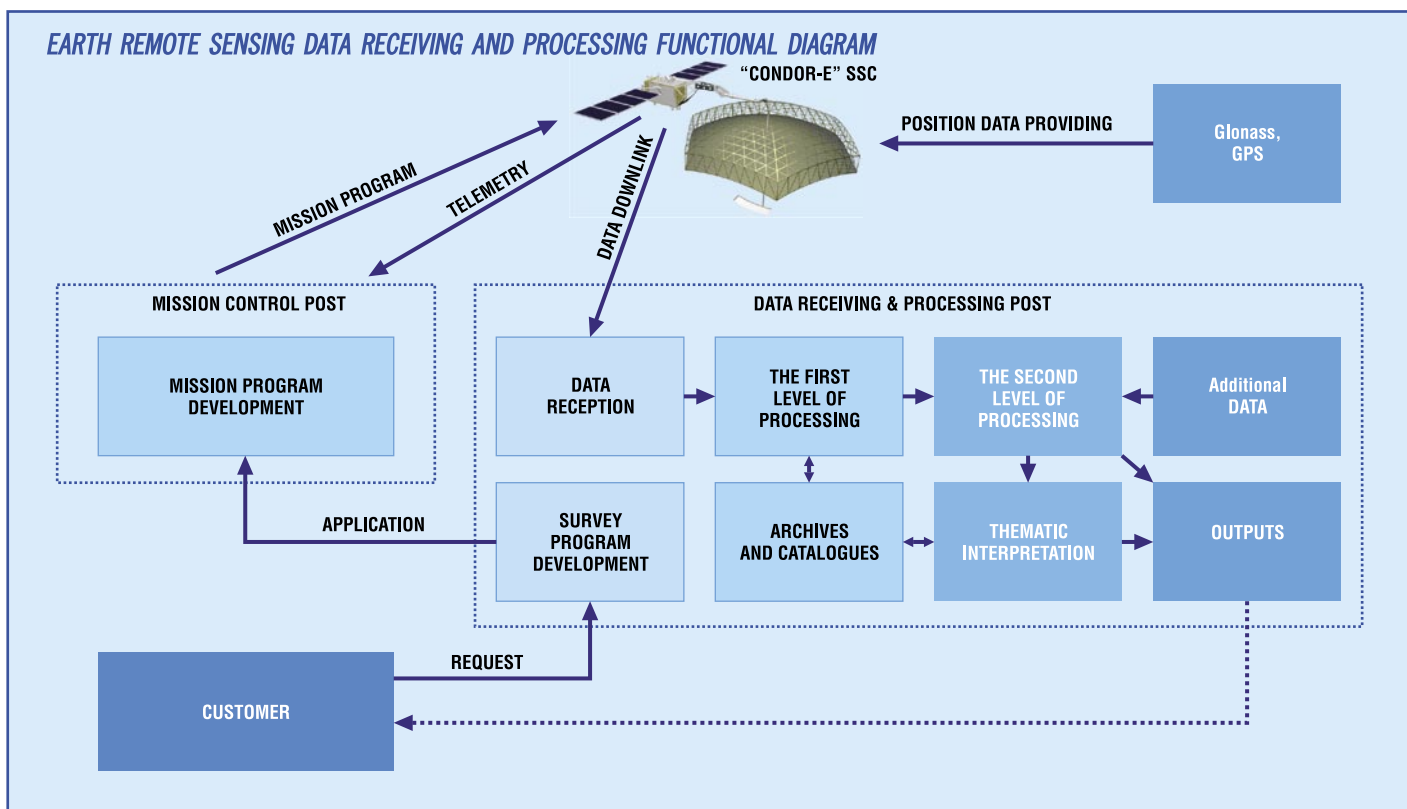
Composition of the system:

- orbital constellation of Condor-E SSC,
- mobile of fixed mission control centre, mobile or fixed data receiving and processing post.

Condor-E SSC of the constellation can be fitted out with SAR or EOS. The sensor type and number of Condor-E SSC in the system depend on the objectives of the mission.

### SPECIFICATIONS OF EARTH REMOTE SENSING SPACE SYSTEM

Type of SSC payload	SAR, EOS
Resolution of the obtained data	> 1 m
Parameters of SSC operation orbit:	
• altitude	~ 500 km
• inclination	up to 98°
Mass of SSC	up to 1,150kg
Active life of SSC	5 years
Launch vehicles of SSC	Light LVs



**FUNCTIONS OF MISSION CONTROL CENTRES:**

- control of SSC
- receiving, processing and storage of telemetric data
- flight mission planning.

**FUNCTIONS OF DATA RECEIVING AND PROCESSING POSTS:**

- receiving and registration of Earth remote sensing data,
- primary processing,
- secondary processing,
- dedicated processing, automatic identification of objects,
- creation of digital maps and digital relief models, generation of dedicated data bases of objects.

**PROCESSING FEATURES OF EARTH REMOTE SENSING DATA:**

Joint use of Condor-E SSC equipped with radar and EOS allows to combine the surveyed area images taken in different spectrum bands, expanding capabilities of processing, improving the quality of Earth remote sensing data and increasing data intensiveness level of final dedicated documents.

