Under a contract with The Ministry of Communications and Information Technologies of the Republic of Azerbaijan (the Ministry), Northrop Grumman designed and built the Azerspace/Africasat-1a commercial communications satellite. Based on Northrop Grumman's flight-proven GEOStar™-2 platform, the hybrid C- and Ku-band satellite generates approximately five kilowatts of payload power and carries 36 active transponders. Azerspace/Africasat-1a provides communications services to Azerbaijan, Central Asia, Europe, and Africa from an orbital location at 46 degrees East Longitude through an arrangement between the Ministry and Measat of Malaysia, which owns the rights to the orbital slot.

**The GEOStar™ Advantage**

Northrop Grumman’s highly successful Geosynchronous Earth Orbit (GEO) communications satellites are based on the company’s GEOStar spacecraft platform, which is able to accommodate all types of commercial communications payloads and is compatible with all major commercial launchers. The company’s GEOStar product line includes the GEOStar-2 design, which is optimized for smaller satellite missions that can support up to 5.0 kilowatts of payload power. Northrop Grumman has also developed the higher-power GEOStar-3 spacecraft design, delivering the next increment of payload power for applications between 5.0 and 8.0 kilowatts, allowing Northrop Grumman to offer its innovative and reliable satellite design to the medium-class of communications satellites.

**Coverage**

Azerbaijan, Central Asia, Europe and Africa

**Mission**

C- and Ku-band communications

**Customer**

Azercosmos OJSCo.
**Specifications**

**Spacecraft**
- Launch Mass: 3,275 kg (7,220 lb.)
- Solar Arrays: Four panels per array, UTJ Gallium Arsenide cells
- Stabilization: 3-axis stabilized; zero momentum system
- Propulsion: Liquid bi-propellant transfer orbit system; monopropellant (hydrazine) on-orbit system
- Batteries: Two >4840 W-Hr capacity Li-Ion batteries
- Mission Life: 15 years
- Orbit: 46° East Longitude

**Hybrid Payload**

**C-band**
- Repeater: 24 active transponders
- Antenna: 2.5 x 2.7 m single shell super-elliptical deployable reflector; 1.4 x 1.4 m single shell super-elliptical deck-mounted

**Ku-band**
- Repeater: 12 active transponders
- Antenna: 2.5 x 2.7 m single shell super-elliptical deployable reflector

**Launch**
- Launch Vehicle: Ariane 5
- Site: Kourou, French Guiana
- Date: February 7, 2013

**Mission Partners**

**Azercosmos OJSCo.**
Prime Contractor for the Azerspace/Africasat-1a spacecraft and ground system

**Coverage Contour Maps**

**Ku-band EIRP Contours – 11.2 GHz**
- East (Central Asia)  
- West (Europe)

**Ku-band G/T Contours – 14.0 GHz**
- East (Central Asia)  
- West (Europe)

**C-band EIRP Contours – 3,740 MHz**
- Africa and Europe  
- Central Asia and Europe

**C-band G/T Contours – 5,965 MHz**
- Africa and Europe  
- Central Asia and Europe