

Express-AM1 satellite (launched on 30 October, 2004, entered operation on 1 February, 2005)

A new broadcasting and communications Express-AM1 satellite is produced by NPO PM named after Academician M. Reshetnev jointly with NEC/TOSHIBA Space Systems under the order of Russian Satellite Communications Company. The satellite is produced in the context of the Program for Renovation of National Constellation to be executed over a time period of 2002–2005.

The satellite is designed to provide a package of communications services (digital TV, telephony, videoconferencing, data transmission, the Internet access) and to deploy satellite networks by applying VSAT technology.

The Express-AM1 spacecraft equipped with up-to-date antenna systems that provide high-quality communications and uniform coverage in C- and Ku- bands.

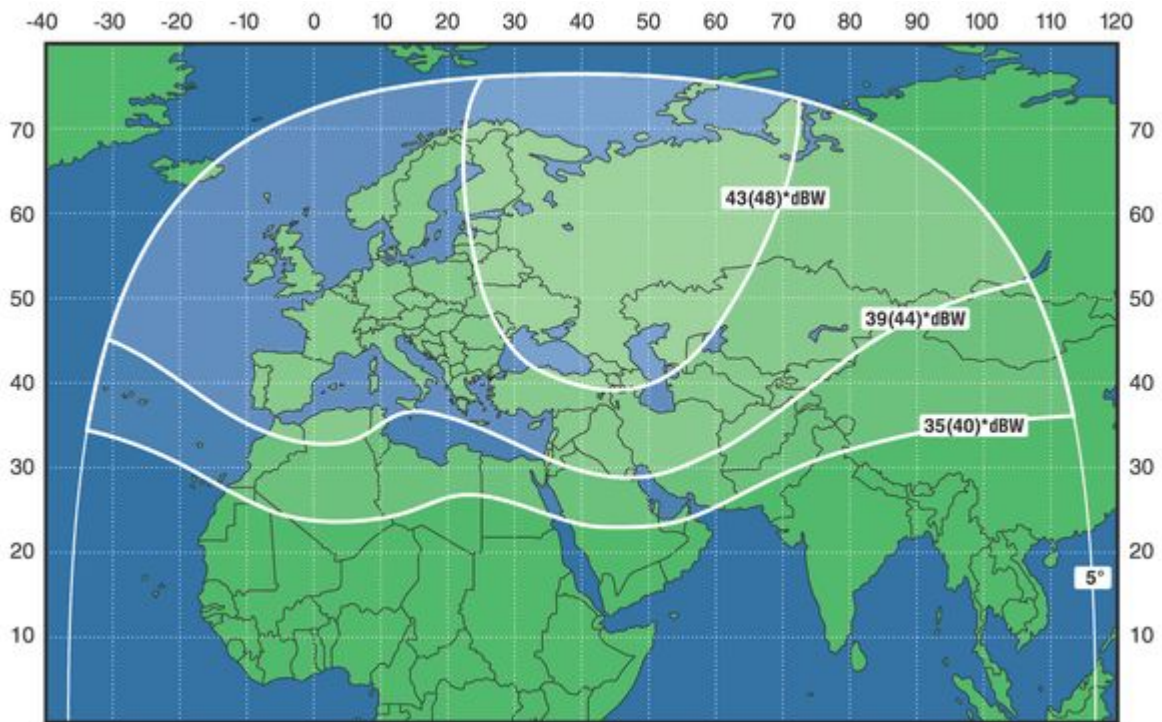
Sberbank of the Russian Federation takes an active part in financing the Program for Renovation of National Constellation.

Satellite performances

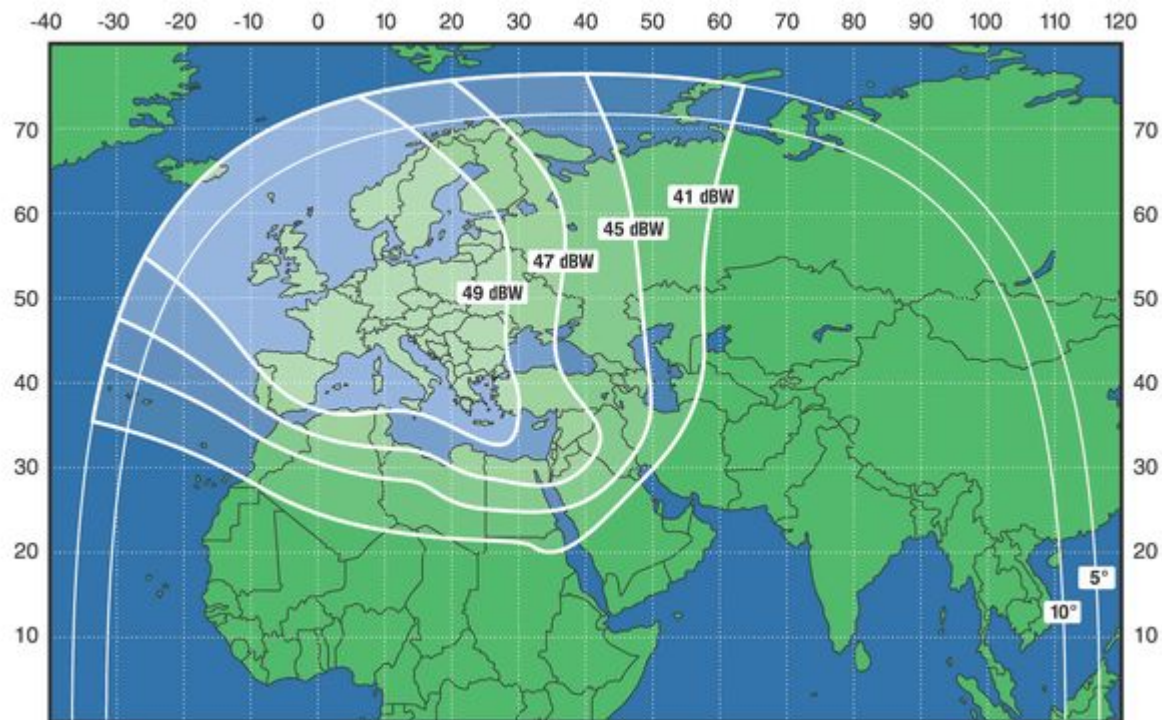
Mission	TV & radio broadcasting, telephony, data transmission, Internet access, videoconferencing and other services
Orbit	Geostationary / 40° E
Station keeping accuracy	±0,05° (N&S / E&W)
Operational life-time	12 years
Stabilisation	Three axes
Payload electric power	4200 W
Mass of payload	570 kg
Mass of satellite	2600 kg
Power supply	6000 W

Transponders

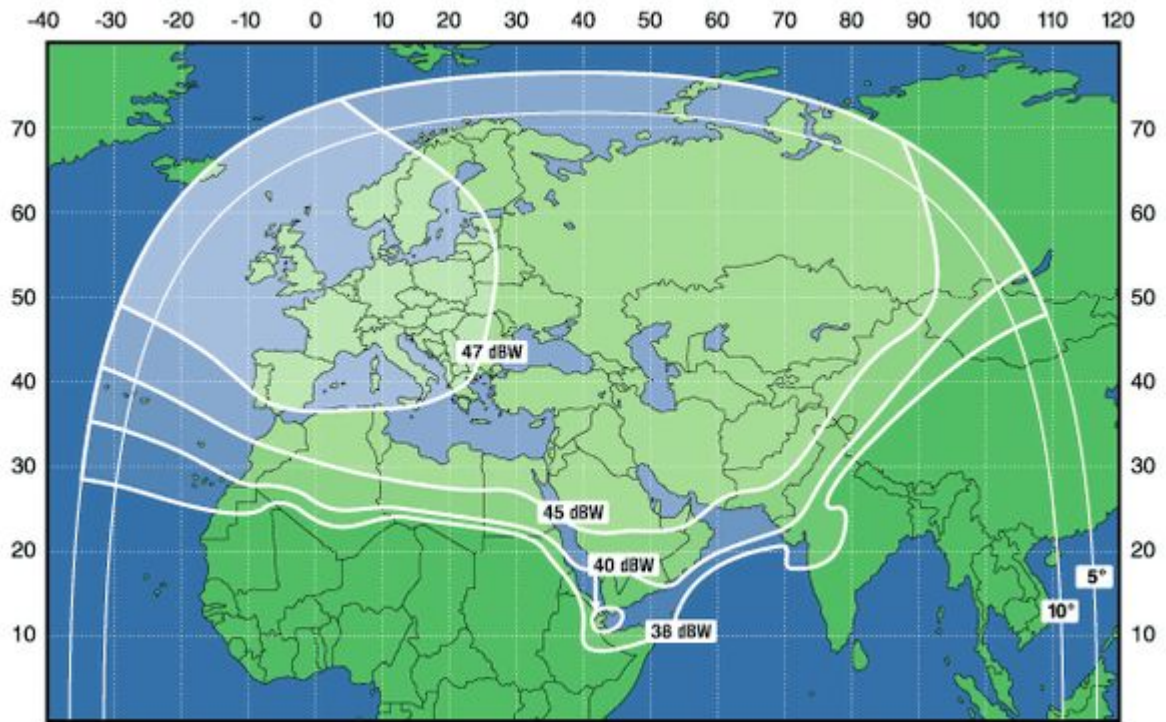
parameters	C-band	Ku-band	L-band
Number of transponders	9	18	1
Transponders bandwidth at -1dB, MHz	40	54	0,5
Transponders output power, W (number of transponders)	40(8) 120(1)	95-100	30



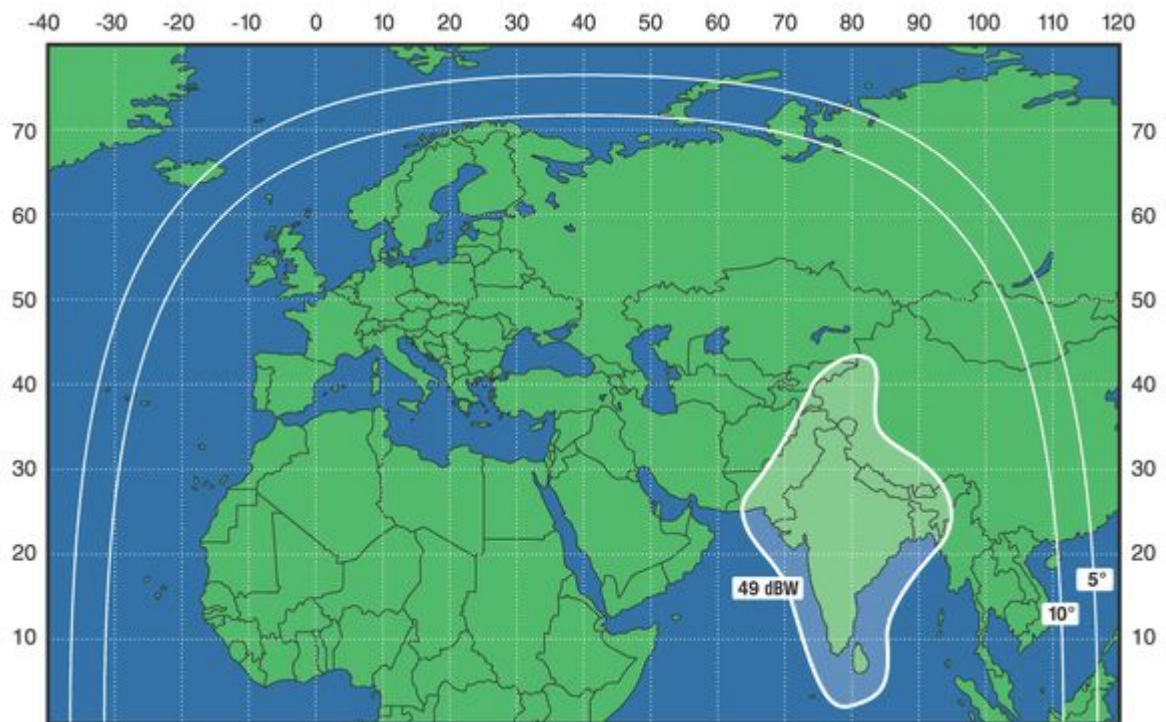
Express-AM1 satellite (40° E)
Downlink coverage, C- band, * - EIRP value of the transponder #6



Express-AM1 satellite (40° E)
Downlink coverage, European service zone, Ku- band



Express-AM1 satellite (40° E)
Downlink coverage, Wide european service zone, Ku- band



Express-AM1 satellite (40° E)
Downlink coverage, Indian service zone, Ku- band