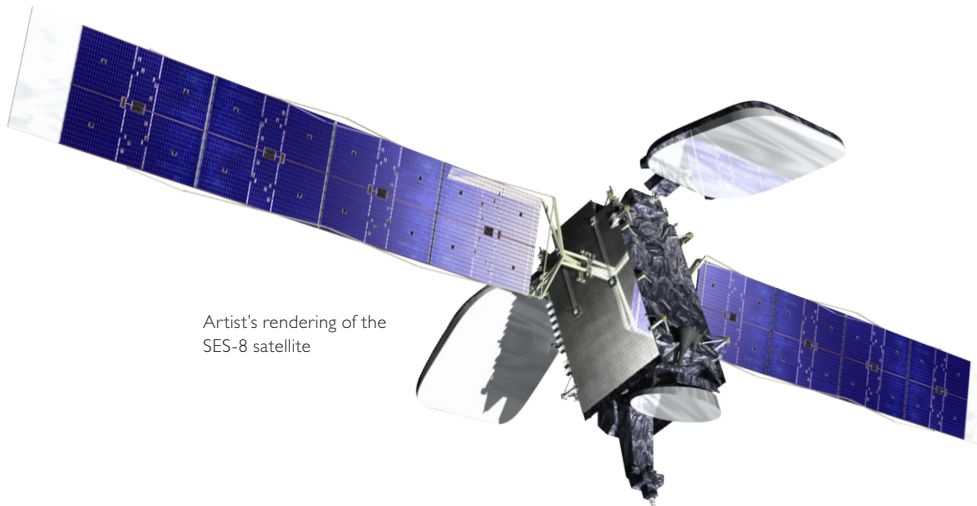




# SES-8

Hybrid Ku- and Ka-band Satellite for South Asia and Indo-China



Artist's rendering of the SES-8 satellite

## Mission Description

SES-8, a hybrid Ku- and Ka-band spacecraft, is the sixth GEOStar-2 satellite ordered by SES S.A. The satellite is based on Orbital's Enhanced GEOStar-2.4 bus, and will carry 24 active Ku-band transponders of 36 or 54 Mhz capacity switchable amongst 33 channels and two beams. Certain channels in each beam are cross-strapped to multiple frequency bands, enabling flexibility for new services. In addition, the spacecraft features a Ka-band payload. The spacecraft will generate approximately five kilowatts of payload power and will feature two 2.5 x 2.7 meter super elliptical deployable reflectors and a 1.45 meter fixed, nadir antenna.

## QUICK FACTS:



**Coverage:**  
South Asia and Indo-China

**Mission:**  
Ku-band communications for South Asia and Indo-China  
Ka-band communications for the Asia-Pacific region

**Customer:**  
SES WORLD SKIES



The SES-1 satellite in Orbital's Satellite Manufacturing Facility in Dulles, VA

## Specifications

### Spacecraft

Launch Mass:	3,200 kg (7,055 lb.)
Solar Arrays:	Four panels per array, UTJ Gallium Arsenide cells
Stabilization:	3-axis stabilized
Propulsion:	Monopropellant (hydrazine) on-orbit system
Batteries:	Two >4840 W-Hr capacity Li-Ion batteries
Mission Life:	15 years

### Payload

#### Ku-band

Repeater:	24 active transponders with one group of 18-for-15 and one group of 12-for-9 TWTAs
TWTA Power:	120 W RF
Antenna:	Two 2.5 x 2.7 m single shell super-elliptical deployable reflectors and one 1.45 m single shell fixed reflector

#### Launch

Launch Vehicle:	Falcon 9
Site:	Cape Canaveral, Florida
Date:	1st Half 2013

## Mission Partners

### SES S.A.

A leading global satellite operator providing a broad range of communications services

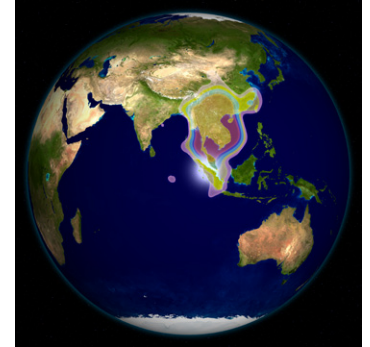
### Orbital Sciences Corporation

Prime contractor for the SES program

## SES-8 Ku-band Coverage Contour Maps

Payload performance exceeds requirements over the full coverage areas.

### Indo-China EIRP 95° East Longitude



### South Asia EIRP 95° East Longitude

