

Intelsat possesses the world's most extensive and secure satellite communications network. Engineers design, test and operate space and ground assets exceeding industry standards. Intelsat leverages its engineering expertise and ground network to provide the most flexible in-orbit testing services.

Intelsat Satellite Services:

## In-Orbit Testing (IOT) Services

Prior to providing service to our customers on newly launched satellites, Intelsat engineers are tasked with ensuring the payload meets spacecraft contractual requirements. Our engineers use their technical expertise and Intelsat ground assets to conduct in-orbit testing (IOT) as efficiently and effectively as possible. In addition to testing its own satellites, Intelsat provides in-orbit testing services directly to satellite manufacturers. As an operator, Intelsat understands the importance of bringing new satellites into service as quickly as possible. Our engineering expertise and global IOT ground network provide an extraordinary amount of value to any IOT campaign.

### The Intelsat IOT Network

- Automated measurement stations located around the world
  - > Multiple antennas/stations available now for testing
  - > C, Ku and BSS bands
- Portable in-orbit testing system can be easily installed at an Intelsat or customer designated facility
- Ka-band IOT testing capability using transportable antenna that can be easily installed at IOT testing site
- Single site or simultaneous multiple site IOT testing

### Intelsat IOT Engineers

- Intelsat engineers have performed IOT for more than 50 Intelsat and third party missions
- Intelsat engineers can find an optimal IOT location and coordinate testing time with adjacent satellite operators

### Remote IOT Testing Capability

- Execution of all tests can be performed remotely from Intelsat headquarters in Washington, DC

### IOT Testing Activities

- Generation of testing schedule (Test Plan)
- Test rehearsal
- Execution of test
- Payload anomaly investigations

### Benefits

- Shortened test time
- Less travel required
- Reduction in non-recurring costs
- Increased accuracy of results

# Intelsat TT&C and IOT Ground Network Facilities



**Orbital Coverage from Intelsat IOT Stations**  
(in °E Longitude)

