Intelsat has an extensive ground network of Tracking, Telemetry and Command (TT&C) stations which are available to support customer satellite services. The available services range from the simple lease of an antenna, to the provision of the entire transfer orbit network. We make access to this network easy and convenient for the customer, with engineering and operations support to meet any specialized requirements.

**Intelsat Satellite Services:**

**Transfer Orbit Support Services**

### Services Available
- Site determination
- Rehearsal planning and execution
- ITAR and other licensing
- Hindrance coordination
- 24/7 network monitoring

### Features

<table>
<thead>
<tr>
<th>Features</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Coverage across the entire equatorial arc</td>
<td>Provides optimal network for all satellite and launch vehicle mission planning scenarios</td>
</tr>
<tr>
<td>Full performance C, Ku, DBS and Ka-band antennas (S-band available through lease of third party assets)</td>
<td>One stop shopping for all TT&amp;C frequency requirements</td>
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<tr>
<td>Multiple antennas in each region</td>
<td>Maintain network availability in instances of overlapping missions</td>
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<tr>
<td>Robust infrastructure with multi-mission capability</td>
<td>Capability to support up to 3 simultaneous missions</td>
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<tr>
<td>Common data and voice communications network at all sites</td>
<td>Increased reliability and efficiency</td>
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<tr>
<td>24/7 redundant and diverse communication links</td>
<td>Increased reliability and reduced set up costs</td>
</tr>
<tr>
<td>Simple customer interface to the entire TT&amp;C network via a single connection to the TOSS network hub</td>
<td>Less overhead for manufacturer to maintain</td>
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</tbody>
</table>
Intelsat TT&C Ground Network Facilities

Typical Antenna Specifications

C-Band Full Performance Antennas
- 11-32m diameter
- Tx: 5850-6425 MHz / Rx: 3625-4200 MHz
- Polarization: Circular and Linear
- G/T: 31-41 dB/K
- Tracking: Monopulse and Programmable

Ku-Band Full Performance Antennas
- 11-14m diameter
- Tx: 13750-14500 MHz / Rx: 10950-12750 MHz
- Polarization: Circular and Linear
- G/T: >35 dB/K
- Tracking: Monopulse and Programmable

Ka-band Full Performance Antennas
- 8m-13.2m diameter
- Tx: 28350-30000 MHz / Rx: 18300-20200 MHz
- Polarization: Circular and Linear
- G/T >42 dB/K
- Tracking: Monopulse