



BGAN FAQ

510 / 710 / 325 / 727

Hughes BGAN 9211-HDR / Hughes 9450-C11

Does the Sun cause any connectivity issues?

"Sun outages (interference) caused by the passage of the Sun behind the satellite should not impact I-4 broadband services. The period of interference occurs twice a year and the duration of each event is limited to a few minutes. For the Inmarsat satellite access station (SAS) antennas these Sun outages are known beforehand and handled as part of nominal operations. The beam width of the L-band user terminals is such that they are not impacted by the Sun within the field of view."

Are Inmarsat satellites affected by solar magnetic disturbances?

Inmarsat monitors the published space weather environment, as provided by NOAA. At geostationary orbits (~36,000km above the Earth) a satellite is normally offered some protection from solar particles by the Earth's magnetic field. But at times of high solar activity (e.g. during flares or coronal mass ejections) the extent of the Earth's magnetic field can be reduced, resulting in the satellites being exposed to higher than normal flux of charged particles. The satellites are designed to handle increases in the charged particle environment, but no amount of shielding can provide total protection, so events do occur. These are sometimes referred to as single event upsets (SEUs). Typically, satellites have redundant on-board systems allowing a back-up to be used whilst an SEU is investigated and the affected equipment returned back to full operations. No interruptions to services are expected.

What is the maximum number of bearers in any one I-4 satellite spot beam?

For I-4 broadband satellite services this is dependent on demand. Inmarsat has the flexibility to dynamically assign spectrum and power where it is needed. Capacity can be adjusted and allocated depending upon demonstrated demand for the BGAN family of services.

How does Voice Over Internet Protocol (VoIP) work over BGAN, FleetBroadband or SwiftBroadband?

We provide an IP bearer that is transparent to applications, including VoIP. We have tested common VoIP providers such as Skype.

Is there global barring available on BGAN?

SIM cards can be barred or disconnected for any location by the Distribution Partner (DP).

What is the total power output of an I-4 satellite?

The total EIRP (Effective Isotropically Radiated Power) that can be allocated to the narrow spot beams is 67 dbW.

**Can an SMS text be sent to a pager service?**

Some paging systems have been modified to receive text messages from the local mobile networks. The user will be unable to access the service if they are outside their own country because the numbering scheme (or plan) for pagers is not part of E.164 numbering.

When I receive an SMS text, do I pay for this?

No, the sender pays for the SMS.

What is the process to set up voicemail over BGAN?

Dial 57 or +870 772 001 899 from the BGAN network. Then follow the instructions on the recorded voicemail message. The user will be asked to select a PIN number (typically four characters or more) and to state their name. They will then be directed to create a personal greeting for their voicemail. When a new message is received, the network will automatically send a text (SMS) to their terminal. The user can then dial short code 57 to listen to the message.

Is 'BGAN LaunchPad' able to send an SMS text directly after registration?

Once registered, the BGAN LaunchPad software will be active and able to send and receive SMS.

Is there a map which shows the edge of BGAN coverage?

Coverage maps are available on the Inmarsat.com website. Satellite coverage maps are not definite because the edge of coverage is not static. Geosynchronous satellites reside within a "box" in space, inside which they drift from one edge to the other (typically 0.5 degree drift). As they drift, so the edge of coverage moves.

Is each SMS sent charged separately over BGAN?

Yes. There is a charge for each individual message.

What is the short code to collect BGAN voicemail messages?

Dial 57# to collect voicemail.

How does satellite network latency impact email performance?

Cause and effect latency, or delay experienced over the satellite network impacts the performance of acknowledgements and of packet sizes. The BGAN network typically provides a latency of between 900 - 1100 milliseconds. You can achieve a more cost-effective and efficient email service by ensuring that your email client/server settings have been optimized for satellite networks. For further assistance, please contact your Distribution Partner or Service Provider.

What is the latency for the BGAN network?

The BGAN network typically provides a Latency of between 900 - 1100 milliseconds.