X-Stream performance

Field trials of Inmarsat’s latest solution, BGAN X-Stream, are providing positive feedback, while one broadcaster has already deployed the service.

Prior to its global launch in Singapore on 15 June, the solution was demonstrated at the NAB show in Las Vegas in April, using a live broadcast from the Hoover Dam back with BGAN X-Stream, journalists can take advantage of the extra bandwidth to transmit high-quality footage back to the studio from the most remote locations.

The broadcast community has been getting its first taste of Inmarsat’s recently-launched BGAN X-Stream service, which offers streaming IP over BGAN at speeds of 384kbps, with top speeds for most users approaching 450kbps. So far, it seems, they like what they see.

**Byte size**

- **Requirement:** Higher-bandwidth satcomms solution for the broadcast industry, to deliver superior picture quality.
- **BGAN X-Stream™**
  - Increase in data streaming rates to a minimum of 384kbps, with up to 450kbps achievable in most instances.
  - Highest quality video through one compact terminal.
  - Highly portable alternative that can get to places VSAT trucks cannot reach.
  - Accessible on existing Hughes 9201 and Thrane & Thrane Explorer 700 Class 1 BGAN terminals with no additional hardware or investment required.

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Prior to its global launch in Singapore on 15 June, the solution was demonstrated at the NAB show in Las Vegas in April, using a live broadcast from the Hoover Dam back.
BGAN X-Stream will enable reporters to file high quality picture footage from areas inaccessible by satellite truck.
Inmarsat estimates that approximately 80 per cent of BGAN X-Stream users will be able to achieve data rates of 450kbps.

to the exhibition hall. According to Inmarsat’s commercial manager for land mobile services, Robert Bishop, the reaction was extremely positive.

“We had a lot of existing and potential new customers on the stand to see the demo, and everyone who saw it was very impressed,” says Bishop. “The increased data rate means that pictures look that much better. A lot of the people who saw the demo said that even though the data rate is less than double that of regular BGAN, the picture looked twice as good.”

The solution was demonstrated at NAB in conjunction with four media-centric applications: Livewire, Quicklink, Streambox and ClipWay. According to Inmarsat solutions manager Nadeem Khan, the four solutions providers responsible for the applications were all confident that the enhanced data rate offered by BGAN X-Stream is sufficient to deliver 25fps (frames per second) images for PAL (Europe) and 30fps images for the American broadcast standard, NTSC.

**Significantly clearer**

“We engaged with the application providers early to ensure that the solutions were optimized for use over BGAN X-Stream,” says Khan, who estimates that around 80 per cent of BGAN X-Stream users will achieve data rates of 450kbps. While the NAB demo enabled broadcast customers to see BGAN X-Stream for themselves, more formal field tests have been taking place with selected broadcasters, enabling them to put the solution through its paces.

In Dubai, Inmarsat partner Vizada has been working alongside Digital Skies and Atlas Telecom on a test with a major international broadcaster. According to Eric Verheylenegen, vice president commercial sales for Vizada Americas, the broadcaster was impressed by BGAN X-Stream’s performance.

“The increased data throughput provided a significantly clearer image during live broadcasting,” he tells Via Inmarsat. “With BGAN X-Stream, you can film both the reporter and his or her surroundings, even if there is motion in the background. Lower bandwidth solutions do not allow this.”

Verheylenegen believes that BGAN X-Stream will open up a new era of live reporting from the field, where journalists will not feel tethered to one static spot, but will take advantage of the extra bandwidth, and the more fluid motion this delivers, to move around and show what is happening in their surroundings.

Vizada provides its media customers with a package which combines BGAN X-Stream with a range of Vizada Solutions to meet the video transmission, voice calling, end-to-end traffic termination and cost control requirements of users operating remotely.

The company’s free online management system, The Source, enables service providers to track and manage end-user accounts, including setting limits and alerts on usage, to control communications costs.

**X-Stream deployment**

Also in the Middle East, Al Jazeera English has already taken the decision to deploy BGAN X-Stream. The broadcaster began using BGAN X-Stream from Stratos to broadcast live TV news coverage of military developments from Pakistan on 6 May. Stratos worked closely with its UK-based channel partner Applied Satellite Technology (AST) to deploy the solution for the broadcaster, which has since used BGAN X-Stream daily for live broadcasts throughout the Middle East.

Al Jazeera English has been using BGAN for the past two years to transmit video from field locations worldwide to its various broadcast centres, thereby broadening the scope of its field reporting, while simultaneously avoiding the transmission costs normally associated with bulky satellite trucks.

To date, Stratos and AST have provided Al Jazeera English with 45 Hughes HNS9201 BGAN terminals, with 16 of these now operating BGAN X-Stream. The broadcaster is using the solution in conjunction with Quicklink software for live and file-based video transport and acquisition over IP.

“While transmitting video from major cities worldwide is facilitated by the availability of terrestrial fiber and satellite news gathering connections, reporting the news from remote areas can be a major challenge, due to the lack of available infrastructure,” explains Al Jazeera English’s head of news operations, Nick Taylor. “BGAN from Stratos has proven to be a valuable solution for remote reporting. It is now clear that BGAN X-Stream from Stratos provides that same reliability, with faster guaranteed streaming speeds, giving a major enhancement to picture quality.”

**Refine and improve**

While more of the world’s broadcasters conduct their own assessments of Inmarsat’s latest solution, work continues on refining the BGAN X-Stream experience. LaunchPad with support for BGAN X-Stream is now available for both Windows XP and Intel MAC OS X (v3.9.1). And while no terminal firmware upgrade is required to use BGAN X-Stream, Hughes has plans to release firmware for its HNS9201 BGAN terminal with a web browser interface that supports BGAN X-Stream connectivity without LaunchPad. For its part, Thrane and Thrane already supports the addition of new profiles for BGAN X-Stream on the Explorer 700 terminal’s web browser interface.

It’s little wonder that the broadcasters are so enthused about the solution. In the modern-day era, when consumers are increasingly familiar with the concept of high definition TV, BGAN X-Stream has already proved itself capable of delivering images of a quality that few thought possible over a mobile satellite link. In the never-ending ratings battle, that’s a capability that no self-respecting broadcaster can afford to ignore.

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**Inmarsat**

[www.inmarsat.com/bganx-stream](http://www.inmarsat.com/bganx-stream)

**Stratos** [www.stratoseglobal.com](http://www.stratoseglobal.com)

**Vizada** [www.vizada.com](http://www.vizada.com)

**AST** [www.satcomms.com](http://www.satcomms.com)

**Hughes** [www.hughes.com](http://www.hughes.com)

**Thrane & Thrane** [www.thrane.com](http://www.thrane.com)