As camera technology becomes more sophisticated, and the resolution of image capture increases, so too does the file size of photos and video. This results in both an increase in the data bandwidth needed to send the images, and a corresponding increase in the amount of time and cost it takes to transmit.

Previously, the only way to overcome this challenge was to downsize images for transmission – reducing definition and detail. ASIGN, from AnsuR Technologies, allows you to keep full resolution and still communicate in a rapid and cost-effective way. Operationally-relevant images from ASIGN can be received, processed and distributed worldwide in minutes, without compromising quality.

ASIGN operates over a client-server architecture. Once a picture has been received, either through a smartphone’s camera or uploaded to a PC or smartphone from a stand-alone camera, the ASIGN Field Client software sends a preview of the image or video to the server, ready to be assessed for operational relevance. Once assessed, the decision can be taken on which portions of the image are relevant and then the software can pull specific content or regions of interest, in up to full resolution as needed.

For example, a first responder field team could take a geo-tagged photograph of a community affected by a disaster. A preview of this image would then be sent to the ASIGN server. Using the software, analysts would study the preview image, and identify details that need higher-resolution, such as faces or number plates. The software would then send the relevant parts of the photo or video in the required precision, a much faster option than sending the entire content for download, enabling faster response times and decisions for teams on the ground.

The ASIGN software reduces communications network load by typically up to 99%, when compared against the load required to send a photo or video in full resolution. This translates into a reduction in costs, as only operationally-relevant data is sent over the network. The software supports direct GPS tagging and integrates efficiently with GIS systems and rapid mapping technologies, making it a powerful tool for situational awareness and analysis, whether that’s for field teams on the ground or unmanned vehicles such as UAVs.

**Key benefits**

1. **Cost-effective** – only the operationally-relevant portions of images are sent in high-quality, reducing data spend
2. **Rapid communications** – send images and video to HQ for analysis in seconds
3. **No need for hardware investment** – AnsuR ASIGN is software-based and works with your existing infrastructure
4. **Software API** – integrate the data from ASIGN into your own dedicated situational analysis software
5. **Control** – increase efficiency by prioritising your network resources on the most relevant information

**AnsuR ASIGN**

Interactive image compression, optimisation and communication software for mission critical operations

ASIGN, from AnsuR Technologies, enables efficient communication of high-quality images and video with minimal cost, minimal network load, and minimal delay.
The mobile satellite advantage

In the field, often the places where you most need to capture images and video are those that are least served by traditional broadband and cellular connectivity, or in the event of a disaster, the communications infrastructure is down. Inmarsat’s global 3G IP network offers 99.9% availability over its ground and satellite network, and worldwide coverage, so your teams can send images and video in real time no matter where they are deployed. And because AnsuR ASIGN offers a reduction in network usage of 99%, relevant high-quality content can be sent across Inmarsat’s network in a rapid, cost-effective manner. Through its Certified Application Partner programme, Inmarsat has certified ASIGN as Inmarsat-ready. If you’re looking to leverage the reliable, global reach of Inmarsat’s award-winning satellite network to provide rapid situational analysis and high-quality pictures and video, AnsuR ASIGN is an ideal application. ASIGN has been certified for use over the following Inmarsat services:

- BGAN
- FleetBroadband
- IsatHub
- Global Xpress

Features

- Interactive photo and video communication - send compressed preview images or video, then pull operationally relevant details in full resolution.
- Client-Server architecture, ASIGN Field Client software communicates with a Web-accessible server
- Field Client software runs on smartphones, PCs or embedded Linux
- Supports geo-tagging and integration with GIS / mapping systems
- Works with professional cameras, smartphones and UAVs

Usage scenarios

AnsuR ASIGN can provide operational efficiency improvements across a number of industries, including:

- Aid – first responders send images from the field to enable situational awareness analysis
- Oil & gas – use drones to remotely inspect installations sending images in real time
- Media – journalists in the field can send images back to central office, where editorial teams can select the best portions to download in high quality

Certified application

As part of our CAP (Certified Applications Provider) programme, Inmarsat works with a number of application providers with the intention of ensuring that their applications are not only compatible with our network, but provide our network users with effective, customer-focused applications that offer genuine business benefits, whether they’re using the network for voice, broadband, machine to machine connectivity, or all three. Only individual applications approved by Inmarsat are endorsed with the Inmarsat Certified logo.

Disclaimer

Where an application provider’s application carries the Inmarsat Certified logo, it means that the application has been certified by Inmarsat to operate over Inmarsat’s satellite network. Certification does not mean that Inmarsat is certifying any system design or assumes any liability or responsibility in connection with the application provider’s application.

About AnsuR Technologies

AnsuR Technologies AS researches, designs and sells innovative applications for satellite and mobile wireless communications. The company was founded in 2005 by experienced satellite- and telecommunications experts with more than 150 years combined expertise in broadband and mobile satellite and telecommunications. Efficient voice and image communications concepts are part of their innovative communications applications. In satellite communications they have, in particular strong expertise on Inmarsat BGAN (mobile broadband) and DVB-RCS (fixed broadband).