:innovation in communication

Location-based Adaptive Image Communications for Environment, Emergency and Disaster Management

ASIGN - Situational Awareness

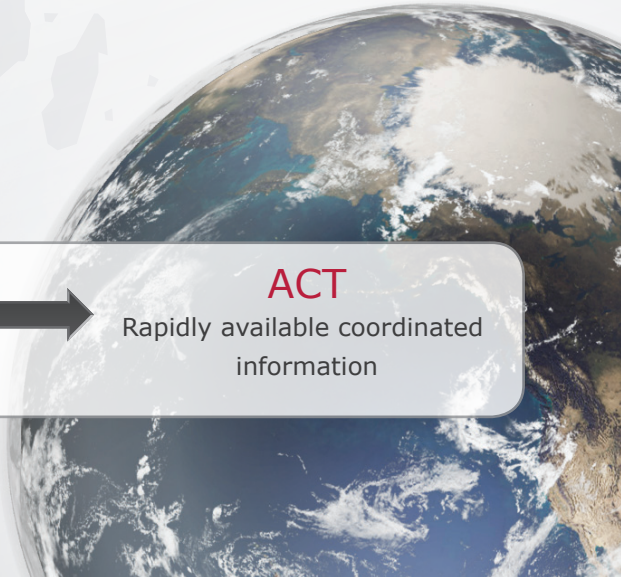
Fast, Robust High-Resolution Photo and Video Communications Management

Geo-referenced High Resolution Images in near real time over unknown and potentially low capacity satellite or mobile networks are essential in many situations, such as disaster management, surveillance, QA and photo journalism.

ASIGN (Adaptive System for Image Communications in Global Networks) from AnsuR is optimized for quickest transfer, least capacity requirement and full quality high resolution of key elements, even over unknown and unreliable channels.

ASIGN is an award-winning solution for optimized transfer for high-resolution geo-referenced multimedia information, video streaming, video files, photos and sensor data. ASIGN is developed for applications such as disaster and emergency management, damage assessment, surveillance, situational awareness, quality management and photo-journalism, where images are a bearer of important and urgently required information.

AnsuR´s unique GR4-COMS protocol (Global Rapid, Reliable, Resilient, Robust Communications Optimized for Mobile and Satellite) for IP systems forms an essential element in achieving universal coverage, independence from local infrastructure and consistent global performance.



OBSERVE
Geo-referenced multimedia situational awareness

→

DECIDE
Integration with maps and satellite images

→

ACT
Rapidly available coordinated information

ASIGN - Optimal Situational Awarenes

ASIGN is based on *fundamental challenges in digital communications*. Requirements for communications capacity increase substantially with higher resolution image material.

During disasters and emergencies, or in areas with reduced cellular or satellite coverage, digital communications capacity may be less than needed. Reliable systems need to work *always – anywhere*, and not just with "everyday" conditions.

ASIGN from AnsuR is the award-winning image communication solution for situational awareness that optimally solves this challenge.

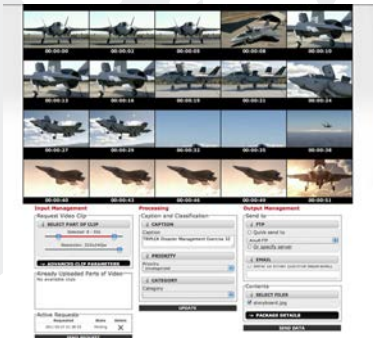
ASIGN uses a two-step approach with the *AnsuR GR4-COMS protocol*. The first input is a form of preview; or "a sign". Signs are shown in the server overview page. From this an operator can, via a simple-to-use Web interface, click on specific image pages and request any *region of interest in any quality from any image or video*. It is possible to request best quality within a given time-limit.

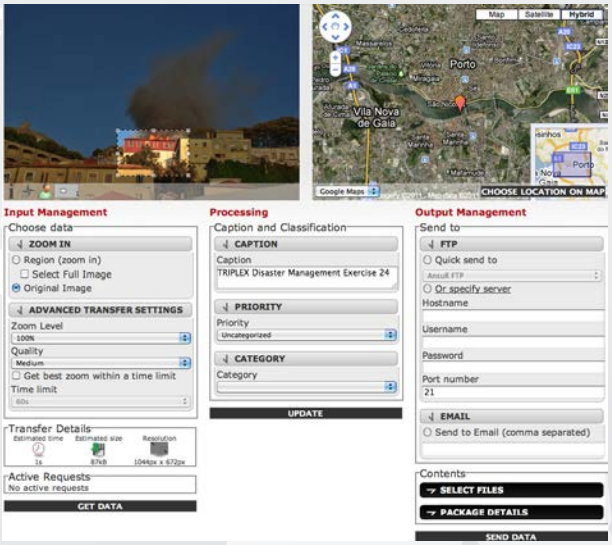
During critical situations radio networks may congest. Chances for congestion increase if multiple field teams send too much high-resolution image material without proper coordination. ASIGN, in reality, offers an easy -to-use central control over how the system uses network resources, significantly reducing chances of congestion.

Geo-referencing allows simple integration with GIS systems. By default Google maps and OpenLayers are used, but custom WMS servers can be integrated.

Satellite Earth Observation requires an in-situ component for complementary observations and verifications. ASIGN can be this in-situ component, and can also work with various sensor data, offering access to high resolution measurements from decimated initial preview inputs.

An Android smartphone version of ASIGN complements the PC version with separate GPS/Camera/Wi-Fi/PC/Modem. There are also ASIGN solutions for aeronautical platforms such as UAV and microdrones.





Main Features

- Optimal image communications management
- Easy to use, powerful integrated solution
- Situational Awareness and Integrated Operations
- Well integrated from camera and sensors, via server to receivers
- Direct geo-tagging and interface to GIS systems
- Low cost, low delay, low bandwidth and highest resolution
- Robust GR4-COMS transfer protocols do not need stable links
- Central ASIGN Network resources control
- Custom integration options to user equipment or servers
- Runs over any IP network; satellite, TETRA, mobile GSM/3G etc.

Applications

- Field operations with real-time image coordination
- Disaster and emergency management
- Governmental operations, scouts, surveillance
- Interactive real time inspection, verification, training
- Blue light operations: police, fire, ambulance
- Civil protection
- Photo journalism, media, rapid publishing
- News gathering
- Direct web update from camera

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For more information:
email: asign@ansur.no
phone: +47 6400 9456
www.ansur.no

Visiting address:
Martin Linges Vei 25
1330 Fornebu
Norway

Postal address:
P. O. Box 1
N-1330 Fornebu
NORWAY