

Viability of professional LTE services over satellite links validated by HISPASAT, Teltronic and MOME

- **VSAT transceiver facilitates the communication between LTE base stations deployed on disaster area and the command and control room.**
- **Satellite links hardly introduce any delay and guarantee a perfect communication even for real-time video transmission.**

Madrid, 1 June 2016.- Spanish satellite telecommunications operator HISPASAT– in partnership with MOME and Teltronic, part of the Sepura Group – has successfully validated the feasibility of providing professional LTE applications for safety and emergencies over satellite links with Very Small Aperture Terminals (VSATs).

LTE is the standard for wireless transmission of high speed data in professional deployments used by first responders and rescue brigades for private communication. VSAT links enable communication between LTE base stations (also known as eNodeBs) deployed in a disaster area and the LTE Control Node or Evolved Packet Core (EPC), which may be located remotely in a centralised control room or coordination centre. This communication can be vital in the event of flood, earthquake or any emergency situation in which ground infrastructure is damaged or destroyed.

Utilising Teltronic's eNEBULA LTE solution – in conjunction with HISPASAT's satellite communication links and the latest VSAT baseband and RF technology provided by MOME – a number of tests were undertaken to validate the technical parameters required to ensure connectivity between LTE radio access network equipment and the LTE core, using VSAT as a backhaul network.

A range of services were tested, such as bi-directional, real-time video transmission between users in the field and remote applications in the Control Room, as well as broadband data connectivity on both the uplink and the downlink.

The tests demonstrated that delays introduced by VSAT links were minimal and ensured continuous and error-free transmission between the LTE base stations and the LTE EPC.

Román Abadías, R&D Deputy Director, Infrastructures Area, for Teltronic, said: “Broadband VSAT links are ideal for professional LTE transmission in tactical operations or emergency situations. We have already deployed similar links for tactical TETRA systems; this validation will allow us to extend this technology to our next-generation eNEBULA LTE systems.

“We have established a strong working relationship with Hispasat over the years. Their links introduce very little delay, which ensures a great user experience and does not affect communications, even when real-time video is transmitted.

“These results not only demonstrate the viability of using VSAT links with broadband networks, they also consolidate our defence and public safety portfolio, illustrating the value of our offering, particularly during tactical operations and emergency situations.”

Inés Sanz, Customer Engineering Manager for HISPASAT, said: “These tests demonstrate that satellite connections – already proven in TETRA-based communications – are the perfect complement for professional LTE services in emergency situations, providing effective coverage and reliable communications, however remote the location.”

About HISPASAT Group

HISPASAT Group is comprised of companies that have a presence in Spain as well as in Latin America, where its Brazilian affiliate HISPAMAR is based. The Group is a world leader in the distribution and broadcasting of Spanish and Portuguese content, and its satellite fleet is used by important direct-to-home television (DTH) and high-definition television (HDTV) digital platforms. HISPASAT also provides satellite broadband services and other added value solutions to governments, corporations and telecommunication operators in America, Europe and North Africa. HISPASAT is one of the world's largest companies in its sector in terms of revenue, and the main communications bridge between Europe and the Americas.

www.hispasat.com

About Teltronic

Part of the Sepura Group, Teltronic presents a broad portfolio of critical communication solutions for the transportation, public safety, utilities, and industrial sectors based on TETRA, P25, and LTE technologies. www.teltronic.es/en/

About MOME

MoMe is highly specialized engineering company in the satellite communications, digital television and M&C platform domains with activities both in Europe and America. www.mome.es