

## **Emergency.lu: re-establishing communications in emergency situations with C-band satellites**

The emergency.lu platform is designed to quickly re-establish communications in remote areas isolated by natural disasters or other emergency situations. The platform is based on a public-private partnership between Luxembourg's Ministry of Foreign Affairs, the satellite operator SES, HITEC Luxembourg and the Luxembourg Air Ambulance, and is supported by a number of operational and technical partners.

### **Challenges**

There are two vital requirements in emergency situations: rapid on-site deployment to meet communications needs in the immediate aftermath of a disaster, and control and management capability to allow quick and efficient sharing of information about the situation on site.

### **Solution**

The emergency.lu platform is based on a global hub infrastructure and satellite capacity, both provided by SES. Hubs are deployed in Betzdorf (Luxembourg), Manassas (USA) and Hong Kong (PRC). - See more at: <http://www.ses.com/10263167/emergency-lu#sthash.UlgGd5IO.dpuf>

### **Pre-booked & ad-hoc satellite capacity using C-band spectrum**

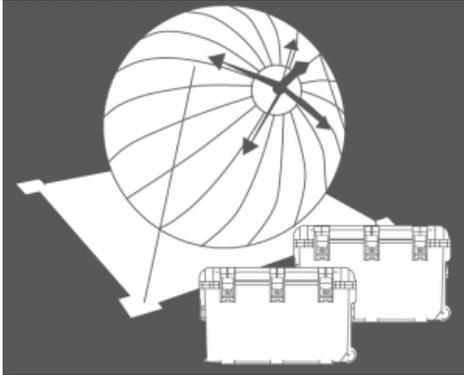
emergency.lu offers virtually worldwide coverage with pre-booked capacity. Additionally, within a few hours, supplementary and ad-hoc coverage and capacity can be added in case larger bandwidth is required for certain missions.

- Frequency Band: C-band
- Coverage
  - South, Central and large parts of North America
  - Europe, Middle-East and Africa
  - Central Asia

C-band is a portion of the electromagnetic spectrum in the microwave range of frequencies ranging from 4.0 to 8.0 (GHz). The communications C-band was the first frequency band that was allocated for commercial telecommunications via satellites. "A major advantage of C-band in the context of emergency.lu is its reliability and low atmospheric attenuation, especially in the presence of heavy rain." (from: <http://www.emergency.lu/index.php/resource-centre/glossary>)

### **Deployed satellite terminals**

emergency.lu offers two types of deployed terminals providing the humanitarian community with adequate communication support for every kind of mission. The Rapid Deployment Kit is pre-configured and ready to deploy. The kit consists of an inflatable 2.4m satellite antenna providing satellite connectivity and NoSaCo® Rapid, a nomadic satellite communication system, offering a local area network and immediate access to services.



The Regular Deployment Kit is also available and is intended to support the humanitarian community during longer-term missions. As with the rapid deployment kit, this solution is pre-configured and ready to deploy.

### **Rapid deployment to the crisis zone**

emergency.lu is intended to fill the communication gap in the first hours and days after a disaster has occurred. To ensure rapid deployment to the disaster site, our team relies on a fleet of small airplanes, ready to leave within 2 hours after an alert has been issued. Our 24/7 on-duty technical and expert staff supports our operational partners during the deployment.

### **Key Benefits**

emergency.lu offers several benefits to the International Humanitarian and Disaster Relief Community, due to its innovative concept:

- Rapid response solution for disaster relief and humanitarian operations
- Complementary addition to the international humanitarian tool-box
- Stand-by response capacity
- Multi-layer platform
- End-to-end services adapted to the requirements of the international humanitarian community
- Coverage of entire service chain including air transport, satellite infrastructure, terminals and services
- Close coordination with the Emergency Telecommunications Cluster (ETC), the World Food Programme (WFP) and the European Union
- Global Public Good supported and financed by the Luxembourg Government

### **More information at:**

[www.emergency.lu](http://www.emergency.lu)

<http://read.uberflip.com/i/293406>