## Secure cross-agency communication between air and land forces



One deployable secure interface fits many scenarios:

- Multi-domain crossagency communication
- Joint coordination of UAS via unmanned traffic management (UTM)
- Integration with tracked or wheeled vehicles
- Service & maintenance at unmanned radio sites
- Disaster and distress scenario support



Communication is a key enabler for successful air and ground missions. Timewise, this requires an easy separation of security levels to differentiate between mission critical orders and common shared information. Some forces already use operational RED/BLACK systems in their mission-critical environments. Deployed operations need to meet the set standards and procedures as well, so a mobile integrated communication system for command and control (ICS-C2) solution in compliance with military and industry standards empowers operators with everything they need.

The coordination between air and land forces is quite often separated from their individual solutions. Mission planning for joint operations has been challenging in the past. The increasing use of unmanned aerial systems (UAS) across all operational scenarios requires an efficient and flexible management system for all elements using a dedicated airspace.

In both current and future scenarios, UAS have become more important. Land and air forces need to integrate them with their operational planning. As long as predefined plans follow their specific time slots, there is no urgent need for secure cross-domain communication, but what if not?

How can you react appropriately when mission-scenarios change in a minute and there is no secure deployable communication?

The Frequentis mobile ICS-C2 single and/or multi-domain voice over IP solution enables operators to effectively manage missions via telephone, intercom, radio, recording, data and conferencing services, all from a single operator station with a customisable HMI.

This portable plug-and-play solution empowers personnel in deployed environments to establish communications with the relevant authorities so that they can adapt to changing scenarios and receive new commands securely.





- Multi-agency operations
- Rapid deployment
- Rapid onsite incident response
- Standalone secure communications system
- Certified RED/BLACK
  VoIP communication
- Operate and manage on two separate security domains at the same time
- Network units in system-of-systems architecture
- Direct access to VHF and UHF IP radios

In joint missions, plans are established and coordinated before an operation commences and all tactical elements are tasked with pre-defined airspace management such as time slots, establishment of hot-walls etc. The connection interface is always a soldier.

For instance, air traffic and joint fire operations need to be deconflicted not only prior to mission but also during ongoing operations. In order to allow for a flexible management of all assets using a limited airspace, seamless communication is essential.

With the Frequentis mobile ICS-C2, secure communications can be established from air coordination elements to manage fixed and rotary wing assets, artillery and UAS all at the same time and define further steps to re-position troops and coordinate the mission.

The mobile ICS-C2 will be connected to IP radios in order to enable crossdomain communication.

Based on up-to-the-minute information, battlefield management situations can be visualised, harmonising land and air assets into a joint operational picture.

Through the data fusion of all exchanged information, air coordination cells can act as the interface for air and land forces, reaching everyone securely and independently through their individual communication system.

Additional benefits of the ICS-C2 include UTM coordination, integration with tracked or wheeled vehicles, service and maintenance at unmanned radio sites, disaster and distress scenarios. The solution is also suitable for deployment at competitive exhibitions and industrial fairs.



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