

# Product brief: Link 16 secure voice

## J-Voice for the entire operations team

Since its early beginnings in the Vietnam War, Link 16 (L16) has been consistently improved and has subsequently developed into the primary military tactical data link for NATO and selected friendly nations. Commanders are able to employ L16 to exchange vast amounts of mission data between likewise equipped units in real time without fear of cyber attack or being subject to electronic counter measures. One key element of L16 capability is its ability to host secure voice channels – often referred to a J-Voice (Joint Tactical Information Distribution System – JTIDS) – and this is an area where Frequentis can add value. By using the field-proven and certified ground/air and ground/ground secure communications system iSecCOM, Frequentis provides the customer with unparalleled J-Voice connectivity to every iSecCOM position.

## Key features

### Link 16 secure voice

iSecCOM enables Link 16 secure voice to be available at each operator position. Routed from the workstation via the Link 16 MIDS (multifunctional information distribution system) terminals, both channels A and B, (16kbps & 2.4kbps) are supported.

### Simplified communications and full control

iSecCOM provides full-spectrum communication services, including all radio and telephony services, combined with selected data and full radio remote control services.

### Designed by the operators and for the operators

Frequentis leverages decades of experience working with operators to define the most user-friendly HMI based on its field-proven, military-grade IT solutions used by multiple forces around the globe.

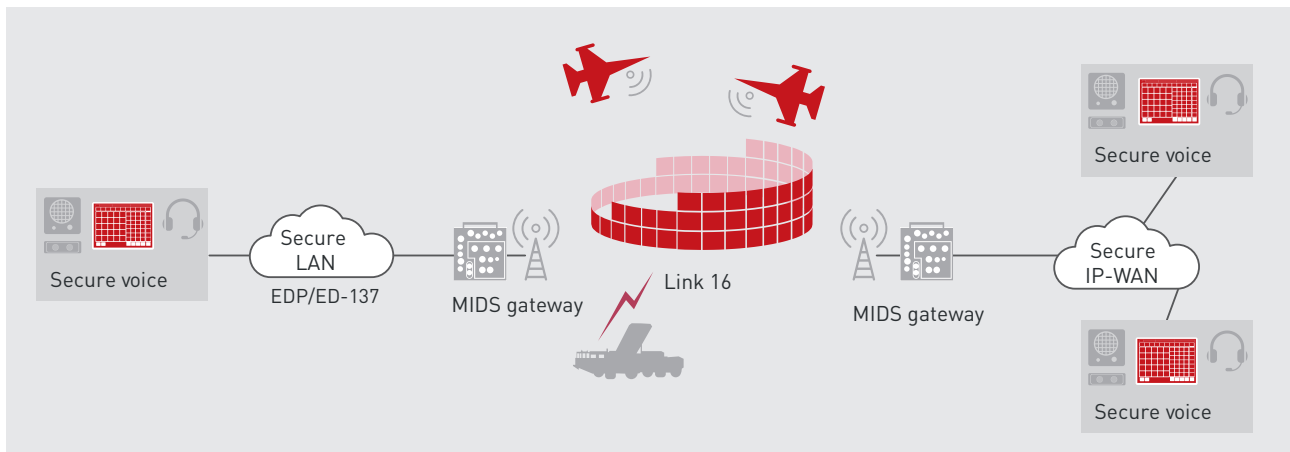
### Electronic-counter-counter-measures

Another feature of iSecCOM is that it integrates radios in fixed frequency and ECCM mode (e.g. HQ I/II, SATURN, ®SECOS) providing radio remote control on secure voice operator position.



## Link 16 secure voice at a glance

- Link 16 Secure Voice connectivity to combat aircraft
- Embedded electronic-counter-counter-measures in every operator position
- Remote control on all levels
- Certified RED/BLACK VoIP
- Parallel access to the secure networks
- Mobile architecture based with very low size weight and power (SWAP)
- VOIP technology permits location-independent access to the network for any Link 16-capable system
- Multi-MIDS & multi-host operations



## Benefits

### 24/7 operations

Continuous secure voice over IP (VoIP) for interference access to all Link 16 voice channels.

### Real-time

Simultaneous implementation, maintenance, operation and supervision of numerous Link 16 networks.

### Static – deployable – mobile

With a comprehensive set of features, the Frequentis solution has only a small footprint and can be deployed with ruggedised equipment to support transportable and mobile units.

### Unlimited access

Location-independent access to the network for any Link 16-capable system including national C2 systems and NATO ACCS.

### Uninterrupted availability where it matters

Field-proven, bulletproof technology that is designed with no single point of failure and built-in redundancy of every Frequentis component (e.g. redundant power supplies, redundant ethernet and data interfaces) to ensure continuity of service.

## Technical specifications

Availability	At least >0,99999
Configuration	Fully redundant single domain only, or dual domain (RED/BLACK)
Power supply	Redundant: two separate power supply lines recommended
Standards compliance	NATO SDIP-27 <sup>1</sup> Level C and NATO SDIP-29 <sup>1</sup> , ED136, ED137, ED 138 and ED153 SWAL3, ICAO-Standards Annex 10
Radio interfaces	VHF/UHF/HF, HAVE QUICK I/II, SATURN, ECCM <sup>2</sup> . Fully remote-controlled
Phone interfaces	Supplied: PRI, BRI (T0), MFC, E&M, FXS, FXO, LB. Supported: 3rd-party COTS IP voice gateways, e.g. Mediant or CISCO router
End-to-end encryption	Supports COMSEC between centre and aircraft, and VINSON-compatible crypto devices connected to Frequentis crypto gateways and dynamic crypto allocation. CC EAL4+-certified secure audio switch
Recording interfaces	Integration of real-time voice and data recorders according to EUROCAE ED-137
Others	Integration of 3rd-party gateways, SIP phones or collaboration applications

<sup>1</sup> valid for secure audio switch, <sup>2</sup> other ECCM modes on request

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