MASTER NETWORK CENTRIC TRANSFORMATION

- Range first
- Natively secured
- Network centric - Embedded Dual conference
- Simultaneous and independent multi-service
- Improved spectrum usage

RADIOCOMMUNICATION PRODUCTS AND SOLUTIONS

MANEUVER GEO
Military Waveform for Critical Traffic
RADIOCOMMUNICATION PRODUCTS AND SOLUTIONS

MANEUVER GEO
Military Waveform for Critical Traffic

Available in SYNAPS-WAVE Library

MANEUVER GEO is designed to secure the critical traffic in the context of the battlefield digitization.

RANGE FIRST
Critical traffic –and especially combat voice– has to be assured whatever the environment surrounding the radio (jammers, multipath…). This is the aim of MANEUVER GEO. As narrow band VHF waveform, the MANEUVER GEO structure enables long range and robustness for voice and data.

In addition –so as to extend the connectivity– MANEUVER GEO is also a multi-hop MANET (Mobile Ad hoc NETwork) waveform. This relaying capability is available for voice and data.

NETWORK CENTRICITY
According to the operational mission, one node can simultaneously and independently belong to several communities: hierarchical (C2 traffic), geographical (PLI*, warnings) and also transverse Communities of Interest (such as combat voice through a convoy…).

MANEUVER GEO is thus designed to support simultaneously and independently both hierarchical exchanges and geographical situation awareness, the latter between two different VHF networks.

NATIVELY SECURED
Withstanding and mitigating threats in the tactical operational environment is achieved by the means of embedded communication security (COMSEC), network security (NETSEC) and transmission security (TRANSEC). The waveform features frequency hopping to defeat jammers.

IMPROVED SPECTRUM USAGE
MANEUVER GEO takes benefit of a network wide synchronization even without GNSS which enables orthogonal frequency hopping in order to improve the frequency usage and mitigate cosite interference.

Main Features

Frequency/Throughput Characteristics
Frequency: 30-88 MHz
Bandwidth: 25 kHz
Adaptive data rate: up to 21.6 kbps

Networking
MANET (Mobile Ad hoc NETworking)
Fast network split/merge
Automatic join/leave
Node mobility: up to 500 km/h
1 node belongs to multiple groups of interest (voice, data, PLI)
Synchronization: with/without GNSS

ECCM
Orthogonal Frequency Hopping (TRANSEC)

Security
Embedded COMSEC/NETSEC/TRANSEC
Red/black architecture

Combat Voice
MELP 2400
Multi-voice channel communication independently from the data channels
Voice relay

Compatible Platforms
The following platforms interoperate thanks to MANEUVER GEO:
- SYNAPS-V
- SYNAPS-H
- SYNAPS-A
- F@stnet HD
- PR4G F@stnet with SYNAPS-X

* PLI: Position Location Information

Temps Présent - © Thales - 112017 - This leaflet cannot be considered as a contractual specification - Photos credits: © Thales - © Bernard Rousseau - © Nexter