OPTIMISING YOUR SATELLITE RESOURCES
WHILE OFFERING MILITARY GRADE PROTECTION

- Robust protection against jamming and interception
- Delivering superior bandwidth efficiency, capacity, security and performance
- Advanced Quality of Service supported by IP networking
- Common modem software for air, land and sea operations
- Designed for OTM, Airborne and ESM environments

NETWORK & INFRASTRUCTURE SYSTEMS

SYSTEM 21
Multi-Service Secure Satcom IP Modems
SYSTEM CHARACTERISTICS
- Protected interconnection of IP sub-networks
- STANAG 4606 EPM Waveform
- Star or mesh architecture
- Direct or cross-connectivity
- Compatible with X, Ku, Ka, C and EHF bands

SECURITY
- TRANSEC protection through Orthogonal Frequency Hopping Multiple Access (OFHMA)
- Optional COMSEC (Advanced Encryption Standard)
- NETSEC (signalling security)

OTM CAPABILITY
- Quick re-synchronisation
- High Doppler resistance
- Spread signal for small antenna dishes

BANDWIDTH OPTIMIZATION
- Advanced-ACM & Dynamic Rate Adaptation
- Bandwidth On Demand / DAMA
- Up-Link Power Control

MODULATION & DATA RATES
- FEC: Reed-Solomon/Turbo-Code
- MODCOD: BPSK 1/3, 1/6; QPSK 1/2, 1/3, 1/4, 2/3, 3/5; 8PSK 1/2, 1/3.
- Data rates (bps): 20K, 64K, 128K, 256K, 384K, 512K, 768K, 1M, 1.5M, 2M, 3M, 4M, 8M, 16M, 34M, 50M

INTERNAL FREQUENCY REFERENCE
- High stability reference

CONTROL & MONITORING
- Web-based GUI for local Control & Monitoring
- Complete SNMP MIB for C&M systems

RF INTERFACE
- L-band: 950MHz - 2000 MHz
- Usable bandwidth: OFHMA over 1 GHz
- Output level: -30 dBm to 0 dBm
- Input level: -70 dBm to -20 dBm

Military forces rely on secure satcom bandwidth on demand to share and disseminate information when and where it is needed. Thales’s SYSTEM 21 is the most secure high-speed and multiwaveform satcom transmission system on the market today and an integral component of Thales’s world-leading Nexium Sat solution. The SYSTEM 21 modem is compatible with NATO standards and suitable for land, air and sea platforms with common software that ultimately facilitates deployment and maintenance. Coupled with Thales’s Mission Partner network management system, SYSTEM 21 offers flexible planning, control and monitoring tools as well as a consistent end-to-end security subsystem.

TRUSTED BY MILITARY FORCES AROUND THE WORLD

Thales Communications & Security SAS – 4, avenue des Louvresses – 92622 Gennevilliers Cedex – France – Tel: +33 (0)1 41 30 30 00