

FREQUENTIS
FOR A SAFER WORLD



CANSNET, the next generation regional network platform


Ninth Eastern Caribbean Civil Aviation Technical Group Meeting (E/CAR/CATG/9)


CANSNET, the next generation regional network platform

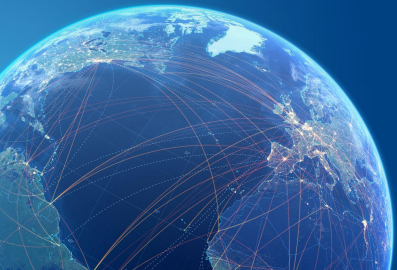


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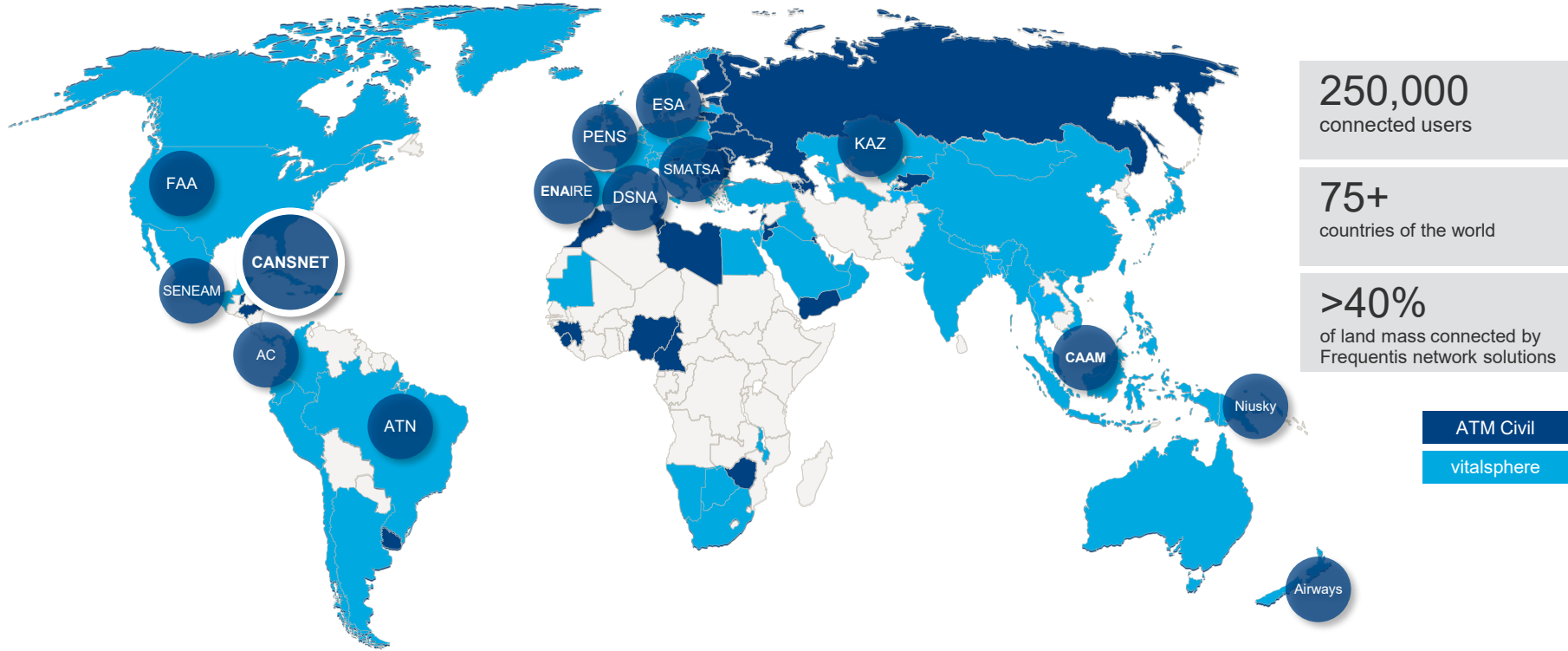
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High performance, safety and security

ATM-grade networks – vitalsphere portfolio references



CANSNET in a glance



- ATC voice, messaging (flight plans, NOTAMs, etc) - AFTN and AMHS connections, radar data sharing, remote radio connectivity services
- Successor of the current MEVAIII VSAT network operated by Frequentis
- Managed service operated by Frequentis
- Move to a flexible full IP environment
- Flexible redundancy approaches to accommodate the needs of all member countries
- Including VCX-IP for analogue to IP conversion
- Interconnection to REDDIG and E-CAR



Advantages CANSNET WAN

- Two fully redundant fully-mesh WAN connections
 - MPLS over dedicated landlines
 - VSAT
- Fully meshed any to any communication over both networks
- All IP environment
- Future proof
 - design allows for bandwidth upgrades without construction
- High availability (99,99% for locations with a redundant setup)
- The existing MEVA III VSAT infrastructure can be partially reused
- Both networks are interconnected via the Teleport in Miami
- Switching between the networks before the link is down (brown-out detection)



CANSNET offering elements

- VSAT Equipment,
 - Space Capacity,
 - Terrestrial Equipment,
 - Terrestrial Capacity,
 - ATM-grade network solution based on Frequentis vitalsphere portfolio (VCX-IP and NetBroker(Optional)),
 - Site Survey and Installation Service,
 - Maintenance Service,
 - Training,
 - Network Operations Center (NOC) with 24/7 English/Spanish hotline service.
-
- Firewalls (Optional),
 - UPS (Optional),
 - Emergency VSAT (Optional),
 - Switches (Optional),
 - Racks (Optional),
 - Surveillance Solution (Optional).



VCX-IP - The integrated voice and data gateway

Bringing the network all the way from legacy to ATM-Grade architecture

ATM-grade network functionalities

Seamless migration of legacy to IP

Flexible contingency implementation,

Radar data distribution

Bandwidth optimization

VSAT specific applications

Multi-network availability

VCX-IP

Flexible architecture

Flexible HW options

Broad portfolio in interface cards

Common VCX-IP SW architecture



Build-in safety

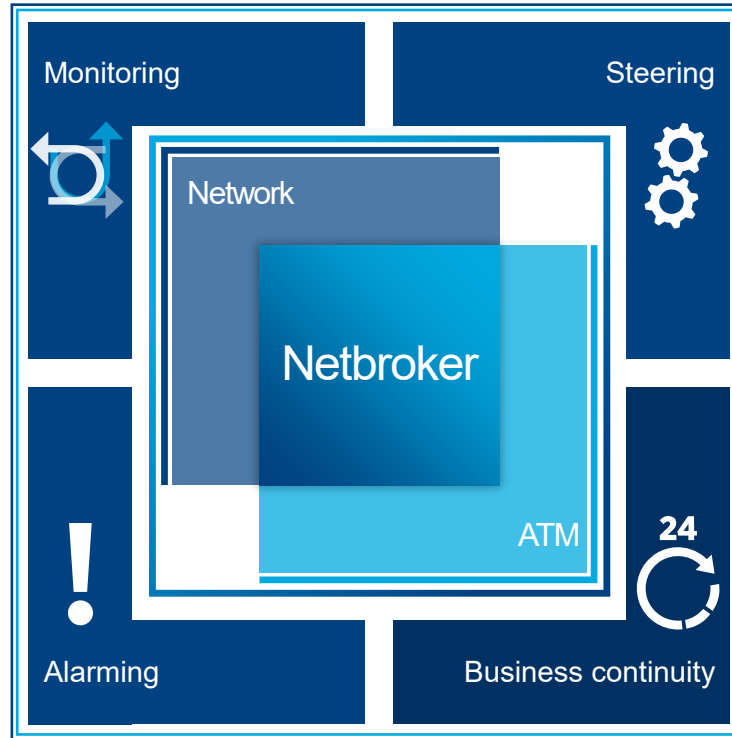
- **Inter-shelf redundancy** for hardware, software and configuration
- **Redundant LAN access** of each redundant processing unit
- **Assurance** according ED-153 SWAL3 / ED-109A AL4
- **Zero down-time** for configuration changes
- **Admission control**
- Long lifecycle support

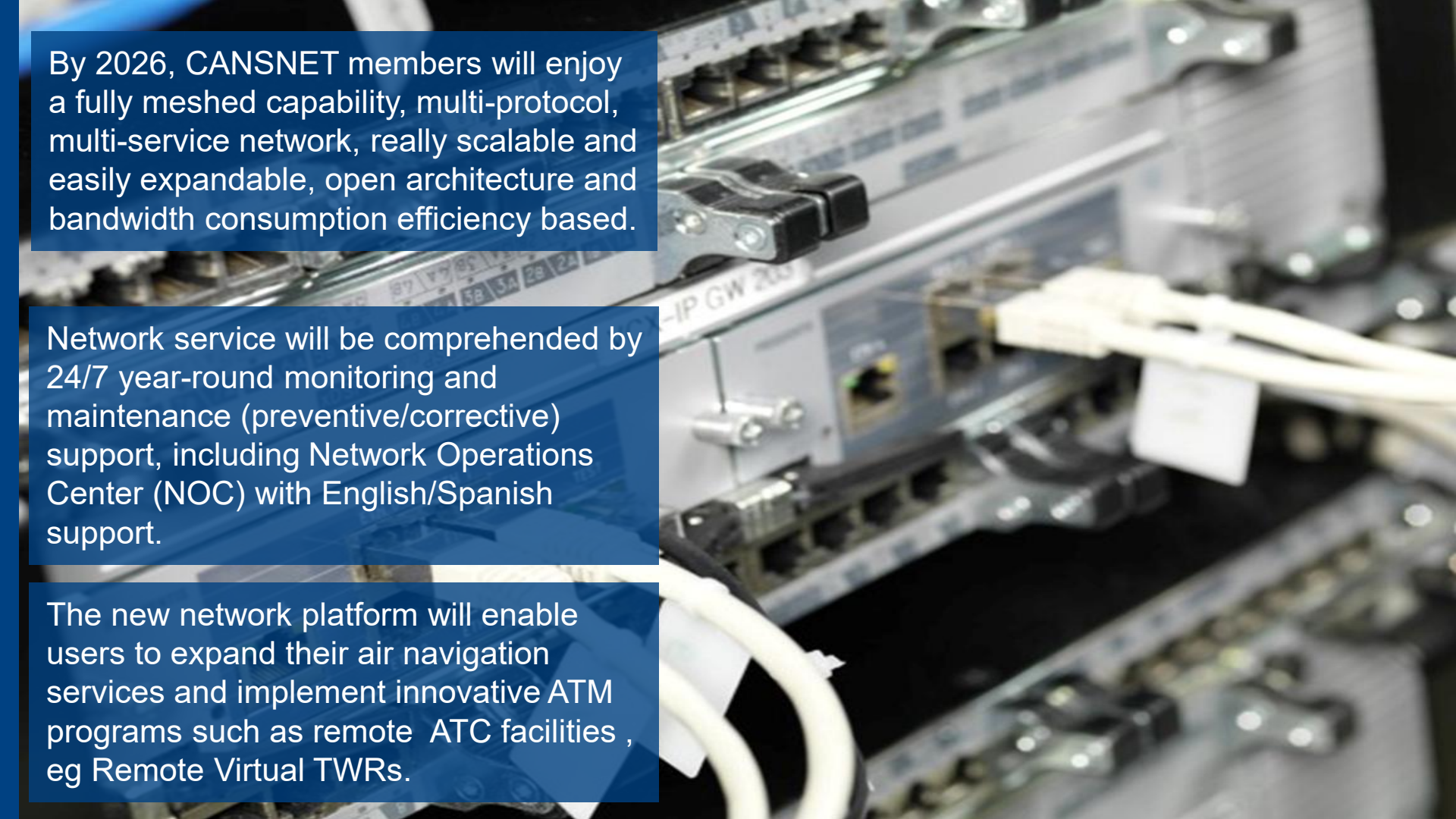
Setting the standards for ATM-grade networks

Accurate measurements
in near real-time

Understand the current
operational situation

Alarm KPI violations



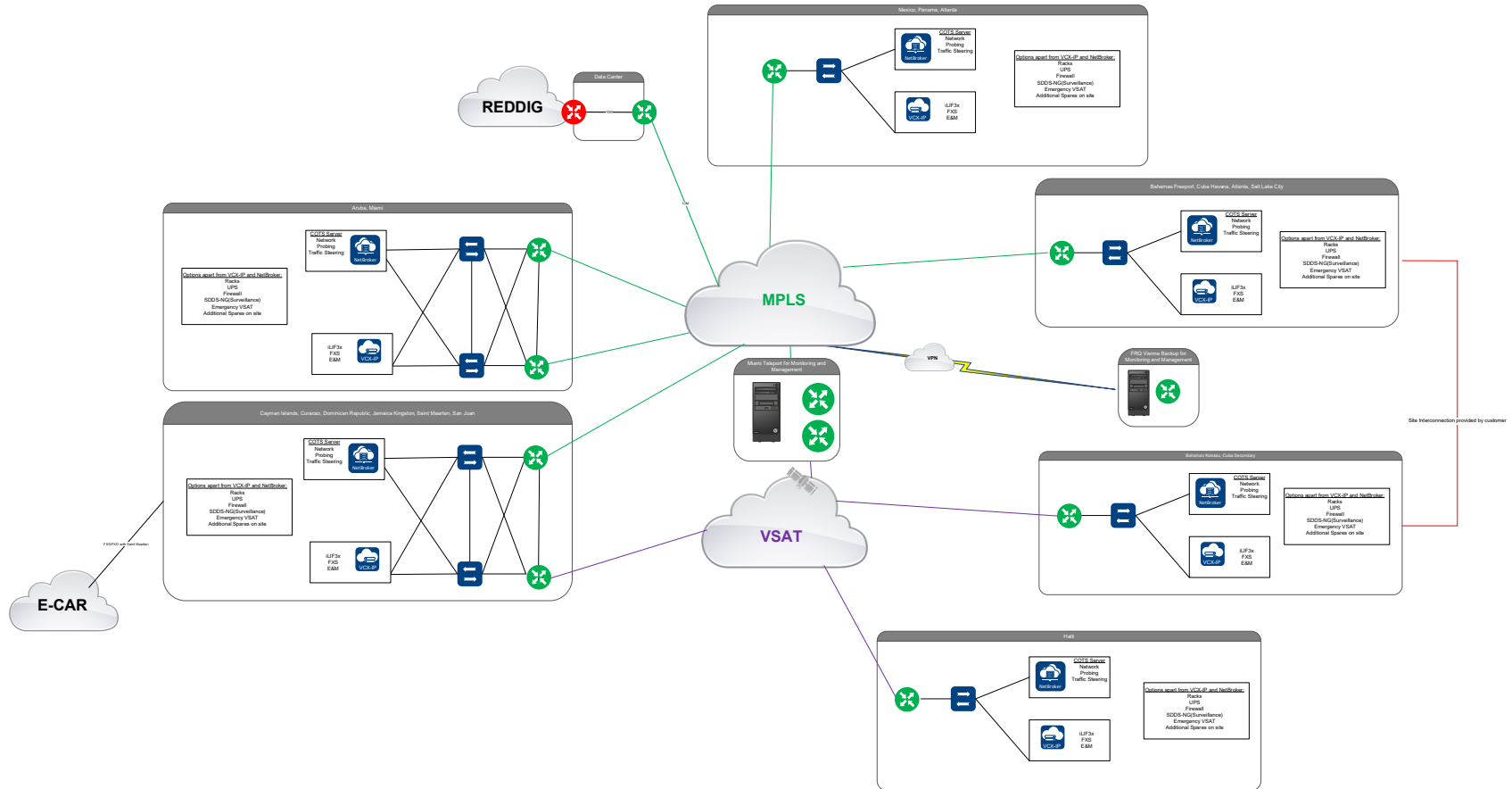
A close-up photograph of a network switch rack. The image shows several rows of ports with various cables plugged in. A white Ethernet cable is prominent in the foreground, connected to a port. The background is slightly blurred, showing more of the rack and other cables. The overall scene is a technical, industrial setting.

By 2026, CANSNET members will enjoy a fully meshed capability, multi-protocol, multi-service network, really scalable and easily expandable, open architecture and bandwidth consumption efficiency based.

Network service will be comprehended by 24/7 year-round monitoring and maintenance (preventive/corrective) support, including Network Operations Center (NOC) with English/Spanish support.

The new network platform will enable users to expand their air navigation services and implement innovative ATM programs such as remote ATC facilities, eg Remote Virtual TWRs.

CANSNET Overview



Join the future





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