

# Integrated communication for the Tactical Edge



Integrated Land Communication.

## TacEdge Software Router by Saab connects and secures the digital battlefield.

Secure and reliable communication is critically important for the digital battlefield. Fused sensor data is curated and shared between units for common situational awareness. The functional chain from sensor to effector requires assured data at all times. Troops depend on voice and other collaborative communication services for command, control and tactics.

**TacEdge Software Router (S-Router)** connects and secures the digital battlefield. It provides an integrated experience for common situational awareness. Defence applications span many domains, including NATO-led Joint Multi-Domain Operations.

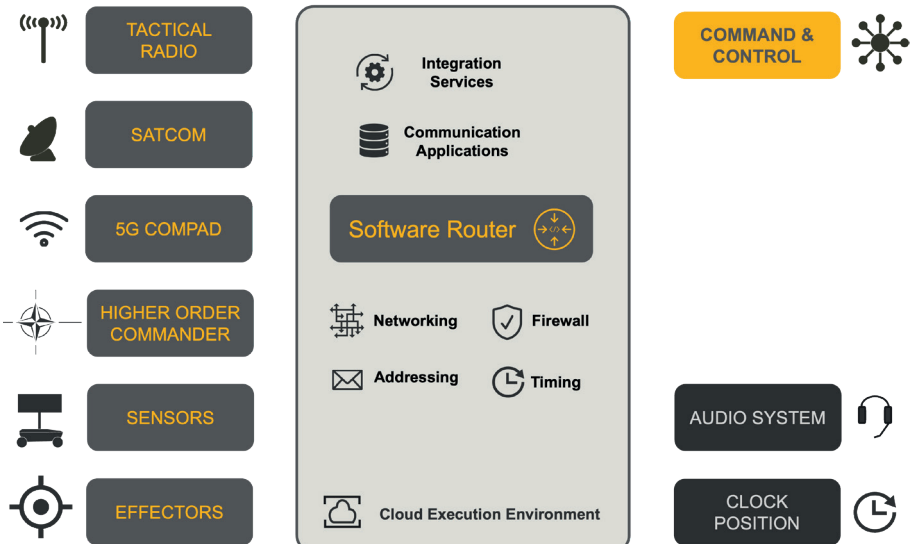
**Flexible integration**  
S-Router flexibly integrates defence communication products by leading vendors. Programmable policy-based routing automates selection of the best transmission available – fiber, V/UHF Radio, or Satcom.

**Collaborative Communication**  
Communication services include a rich set of secure networking functions, transmission control and timing distribution. In addition, the S-Router hosts Collaborative applications such as voice, chat and email.

### Future Proof

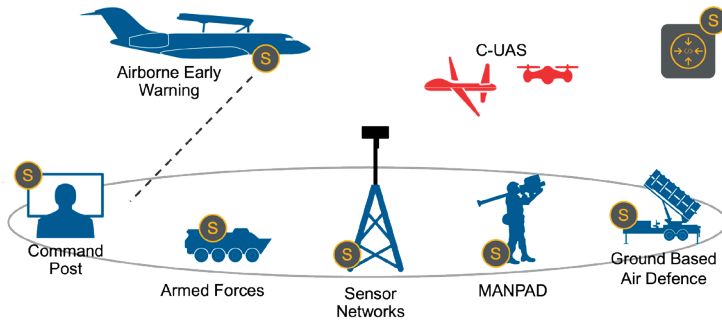
The modular software design makes the S-Router easily deployable in different environments to fit application needs - switching, ports and custom functionality.

The design is future-proof. It can be upgraded to support future emerging defence products such as enhanced EW, jam protection waveforms, Satcom or military adapted 5G.



S-Router integrates Communication and Collaborative Services.

## Applications



Integrated communication experience across many defence applications.

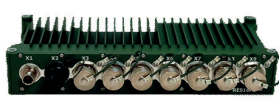


S-Router for AEW in operations since 2019

## Deployment options



RES-8  
8 port rugged switch



RES-16/26  
16/26 port rugged switch



RTR-18  
18 port rugged switch  
and compute



T2156  
56 port T-Router



Cloud Execution  
Environment

Hardware options include support for MIL-STD 810, MIL-STD 461, operating temperature range -40C to +60C

## Key benefits

- Integrated Collaborative Voice, Chat and Network Data Services
- FMN Core services 'in-a-box'
- Automation of best-connectivity and bandwidth selection
- Radio silence operation
- Integration to MANET Mobile Ad-hoc Networking
- Range of deployment options; Stationary command posts, combat vehicles, and MANPADs.
- Zeroization
- Cloud-first architecture compliance
- Software developed by register-controlled personnel

## Specifications

### System security

- Certificate management
- Encryption HTTPS/SSL
- Role based login
- Secure Syslog

### FMN Communications Services – Network functions

- IPv4 unicast, multicast
- IEEE VLAN
- Tunneling: GRE
- Encryption: IPSec
- Routing: OSPF, IGMP, Policy-based routing
- Traffic Management and Quality of Service: Diffserv, Shaping
- Stateful firewall
- Time: NTP
- Addressing: DHCP, DNS

### FMN Core Services – Collaboration functions

- Chat XMPP
- Mail SMTP

### Cloud Execution Environment or bare-metal

- AppArmor
- Secure Trusted Linux
- Virtual Machines
- KVM Hypervisor

### Integration Services

- Timing: VersaSync Time Server
- Tactical Radio: Rohde & Schwarz, HDR-AJ W, Trellisware TSM, L3Harris Wraight, MANET and Radio-relay
- Satcom: RanTec, Actia
- Wideband DataLink WBDL: Radionor
- MediaGW: TCC M34100
- Mission Aircraft: AviCom
- Customization as per customer project

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