RESILIENT INTEGRATED SOLUTIONS

With increasingly complex and dispersed MILSATCOM operations and lack of suitably qualified and experienced personnel (SQEP), there is growing demand for agile, robust, and secure satellite communications network solutions provided by technology experts to ensure seamless communications and information assurance.

Our **Resilient Integrated Solutions (RIS)** approach provides a complete end-to-end MILSATCOM solution set able to be tailored to the specific needs of today's military. In addition to our leading satellite ground infrastructure technology and innovations, we leverage our vast ecosystem of best-in-class partners to be the one-stop shop for reliable modern military VSAT systems.

At the core of our offering is our Evolution® Defense platform along with superior terminals, antennas, gateways, and RF equipment as well as hybrid elements and bespoke defense electronics solutions. Underlying that is multi-layered security and resiliency. Other key capabilities and comprehensive services include advanced networking and optimization, remote commissioning, waveform development, and systems and terminal integration. Our RIS approach results in an end-to-end integrated solution that can be tailored for any entity's need.

iDirect

Resilient Integrated Solutions

Baseband and MILSATCOM Networks

Evolution® Defense is a highly reliable, secure, and resilient platform optimized for defense and government networks and consists of a hub system, network management system, operating software, and versatile modem portfolio for security, performance, and efficiency. Our product line is WGS certifiable and features high data rates, advanced mobility as well as FIPS 140-2 Level 3 and TRANSEC for secure voice, video, and data transmissions. Evolution Defense allows defense and government organizations to embrace the growing complexity of deploying and managing global networks for mission-critical communications.

Terminals, Antennas, and Gateways

ST Engineering iDirect has a full suite of Agilis RF products (BUCs, amplifiers, converters), terminal and gateway technologies and integration services to extend satcom networks with multi-frequency and multi-orbit connectivity to meet end user requirements. We offer size, weight, and power (SWaP) optimized manpacks, on-the-move (OTM) terminals, and mobile earth stations, which can be deployed in-theatre or as an in-country redundant gateway. A fixed hub poses a potential target so having a mobile hub increases resiliency.

Multi-Layered Security and Resiliency

With the proliferation of connected devices and dispersed global operations comes an increase of security threats and vulnerabilities. Proper security systems should detect, mitigate, prevent, and predict the mix of threats that could hamper operations. A multi-layered security approach can be employed to achieve the highest information assurance. A network management system, spectrum monitoring, and geolocation services can identify potential threats, while direct sequence spread spectrum (DSSS) in combination with signal excision technology can provide a highly effective mitigation response.

Resilient Integrated Solutions

Transmission security (TRANSEC) combined with FIPS 140-2 can prevent future security breaches while comprehensive reporting tools and regular network health checks may predict future interferences and threats.

Integration and Services

Comprehensive services such as systems and terminal integration, as-a-service (subscription-based service offerings), training and support ensure that users get the most out of their platform. ST Engineering iDirect also has expertise in developing waveforms such as the European Protected Waveform (EPW) where we are a consortium leader supporting the Belgian Ministry of Defense who manages the program.

Hybrid and PACE Solutions

Hybrid terrestrial-VSAT network elements (such as a Unified Communications Suite, UCS) and the PACE approach (Primary, Alternate, Contingency, Emergency) provide a redundant means of communications to ensure persistent communications. Network and Gateway diversity, waveform innovation, and next-generation terminals are elements that can be integrated into the PACE approach. Satcom networks can be extended with hybrid UCS and 5G mobile edge solutions to provide redundancy and orchestration of services across satellite and terrestrial private government and defense networks. A UCS is similar to the TETRA land mobile radio system, but with the added advantage of connecting classic radios with mobile smartphones to leverage common apps for situational awareness, ISR, quick-to-deploy tactical operations, or to connect workgroups with a mobile command post.

Extended Defense Electronics Solutions

Custom defense integration projects can be achieved through our Systems Integration team. From engineering aircraft and avionics upgrades, to designing and building proven battlefield mobility platforms, soldier systems, ammunition, and naval vessels, we have what it takes to enhance your operational capabilities and tactical superiority to ensure mission success.

iDIRECT   ST Engineering

Resilient Integrated Solutions

Why ST Engineering iDirect

With over 40 years of satellite ground segment innovation, ST Engineering iDirect is a global leader in satellite communications providing technology and solutions that enable its customers to expand their business, differentiate their services and optimize their satcom networks. Our best-of-breed technology, equipment and services work in orchestration to achieve seamless connectivity and information assurance.

- **One-stop shop** offering ground segment technology and services ranging from baseband to terminals, gateways, and (hybrid) satcom solutions for military end-users
- Embracing the complexity of MILSATCOM networks by integrating **RIS technologies from ST Engineering iDirect** and **best-of-breed partners** allowing military end-users to focus on their tasks
- **Multi-layered security and resiliency** approach for MILSATCOM networks with a **PACE approach**
- **Integration services expertise** to install, operate and maintain end-to-end (hybrid) MILSATCOM networks as well as an as-a-service offering
- Design and productization of **secure waveforms** and adjacent baseband and network elements
- **Seamless connectivity** by supporting next-generation MILSATCOM global networks and multi-orbit satellite assets addressing multiple dispersed theatres of operation and platforms on land, air, and sea
- **Agility** through fully integrated terminals, gateways, and antenna systems in orchestration with baseband and networking technologies

Effective communications and actionable intelligence are at the heart of every successful mission. From the battlefield to the command center, ST Engineering iDirect has an extensive portfolio of innovative products, services, and capabilities to ensure critical communications when it matters most.

**For more information on our product portfolio,
please visit iDirect.net/Products**