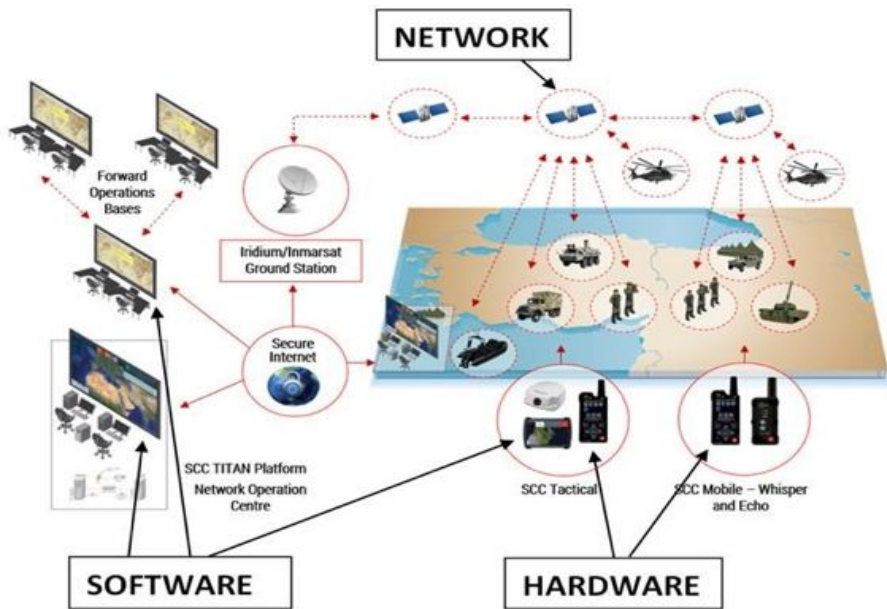# SCC Titan

April 2019

www.nortacdefence.com

What are the benefits for countries

NORTAC has developed a battlefield management solution (BMS) that is simple to use and that most countries can afford. For a fraction of the cost of conventional systems from the defence industry they can buy a commercial off the shelf system that will transform their operational capability. For the first time commanders will be able to see where all their troops are and communicate with them whether they are in the mountains, jungles, deserts, air or sea. That is what we mean by having Situational Awareness (SA) and Command and Control (C2):

- Commanders know where everyone is and can communicate with them
- They can identify where a problem is quicker
- They can manoeuver assets to deal with any threat quicker
- They can use less men to do it and deploy better trained men to a threat
- They can co-ordinate air, land and sea assets better
- They can be interoperable with other forces

Having a battlefield management system is a force multiplier. It will help a country win its battles quicker and control threats to national security better because commanders have control - they can be effective. They will avoid pointless casualties due to blue on blue friendly force incidents, they'll avoid civilian casualties and they'll bring force to bear on their enemies more effectively and accurately. They will control long borders and wide open spaces with fewer men. All operations will be safer and more efficient. The benefits to national security of having an affordable BMS for the first time make the costs negligible. **They will have a complete nationwide capability that surpasses that of most NATO countries**.

What NORTAC Does

NETWORK

Forward Operations Bases

Iridium/Inmarsat Ground Station

Secure Internet

SCC TITAN Platform Network Operation Centre

SCC Tactical

SCC Mobile – Whisper and Echo

SOFTWARE

HARDWARE

SCC Titan solves the problem of poor BLOS SA and C2

What it does
SCC Titan is totally global and allows data to flow backwards and forwards between the command HQ and the tactical levels. It also allows data to flow laterally between field units providing tactical level communications using secure, cost effective, SBD satellite channels.

What it enables
By enabling the transmission and receipt of important information, simple but structured military reports, geospatial display of deployed assets at the tactical level, SCC Titan ensures that Situational Awareness (SA) and Command and Control (C2) is maintained when tactical voice radio is unavailable. This ensures that commanders have the information they need to act intelligently whatever the voice communications situation.

SCC Titan is a major capability enhancer supporting Interoperability, Intelligence Gathering, Offensive Action, Avoidance of Fratricide, Casevac and Supply Chain Management.

It does not replace Battlefield Management Systems (BMS/C4i platforms) which are, in the main, radio based. It is a Beyond Line of Sight (BLOS) bolt-on that augments existing national systems and cost effectively resolves the potential deficiency of lost or no communications at the tactical level in every military communications infrastructure and therefore guarantees SA and C2.
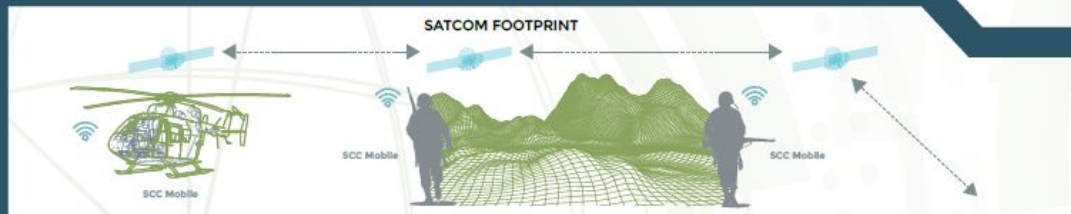
Why is it different?

- Affordable – a fraction of the cost of military solutions

- High Quality - everything works as a single system

- Easy to use – intuitive and very low training requirement

- Easy to deploy – designed for rapid deployment on to client servers

- Easy to support – easily upgraded in the field and over the air
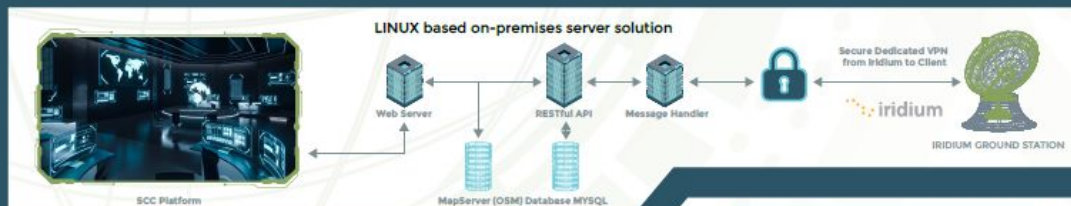
Product Summary

SCC Titan is a COTS solution comprising 3 elements - SCC Mobile, SCC Tactical and the SCC Platform. It provides Situational Awareness and Command and Control (SA & C2) at the HQ and Tactical levels via a platform sitting on client's own servers at HQ level and applications running on mobile tablets in the field. The solution incorporates proprietary hardware and software. The differentiation with competitors is in the detail and the quality of the solution at every level.

SCC Mobile consists of a variety of satellite devices for users on foot or in vehicles or aircraft.
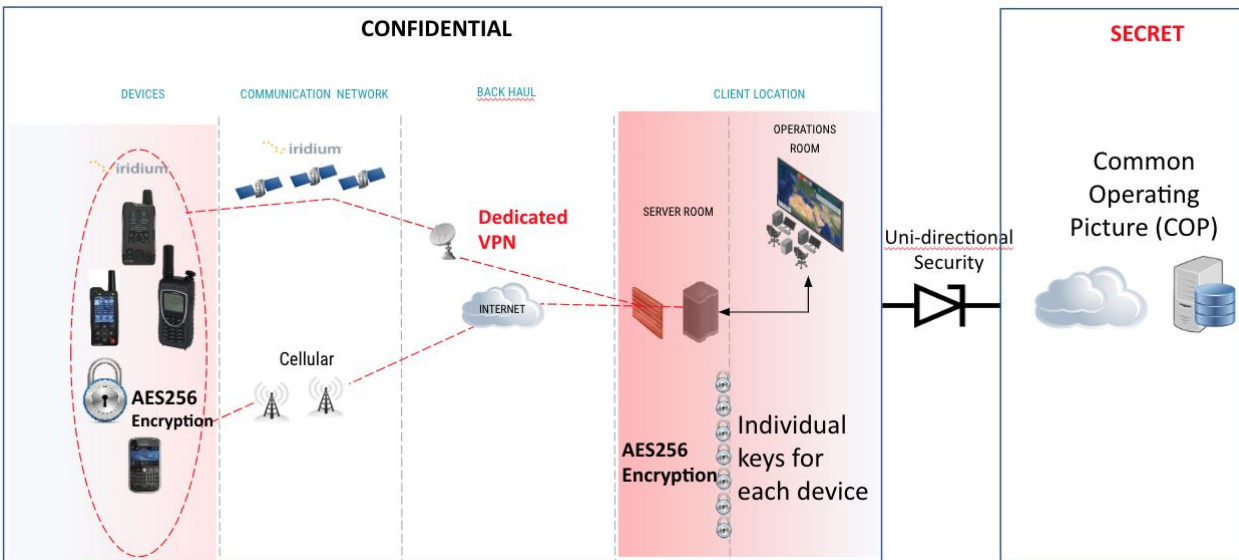
SCC Tactical is an application on tablets providing SA & C2 for commanders in vehicles, aircraft and Forward Operating Bases

The SCC Platform is installed on the client's own servers behind their firewalls. This allows secure web-access from other locations allowing many simultaneous users

Security Framework

AES 256 bit encryption

The highest levels of commercial encryption (clear by US DOD to 'Secret' level) are employed on all devices. Each device has unique encryption keys as is the forward and back channel to each device. Encryption keys can be changed over the air. Encrypted cellular devices and applications on Smart Phones can also be used.

Servers

SCC Titan resides on the client's servers behind their firewalls in order to avoid use of 'The Cloud'. This is necessary for military level use. NORTAC is a specialist in deploying and upgrading/maintaining SCC Titan within the security protocols of the client.

Integrations

It has US DOD clearance and is integrated to the US military MMC to provide a complete Common Operating Picture. It is also integrated to the NATO NFFI. Clients can then feed into a COP for combined operations if necessary.

5

Platform

SCC Titan Platform

The platform allows multiple operations centres in different parts of the world to view and operate many screens simultaneously via secure web access to the client's own servers.

Where a client has already invested in a platform (or BMS), the SCC Platform can be integrated to provide a common operating picture.

It has been designed for the modern soldier who expects ease of use, intuitive functionality and a look and feel more associated with gaming than legacy military platform.

Functionality

The SCC Titan platform has everything an operator would expect from a SA and C2 platform. Hierarchies of access rights to represent military formations extend to as many levels as required.

Deployment, Maintenance and Health Monitoring

Particular attention has been paid to ease of deployment and software upgrades on client's servers. Tools for health monitoring allow the client to remotely monitor the platform performance and detect failures.
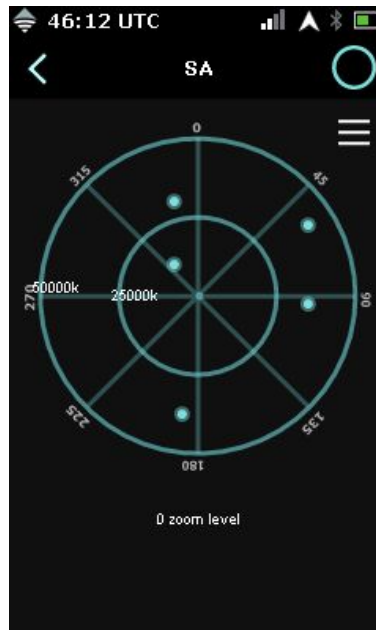
Tactical

SCC Tactical

Client based software application loaded on a Windows tablet and using SCC Mobile as a modem. Without internet or radio, commanders in Forward Operating Bases, helicopters or vehicles can see the location of other friendly forces (callsigns). They can message other callsigns directly so there is lateral communication and not just a link with HQ. Geofences, POIs and Red and Blue force locations can be sent between HQ and the tactical level. This is a unique capability of SCC Titan on SBD.

The tactical commander can operate independently of radio, internet or broadband satellite with full SA and C2.

The Technology

SCC Tactical is simple and usable. Usage costs are very low compared with BGAN or other higher bandwidth satellite systems due Nortac's unique compression technology over SBD.

Mobile - The Wave

Devices

SCC Titan is device agnostic. However, unique M2M capability is needed to achieve SA and C2 so proprietary devices are required. Whisper, Echo, Shadow and Wave (shown left) are all designed and built by Nortac for use at the soldier level.

Situational Awareness

SA (shown left) will be available on the device. Patent pending for the compression technology on SBD. This will be a global first and completely differentiates SCC Titan.

The Technology

Wave, launched Jan 19, sets new standards for a military Short Burst Data (SBD) device. The devices are IP67/68, incorporate AES256 encryption. It incorporates touch screen with gloves, rechargeable batteries (another first) and long battery life due to proprietary software designed by Nortac.

Strictly Private and Confidential

The evolution of space provides exciting new options for satellite based communications. NORTAC Defence is well positioned to realise opportunities as an Iridium Value Added Reseller.