



**COMMUNICATE
WITH
CONFIDENCE**



Who are BlackTree

- Founded 2012
- Specialise in Tactical Communications and soldier systems
- 50% ex-military
- Exclusive reseller/representative for TrellisWare Technologies
- MANET (Mobile Ad-Hoc Network) Technology

Our partners

 XI SYSTEMS

 ALPHA 56

GENERAL DYNAMICS
Mission Systems

 SONIC
COMMUNICATIONS

ZER(α)ALPHA
SOLUTIONS

 **BLACKTREE**


Helsing

ULTRALIFE



TrellisWare[®]
TECHNOLOGIES

 ROWDEN

 Bren-Tronics, Inc.

INVISIO[®]

 Fischer
CONNECTORS

HASCALL-DENKE
THE WORLD'S ANTENNA SOURCE.



Glenair

FALCOM


radiocomms

 Collins
Aerospace

 **BLACKTREE**

TSM – A Foundational Technology



- Self forming and Self Healing MANET waveforms
- Highly scalable (Bn sized flat networks)
- Secure data and voice with Type 1 (Secret) interoperability
- Provides interoperability with partners

TSM – A Foundational Technology



TW-145



TW-140



TW-135



TW-750



TW-950



TW-860



TW-875



TW-870



TW-880

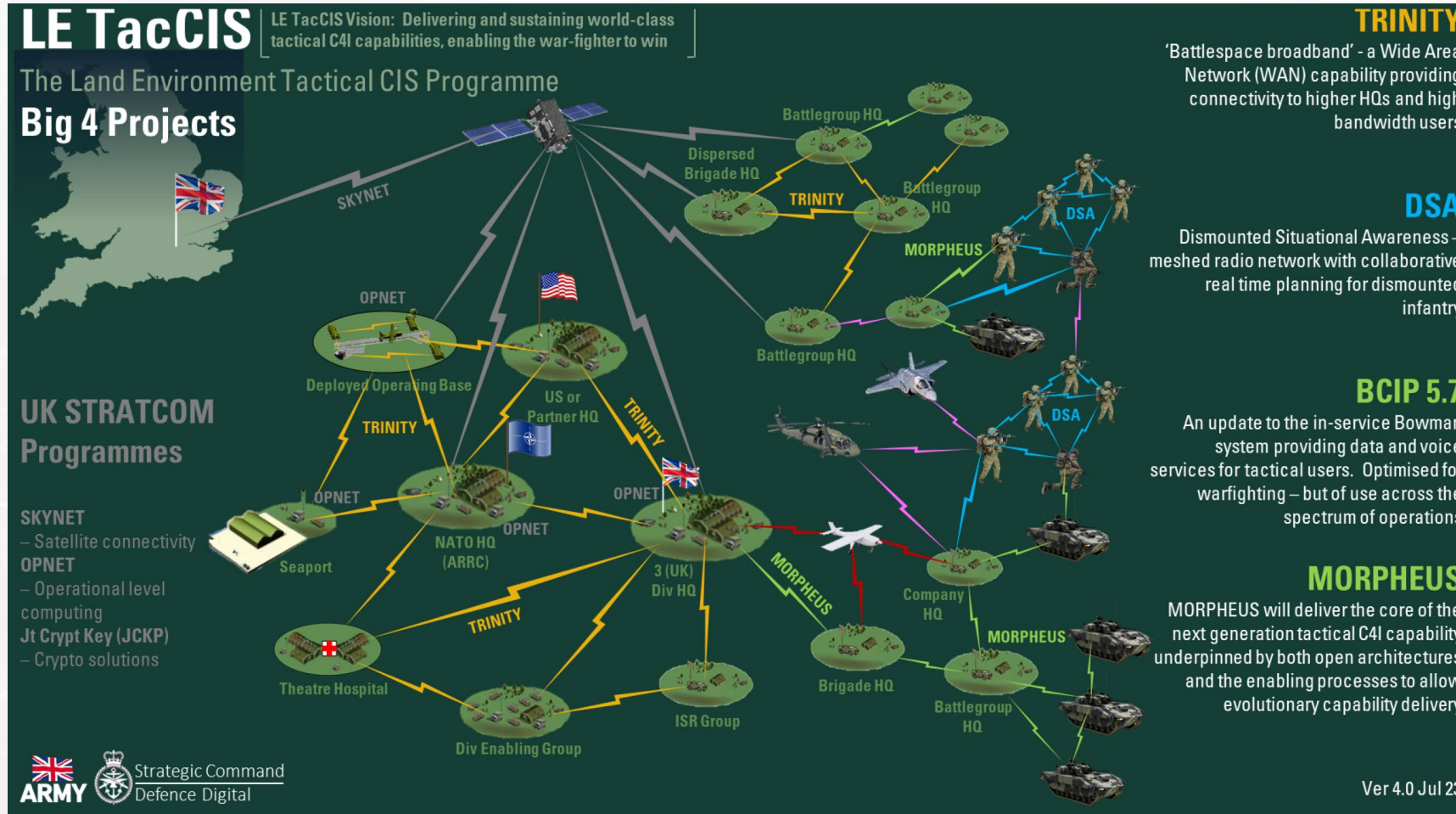


TW-650

TSM[®]
KATANA[™]
WREN



The MoD landscape

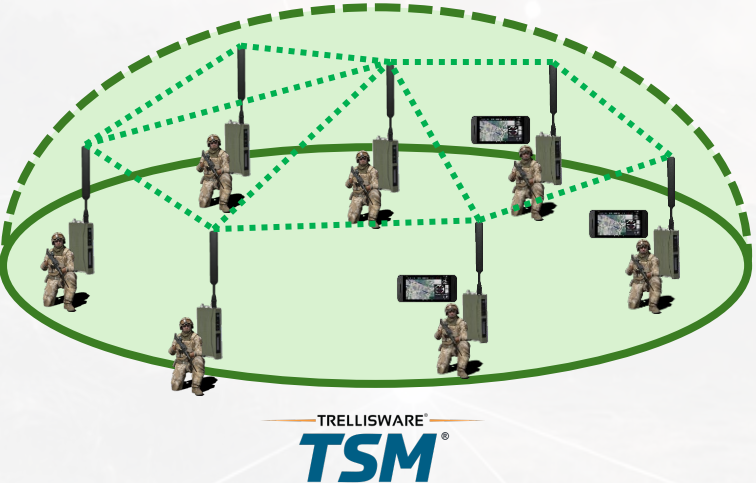


The MoD landscape

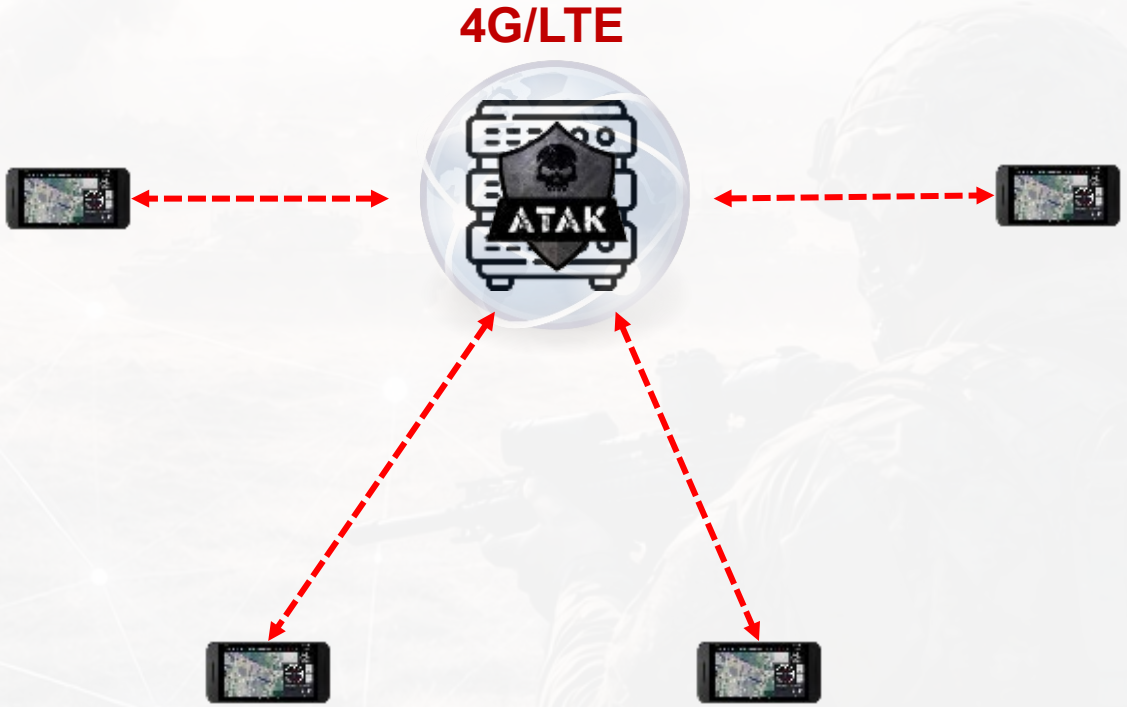


Background - eDSA

eDSA 1



eDSA 2



Pj ASGARD (2025) & EXPANSE (2026)

ASGARD –Setting the conditions for the unfair fight.

"Any British land force will be able to destroy an enemy three times its size. ...our soldiers will have every confidence in being ready and able to fight anyone and win."

1. This white paper outlines what ASGARD is and how it could dramatically change the dynamic for UK and NATO Forces operating in Europe. ASGARD is a vision that addresses the pacing threat to NATO and Ukraine. The UK has contributed a tactical sized formation to NATO's Forward Land Forces (FLF) in Estonia since 2017. It is of strategic importance and has contributed to the UK's iron-clad commitment to NATO. ASGARD provides the opportunity to flip the potential vulnerability of a strategic tripod into a strategic asset, setting the conditions for an unfair fight in the Alliance's favour.
2. ASGARD stems from an urgent need to think and fight differently. The inescapable lessons apparent from the war in Ukraine has imposed the reality of how alliance forces should be preparing for the next conflict. This will secure FLF's strategic depth in the Baltics by setting the theatre with an ability to detect the potential compromise of a nation's sovereignty and find, strike and blunt enemy manoeuvre. Presenting this dilemma will create the decision space for NATO subsequent action as part of the wider collective defence. This national contribution to NATO's collective deterrence in Europe will empower our forces and prepare them to win their close fight through the use of integrated fires.
3. ASGARD will be a software-defined, network enabled reconnaissance and strike complex that will create a step-change in lethal capability for NATO's FLF in Estonia. Central to ASGARD will be a suite of digital and data innovations that enable decision support. It will drive friendly-force decision action cycles at a rate unmatched by any adversary. This software defined approach will drive the increase in lethality offering an 'any sensor to any effector' decision advantage capability at every echelon from Battlegroup to Corps. This has relevance not only for UK land forces, but for the entire NATO FLF enterprise and the wider Alliance. ASGARD will convert the FLF from what is arguably a NATO liability to an asset.
4. The FLF will be used as an incubator for ambitious capability development which could yield benefits that will improve deterrence across the NATO alliance. ASGARD will spirally develop, delivering a tangible uplift in lethality for troops in Estonia while also driving wider adoption of similar technologies across NATO. The UK hopes to catalyse the uptake of this approach across the Alliance and with NATO innovation investment this could be a force multiplier for all members of the Alliance, allowing any allied sensor to communicate with any allied effector.

Tent Problem Statements

Tent 1- Enhanced Effectors

1. Increased range for delivery of kinetic effect to prosecute the Bde and Div deep battle.
2. Integration of all appropriate effector capabilities with the in-theatre communications and data exchange systems(s)

Tent 2- Digital Innovations

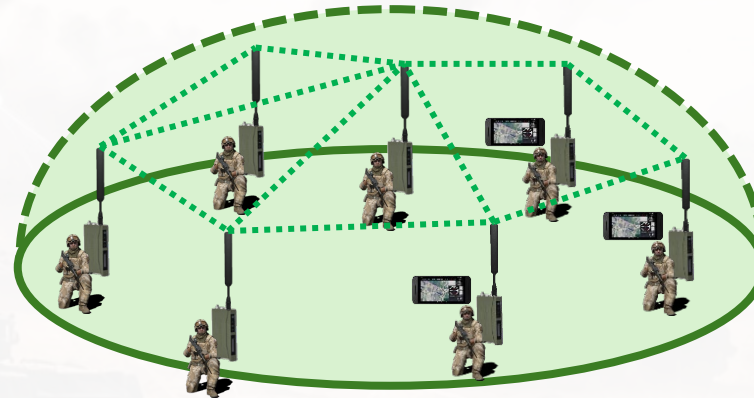
3. Enhanced digital 'operational memory' underpinning CIP and COP across all security domains, that allows FLF(E) to decide faster than our adversaries can manoeuvre.

OFFICIAL

OFFICIAL

Tent 3- Enhanced C4 ISTAR & Networks

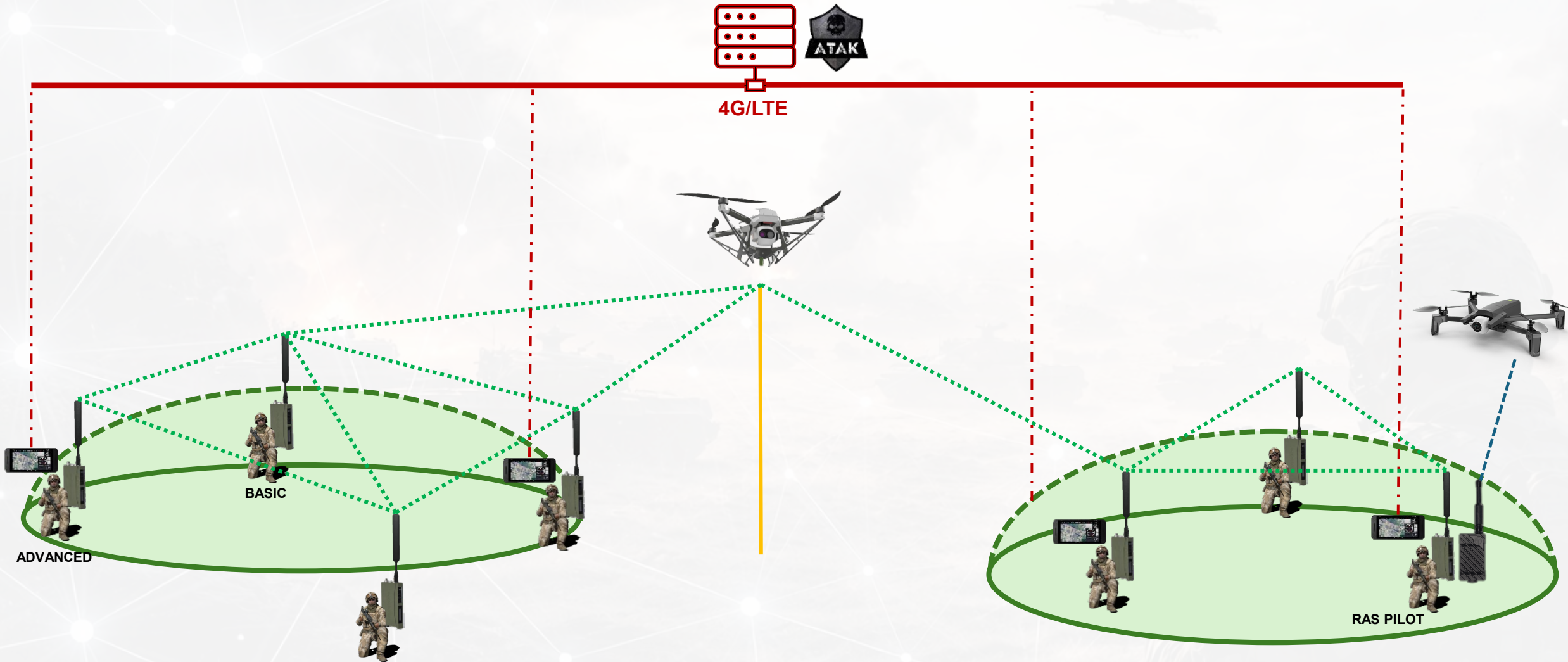
4. To gain decision advantage, we will need dramatically improved situational awareness within the company group, to increase tempo, dispersal and concentration of lethal force for effect.
 - a. This will require seamless integration with multiple in-service tactical CIS systems over multiple security classifications.
5. We will fight with greater dispersal of force elements both for effect and survivability, this will drive the need for increased throughput and range on communication links, without the need to deploy radio rebroadcast stations.
6. The need for enhanced for seamless passage of orders to and from NATO and UK formation Headquarters to the tactical level.



TRELLISWARE
TSM



Dismounted Data System (DDS)



Soldier Systems Experience



Headsets

EUDs

PTTs

Hubs

Batteries

Other



SME Lessons

- Stay lean (low overheads)
- Engage at all levels with MoD
- Get onto relevant frameworks (NS3 / TCS for Tac Comms)



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QUESTIONS