



Tactical Communications Panel Discussion

Presented By

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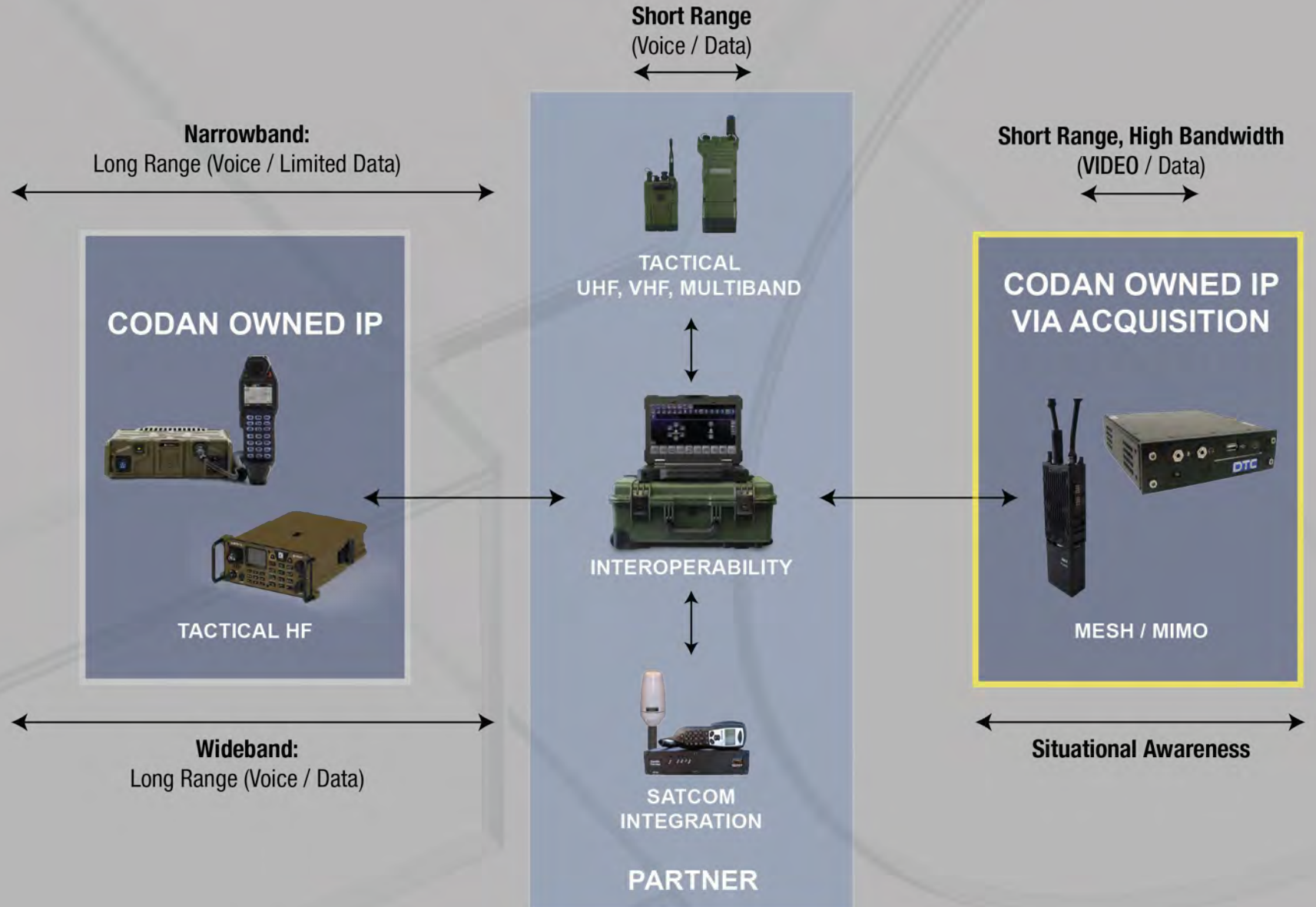
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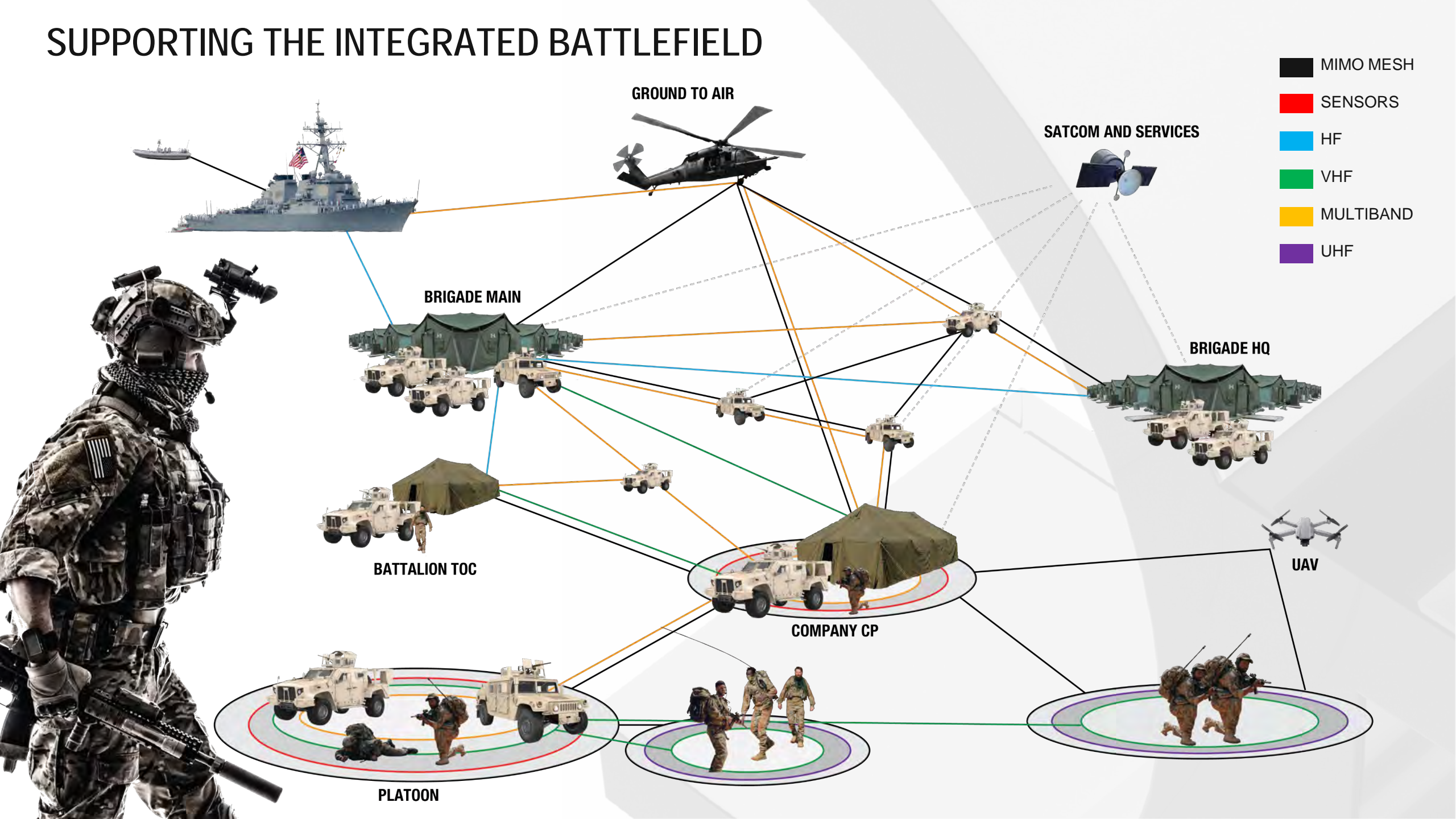
COMPLETE TACTICAL COMMUNICATIONS SOLUTIONS PROVIDER

Tactical Communications

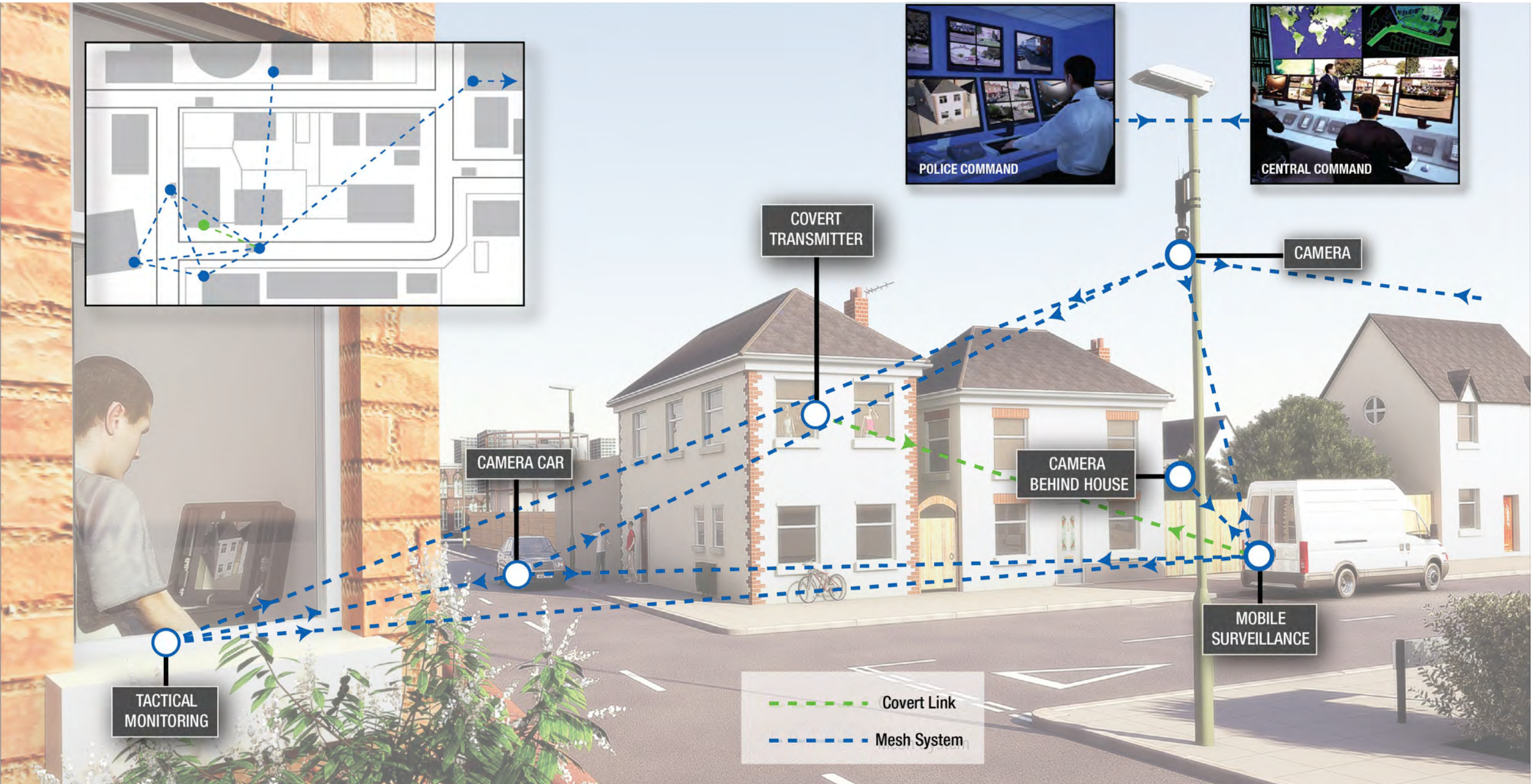
- Modern tactical battlefield communication includes voice, data & **VIDEO**, & increasing demand for high quality infrastructure-less comms



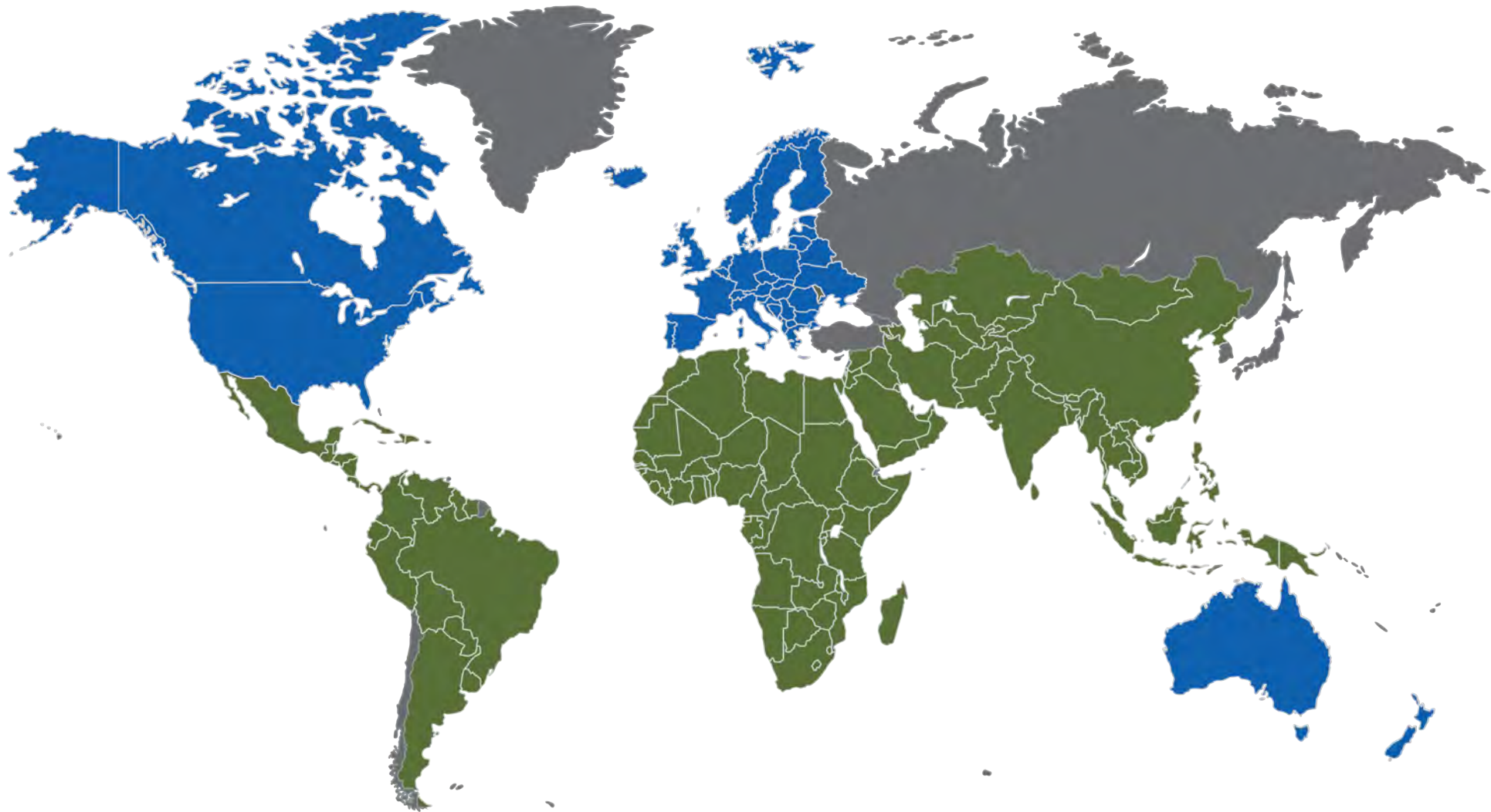
SUPPORTING THE INTEGRATED BATTLEFIELD



LAW ENFORCEMENT: CASE STUDY



ACQUISITION OF DTC HAS SIGNIFICANTLY EXPANDED OUR ADDRESSABLE MARKETS



MARKET DIVERSITY ENSURES REVENUE STABILITY AND GROWTH



MILITARY

Market Segment

- Army
- Navy
- Airforce

Customer Type

- Defence
- Para Military
- Special Forces



LAW ENFORCEMENT & INTELLIGENCE

Market Segment

- Safe Cities
- Domestic Security

Customer Type

- Intelligence Community
- Public Safety
- Homeland Security



UNCREWED

Market Segment

- Air
- Ground
- Surface

Customer Type

- Military
- Law Enforcement
- Commercial



BROADCAST

Market Segment

- Wireless Camera
- Remote Production

Customer Type

- Sports
- News
- Entertainment



COMMERCIAL / NGO

Market Segment

- NGO
- Commercial
- Oil & Gas

Customer Type

- Humanitarian
- Peacekeeping
- Transport

MILITARY / DEFENCE MARKET

- **Paradigm shift in battlefield information requirements**
 - Consider Ukraine as an unfortunate 'live' example
 - Dynamic Situational Awareness is a key success factor
 - Live Troop positions, Video footage from Drones for situational awareness
 - >10 times the information traffic is required
- **How is Codan | DTC technology applicable?**
 - **Software Defined Radio is a Core Technology within Codan & DTC**
 - Waveform enhancement is decoupled from Hardware change
 - Multiple waveforms can be implemented in one platform
 - Each waveform targeting different military applications
 - **Codan | DTC Mesh offers**
 - Mobility, IP, Video, Voice and Position Data from one radio
 - Product offerings with MIL-STD compliance





LAW ENFORCEMENT AND INTELLIGENCE TECHNOLOGY

- Market now demands 'IP streams' for all Surveillance streams with evidence recording moving to the 'Cloud'
- How is Codan | DTC technology applicable?
 - Tailored Waveforms providing Non-Line-Of-Sight communications
 - Ultra reliable products (dependable solution)
 - Size, Weight and Power advantages easing deployment
 - 'Spectrum Sensing' capability
- Deep Domain knowledge (especially in Spectronic)
 - Product design and functionality is tailored for the application
 - Accredited Encryption and 'court tested' evidential integrity
- Comprehensive Solutions with the Portfolio
 - Tactical stand-alone deployments
 - Wide area collection systems using deployed 'base-stations'
 - Integrated software solutions collecting and managing the data

UNCREWED TECHNOLOGY

- **“Uncrewed Robotics are an efficient technology in any conflict” ***
 - Nagorno-Karabakh Conflict (Sep – Nov 2020)
 - Ukraine (Feb 2022 ongoing)
- Growing Opportunities exists in the Military, Law Enforcement /Intel & Commercial sectors
- **How is Codan | DTC technology applicable?**
 - **Size Weight and Power (SWAP)**
 - DTC possesses a ‘sweet spot’ in power, weight and size .v. capability
 - Enables future ‘Swarm Drone’ applications
 - **Low and Consistent Transmission Latency**
 - DTC Mesh technology offers a consistent ‘low latency’ link that is ideal for Video streaming from a UAV
 - The radio link can be combined with DTC low latency digital video codec providing a powerful capability in a credit card sized package

** Unmanned Ground Forces: The Emergence of a New Industry in Europe & its Future Implications, Source: FINABLE, 8th December 2020*



BROADCAST TECHNOLOGY

- **Broadcast Customers** are now demanding 'remote production' rather than production at the 'venue'
- **How is Codan | DTC technology applicable?**
 - **Highest Quality Video Encoding**
 - **Ultra High Def (UHD) 4k** Video encoding and decoding
 - **Low latency** Video Codec solutions (HEVC and H.264)
 - **Robust Non-Line-Of-Sight Wireless links**
 - Highest performing RF links in the market
 - DBS offers both 'COFDM Point-to-Point' & 'Mesh' Technology
 - **Remote Production and Systems Integration**
 - Ultra High Definition Video over IP links enabling the 'Production' to be mixed, editing and produced and distributed remotely

COMMERCIAL / NGO TECHNOLOGY

- How is Codan | DTC technology applicable?
- Customers such as International Aid Agencies require reliable voice communications independent of local infrastructure and IP Data networking
- Codan's waveform technology provides the best end-user experience through innovations such as:
 - **Digital Voice Waveforms**
 - Eliminates the hiss and crackle associated with legacy radio comms
 - Clearest possible voice in difficult conditions
 - **Automatic Link Establishment (ALE)**
 - Implemented to global standards for agency / partner interoperability
 - Codan unique enhancements dramatically simplify operations and remove the requirement for specialist radio operators
 - **DTC Mesh**
 - The IP distribution and the comprehensive 'Talk groups' play into this sector
 - DTC Mesh sells into natural resources markets sharing machinery metadata

