

+ Cognitive Integrated Battlespace

# Cognitive Integrated Comms

How useful is data that doesn't reach you?

In a world which demands permanent online connections the battlespace is no exception. Ultra's class leading fixed and mobile communication infrastructure provides resilient high bandwidth communication anywhere in the battlespace.

To keep pace with the growing potential threat posed by our adversaries, we are developing advanced analytical and adaptive algorithms that will enhance our solutions and provide our customers with more resilient data and communications links. The ability to cognitively route information and avoid potential threats will ensure our users are never without the information they need to operate effectively.

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## Our vision

We are developing communications systems which provide users with a high bandwidth, reliable and intelligent communications path - able to adapt to threats and potential denials of service with minimal user interaction. An interruption free information flow across the battlespace means users receive the information they need when they need it, regardless of the environment.

Cognitive Integrated Comms networks will dramatically lower network managers' cognitive burden, preventing end user fatigue by allowing on-time delivery of information without lag, and reducing the number of communication nodes required for a given size of network traffic.

## Market leading expertise

Cognitive Integrated Comms builds on our unparalleled domain expertise and key communications solutions:

- ORION Radio
- REAP Pod
- HIDL data links
- UltraLynx
- ADSI

## Enhanced capabilities

We are developing a series of enhanced capabilities, deployable across our current and next generation ecosystem of solutions:

- **Graphical user interfaces for network geography and topology** allowing network managers to 'see' their networks for intuitive and seamless planning and deployment.
- **AI/ML powered cognitive networks** to assist making straightforward and logical technical decisions rapidly and provide Autonomous waveform orchestration.
- **Intelligent transmitter algorithms at the edge** enabling power scaling to reduce electromagnetic signatures, automatic rerouting and frequency switching.
- **AI/ML 'Frames of interest' video compression and identification** reducing bandwidth and power requirements by processing video at the edge to send only the data that matters.

## FOR FURTHER INFORMATION CONTACT:

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