

British Army Selects TSM-Waveform Radios to Strengthen Tactical Communications

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The British Army has procured approximately 800 TrellisWare Technologies radios, equipped with the TSM waveform, under Project Asgard, a key programme aimed at enhancing the networking capabilities of the Forward Land Forces battlegroup from the 4th Armoured Brigade

Combat Team. The acquisition reflects a broader effort to ensure resilient, interoperable communications across British Army units.

A senior officer revealed that the initial deployment targeted brigade—level operations within the Forward Land Forces structure. The intent is to maintain uniform hardware across brigades to simplify training and maintenance protocols. While the waveform standard remains fixed to ensure seamless interoperability, the hardware itself may vary across units to allow for competitive procurement processes.

The crux of the decision to adopt the TrellisWare TSM waveform centred on lessons learned from Ukraine's recent experience with Russian electronic warfare. Officials emphasise the necessity of robust and adaptive communications systems in contested environments, particularly those that can sustain multi—hop, spectrum—efficient networks.

TrellisWare's TSM waveform is renowned for enabling large-scale mobile ad hoc networking, supporting services such as secure voice communications, high-definition video streaming, data transmission, and position—location tracking within a dynamically changing tactical setting. The software supports up to 800 radios in a network operating within a single 1.2 MHz channel, among other advanced capabilities.

The radios acquired for Project Asgard align with broader UK procurement frameworks. TrellisWare was previously named as a supplier under the Crown Commercial Service's Network Services 3 framework for tactical radio systems, enabling government departments to access its technology via approved procurement channels.

The strategic selection of TSM for Asgard suggests the Army prioritises waveform interoperability and performance over vendor lock—in. The flexibility allows different brigades to use distinct hardware but maintain secure communication links via the shared waveform. This consistency facilitates future expansion into corps—level or divisional targeting capabilities without sacrificing integration.

TrellisWare's radios and waveform technology are globally recognised; their ecosystem of interoperable devices includes small form—factor radios, embeddable modules, and multi—waveform solutions supporting both TSM and alternatives such as the Katana waveform. The TSM—enabled network model is part of a wider movement towards secure, scalable, and spectrum—efficient tactical communications.

In sum, Project Asgard's rollout of TSM—waveform radios underscores a shift in British Army doctrine, towards modern, resilient communications infrastructure shaped by real—world battlefield conditions. By investing in a proven interoperable waveform and fostering hardware competition, the Army aims to enhance tactical cohesion, defend against electronic warfare threats, and streamline future expansion across land forces.