

Overcoming Visibility/Traceability Obstacles for Mission-Critical Equipment

UK MoD Links Assets to Controlling Documents Increasing Data Accuracy, Enabling Export Control Compliance

Benefits Realised

- Assets subject to Export Control's linked to original export licenses & Technical Assistance Agreements through the UK MoD Asset Subject to Special Controls (ASSC) service.
- Successful Financial Accounting to meet Nation Audit Office (NAO) audit.
- Improved data accuracy/efficiency by use of machine-readable data; using Def-Stan 05-132 (Stanag 2290)
- Automation of Supply Chain process, which allows manpower reductions
- Improved ITAR compliance which mitigates the risk to Industry of non-compliance and potential fines from the US State Department for ITAR violations

Background

The UK MoD had two major headaches related to the Bowman C4I tactical communications system. These were ITAR compliance and failed NAO audits, and both were due to a lack of accountability of equipment and no confidence in their inventory management process and records; for the circa 450,000 BOWMAN assets globally. These range from radios and encrypted master control units, to connectors, aerials and other peripherals which are predominantly ITAR controlled.

The BOWMAN capability is regularly having phased capability enhancements to the software upgrades and improvements. Each time a BOWMAN asset is upgraded, its part number and



NATO Stock Number (NSN) changes. This means that the data for each Bowman asset is continuously being updated

Objective

Camcode Global supported the UK MoD plan to resolve this utilising Def Stan 05-132 and the use of the Wassenaar Code, which would identify assets subject to Export Controls. The proposed solution would solve both the Export Trade Controls i.e. ITAR and NAO concerns on accounting for this capability.

The UK MoD mandated that all BOWMAN assets must be tracked using a globally unique barcode which would allow them to accurately report on each asset's location, condition and value. Thus, providing accurate data and confidence in their Inventory and Engineering Systems to enable accounting and configuration management whilst supporting Export Trade control compliance.

The goal of the UK MoD's BOWMAN identification initiative was to mark and track circa 450,000 assets at multiple locations across the UK MoD's area of operation, which includes the UK, Canada, Germany, Kenya, the Falkland Islands, Cyprus, Brunei and Belize in a wide range of demanding and harsh environments that the equipment is operated.



Old and new data had to be captured and reported to the UK MoD to ensure that not only engineering records can be maintained for asset history but that the assets can be linked to its Export Control record.

Solution

Camcode Global was challenged by the need to respond to a dynamic plan subject to unpredictable changes in requirements to allow equipment availability to meet UK

MoD's operational demands. Lead times for receiving and processing BOWMAN systems were often extremely short.

Camcode Global developed data validation methods to reconcile old data against new data during upgrades. These proven data management systems monitored serial numbers, part numbers, NSN and NCAGE codes, to match them to the new NSN, providing accurate data for each BOWMAN asset. This allows the UK MoD to track every asset throughout its lifecycle. Camcode Global also developed a process to ensure that during the software uplift process where re-labelling was required, timely and accurate data was captured and reported to the UK MoD.

To ensure that Camcode Global could meet the programme of work and the short notice changes due to the irregular flow of BOWMAN assets, an on-site label-production capability was developed that could be used at any location worldwide and was deployed into the operational environment in Afghanistan to ensure that the programme of work didn't adversely impact operations. The Camcode Global engineering team produced Alumamark Blackplus^{®1} labels with Sandshield² overlamine for each BOWMAN asset in order to achieve label longevity in harsh operating environments

The MoDs WATERGUARD Programme delivered the ASSC Service, and data repository of UID and Exprot control data (export license documents and TAAs), this not only accessible by MoD staff but also Industry. The UK MoD's ASSC service ensures data coherence and accuracy, which is underpinned by the use of UID. The UK MoD's Export Control process⁷ and capability has been regularly brief to the U.S. State Department, who recognised this a key enabler to ITAR compliance.



Results

Circa 414,000 Bowman assets across 185 different part numbers have been UID marked. Over 336,500 of the assets marked are subject to ITAR and through the UK MoD's ASSC Service these assets can now be linked directly to its specific controlling document set or Licence(s).

Camcode Global's products and service for uniquely identifying and labelling BOWMAN assets has allowed the UK MoD to solve many of its asset visibility, management and traceability issues. To prevent problems like this recurring, and to improve the management and visibility of mission-critical assets entering their supply chain, in 2016 the UK MoD published a Unique Identification (UID) policy, processes and procedures to uniquely mark and identify specific ranges of equipment within the defence inventory. This requirement for UID is now being placed into UK MoD Contracts as a Terms and Conditions, where U.S. Munition Listed items are being supplied.

The use of UID and MRI has driven efficiencies and benefits for the UK MoD, from automating receipting, issuing, stocktaking and management checks to improved data quality and accounting confidence. This automation has enabled the reduction of manpower in the Supply Chain and enabled the ability to access a specific asset's status, history and configuration.

Camcode Global

Camcode Global has been a supplier to the UK MoD, Australia ADF, US Marine Corps and the Netherland DMO for asset tracking services. As part of our deliverables for the BOWMAN C4I tactical communications systems, Camcode Global was charged with helping the UK MoD implement a strategy to identify, track and manage its entire inventory.

¹<https://www.camcode.com/alumamark-blackplus.html>

²<https://www.camcode.com/abrasion-resistant-uid-labels.html>



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