

Version 9

100112 Infrastructure In-Service: GROMA
11th September 2020
7th December 2023**SYSTEM REQUIREMENT DOCUMENT FOR
MILITARY ENGINEERING SURVEY: PROJECT GROMA****CONTENTS**

- 1 GENERAL DESCRIPTION
 - 1.1 SRD Structure
 - 1.2 GROMA Single Statement of Need
 - 1.3 Origin of the Need
 - 1.4 Operational Context
 - 1.5 System Capability Boundary
 - 1.6 System Context
 - 1.7 Applicable Acquisition Strategy
 - 1.8 Required ISD And FOC Dates
 - 1.9 Planned OSD
 - 1.10 Assumptions
 - 1.11 Freedoms, Constraints and Limitations
 - 1.12 Delivery Priorities
 - 1.13 Structure of System Requirements
- 2 KEY SYSTEM REQUIREMENTS
- 3 SYSTEM REQUIREMENTS
- 4 CONTEXT DOCUMENTS
- 5 GLOSSARIES OF ABBREVIATIONS AND TERMS
 - 5.1 Glossary of Abbreviations.
 - 5.2 Glossary of Terms.

Version 9

PART 1**1 GENERAL DESCRIPTION****1.1 SRD STRUCTURE**

1.1.1 This document is the repository for the draft outline system requirements that articulate the high-level functions required of Project GROMA. The SRD has five parts:

- a. **Part 1 – General Description.** Records the information relating to the overall capability need, how the need arose, and provides an operational context. It provides a foundation for Parts 2 and 3.
- b. **Part 2 – Key System Requirements.** The Key System Requirements (KSRs) are drawn from Part 3 and defined as those individual requirements/constraints which:
 - (1) Encapsulate and characterise the capability.
 - (2) Identify the primary benefits of the capability, against which investment will be justified.
 - (3) Carry the primary measures of effectiveness by which satisfaction of the need will be evaluated.
 - (4) Are critical to the satisfaction of the operational need, or;
 - (5) Are assessed as of particular interest to the User.
- c. **Part 3 – Individual Capability Requirements and Constraints.** The complete, structured, set of individual System requirements and constraints.
- d. **Part 4 – Context Documents.** Documents that provide additional depth of understanding of the context within which the User needs sit or that are referenced frequently in the SRD.
- e. **Part 5 – Glossary.** Including definitions and explanations for all terms that could cause confusion, as well as references and acronyms.

1.2 SINGLE STATEMENT OF USER NEED (SSUN)

1.2.1 The user requires a deployable engineer survey capability that will facilitate the effective and reliable collection of data to enable the analysis, design, construction, maintenance and repair of military or civilian projects and infrastructure.

1.3 ORIGIN OF THE NEED

1.3.1 In-service military engineer survey equipment is approaching obsolescence and is increasingly incapable of delivering the reliable, robust system required to enable military engineer survey tasks on operations worldwide.

Version 9

1.3.2 Project GROMA will update and enhance the military survey equipment fleet to ensure military engineers can continue to conduct engineer survey, across the full range of endorsed military tasks, until the planned capability Out of Service Date (OSD) of 2030. The Concept of Employment (CONEMP)¹ outlines the activities and key survey tasks this capability is required to enable, from Close Support to Infrastructure Support survey. It defines three scales of deployment which reflect the differing levels of capability demand imposed upon military surveyors.

- a. **Light Survey (LS)** will enable basic users such as Combat Engineers and Artisan trades to conduct fundamental, core survey tasks at Sub-Unit level.
- b. **Medium Survey (MS)** will provide capability to specialist users working in pairs such as Surveyors, Plant Operator Mechanics, Military Plant Foreman, and Clerk of Works. All users will have received survey training at the Survey Program Area within 1 RSME Regt. The MS sub-capability will primarily be associated with a Construction Supervision Cell (CSC) at the Regimental level.
- c. **Heavy Survey (HS)** will enable advanced surveyors (ME Surveyor Class 1) to conduct the tasks associated with the LS and MS capabilities and the ability to collect accurate coordinated electronic survey data in areas that are not inter-visible while working independently. The HS sub-capability will be primarily operated in support of 170 (Infrastructure Support) Engineer Group, and its Specialist Team Royal Engineer (STRE) sub-units, engaged in permanent construction and infrastructure delivery tasks worldwide.

1.4 OPERATIONAL CONTEXT

1.4.1 **DSD Defence Tasks.** Defence Strategic Direction 16 (DSD16) demands that Defence can deliver Niche, Small, Environmental Medium, Joint Medium and Joint warfighting at scale (WF@S) operations up to Divisional level. Military survey enables the full spectrum of deployed capability and will support the delivery of all Defence Tasks (DT). Single service plans and readiness orders provide direction that scalable assets are to be held at graduated readiness up to and including R1. GROMA will deliver a solution that enables these scalable elements to maximise capability delivery in line with their respective roles and tasks.

DT No.	Task
DT 1	Defence, Security and Resilience of the Homeland and Overseas Territories
DT 4	Influence through international defence engagement
DT 5	Overseas Defence Activity
DT 7	Direct defence
DT 8	Strategic Base and Enabling Functions

Table 1: Defence Tasks Applicable to ME Surveyor Engineering.

¹ [20190709 GROMA-CONEMP-AHQ-Endorsed..](#)

Version 9

1.4.2 Operating Environment. In accordance with DSD 16, the Project GROMA capability will be able to operate in all climatic conditions, in an improvised office, in austere field conditions and, at extended lines of communication; all for a prolonged period of duration.

- a. **Geographical.** GROMA will be used in all deployed operational environments, on MOD real estate locations, in overseas training environments, Permanent Joint Overseas Bases (PJOBS) and in all UK land environments in support of Homeland Resilience tasks. This includes but is not exclusive to:

- (1) MOD UK Defence Estate.
- (2) The UK LE in support of Homeland Resilience tasks.
- (3) Complex urban areas.
- (4) Overseas training environments – British Army Training Unit Suffield, British Army Training Unit Kenya, Norway.
- (5) Middle East and North Africa (MENA).
- (6) PJOB locations – Falkland Islands, Belize, Cyprus.
- (7) Nepal

- b. **Environmental considerations.** When deployed to endorsed operating environments the GROMA capability, and the trained individuals applying it, will be required to operate in the following environmental and climatic conditions:

- (1) Temperate climates.
- (2) Desert (hot and dry arid environments).
- (3) Arctic (extreme cold and wet weather).
- (4) Coastal operating environments (high exposure to saline water).
- (5) Jungle environments (high exposure to humidity).
- (6) Mountainous regions (high ground elevations above 4,000 metres)
- (7) Urban.

1.4.3 Operating Process. GROMA will allow deployed military surveyors to collect, capture, generate, store, and share survey data that can interface with all in-service digital engineer information systems. The capability must be able to send acquired 3D geospatial data to its intended recipient for further manipulation, interrogation, and exploitation. This capability will allow the safe, secure, and reliable collection of engineer survey data and allow the user to manage distribution of information to all key consumers via secure communication platforms, MODNET enabled communication networks and, where necessary, via standard internet and civilian accessible communications infrastructure.

Version 9

1.5 SYSTEM BOUNDARY

1.5.1 Survey Sub-Capabilities. Defence survey capability will comprise three sub-capabilities to complement the technical ability of each user group and enable completion of their associated tasks. Equipment will be developed and fielded to meet the requirements of each sub-capability. The survey sub-capability groupings will be defined as follows:

a. **Light Survey (LS).** LS will enable users such as Combat Engineers and Artisan tradesman to conduct basic survey tasks, such as levelling formwork, calculating differences in height of a home and far bank on a bridging site, and calculating the gradient of ground or drainage runs. The LS sub-capability will primarily be used for tasks undertaken at the Sub-Unit level within 25 (CS) Engr Gp and 12 (FS) Engr Gp. Tasks likely to be conducted by the LS sub-capability include:

- (1) Site reconnaissance and survey.
- (2) Setting out.
- (3) Combat survey.
- (4) Project task design.
- (5) Project task monitoring.

b. **Medium Survey (MS).** MS will provide capability to specialist users working in pairs, such as Surveyors, Plant Operator Mechanics, Military Plant Foreman (MPF) and Clerk of Works (CoW). All MS users will have received survey training at the Survey Program Area within the RSME. In addition to the LS requirements, MS will enable the collection of accurate inter-visible electronic survey data and establish local line of sight to primary, secondary and tertiary control. Users will be able to electronically process, interrogate and design horizontal alignments, export and produce contoured topographical drawings and set-out points accurately. The MS sub-capability will be used, primarily, for tasks coordinated by the Construction Supervision Cell (CSC) at unit level within 25 (CS) Engr Gp, 12 (FS) Engr Gp, and 170 (Infra Sp) Engr Gp. Tasks likely to be conducted by the MS capability include:

- (1) All tasks defined within the LS capability.
- (2) Road alignment and setting out.
- (3) As-built construction survey.
- (4) Hasty tactical airfield surface survey.

c. **Heavy Survey (HS).** HS will enable advanced surveyors (ME Surveyor Class 1) to conduct all tasks associated with the LS and MS capabilities and the additional ability to collect accurate coordinated electronic survey data in areas that are not inter-visible while working independently. HS will have the capability to undertake specialist tasks such as hydrographical, tunnelling and railway surveys. The HS sub-capability will primarily be used for tasks conducted by 170 (Infrastructure Support) Engineer Group and its subordinate STREs and, 12 (FS) Engr Gp force elements conducting detailed airfield support tasks. Tasks likely to be conducted by the HS capability include:

Version 9

- (1) All tasks defined within the LS and MS capabilities.
- (2) Hydrographic survey.
- (3) Subterranean infrastructure survey.
- (4) Permanent infrastructure construction setting out.
- (5) Construction site monitoring survey.
- (6) Permanent airfield operating surfaces survey.

1.6 SYSTEM CONTEXT

1.6.1 Capability Users. In accordance with the approved CONEMP and URD, the GROMA capability will be used in support of pan-Defence engineer tasks by a wide range of military personnel with varying degrees of experience and training. The LS capability will be used by military personnel required to provide basic survey data for use on Combat Engineer and simple construction tasks. The MS capability will be employed by specialist trades, as listed in the capability model, to provide enhanced survey data in support of military engineer specialist trade construction tasks. The HS capability will provide detailed, highly accurate geospatial data to specialist Military Survey engineers in line with industry best practice in support of Force Support and specialist Infrastructure Support construction capability.

1.6.2 Interoperability.

- a. **Military surveyors**, equipped through Project GROMA, will support joint operations within the land and littoral environment. The capability will be fully compliant with all recognised industry file formats and data transfer standards, such as ASCII, CSV, and DXF. The capability must allow data from sources not currently held by military surveyors, such as high-definition 3D scanning, Unmanned Aerial Vehicles (UAV) and Light Detection and Ranging (LIDAR) scanning, to be processed and manipulated into deliverable products. These technologies are already in use by UK Defence agencies and its partners.
- b. **Survey Processing Software.** The survey processing software must be fully interoperable with all Autodesk products with no loss of information including CAD layers, system codes. Compatible with standard file formats in order to process data from other instruments.

1.6.3 Relationship to other endorsed concepts and associated capabilities. The GROMA solution will be required to operate in collaboration with the following projects, all of which are likely to enter service post GROMA IOC:

- a. **Project HECTOR.** This capability will provide military engineers undertaking permanent infrastructure support tasks with the digital, technical design and management construction tools required to deliver infrastructure works safely and efficiently.
- b. **Rapid Infra Assessment.** Modernised digital data collection tools currently under innovation and concept development research activity.

Version 9

- c. **New Style of IT (Deployed) – NSOIT(D).** Deployable IT computer systems for personnel operating in the tactical field environment.
- d. **Project MORPHEUS.** Defence's digital, modernised, tactical and operational communications system.
- e. **Deployable Infrastructure Programme 2028 (DI 2028).** DI2028 will deliver a capability for Defence that assures the generation and operation of critical Infrastructure to support life, mobility and counter-mobility in the manoeuvre and static operational environments. It will also support resilience, Defence support to the Home Base and routine, enduring training activities. It will be delivered through an integrated, pre-planned and affordable mix of regular and reserve military, civilian and industry resources by 2028.
- f. **Geospatial Survey Equipment.** Geospatial survey equipment develops the understanding and interpretation of the 3D physical battlespace.

1.6.4 **Additional user dependencies.** Project GROMA will enable the collection of data that may be distributed at OFFICIAL SENSITIVE level to a wide range of partners. These include:

- a. Specialist Team Royal Engineers – Military Design Authority.
- b. NATO and United Nations partners.
- c. Contracted civilian engineer design consultancies.
- d. Approved MOD construction sub-contractors.

1.6.5 **Capability Stakeholders.** These include:

- a. Field Army.
- b. JFIG.
- c. HQ RSME.
- d. 8 Engineer Brigade.
- e. 170 (Infrastructure Support) Engineer Group.
- f. 12 (Force Support) Engineer Group.
- g. 25 (Close Support) Engineer Group.
- h. 42 (Geo) Engineer Regiment.
- i. Training Delivery Authority (TDA) – Land Warfare Centre (LWC).

1.7 APPLICABLE ACQUISITION STRATEGY

1.71. GROMA will support operations across the full spectrum of military engineering, from Close Support to Infrastructure Support activities. Defence must also balance the scale of its investment to deliver a capability that can meet both the most likely and most challenging demand signal within an affordable cost profile. This requires a flexible business model and

Version 9

training solution that will allow an agile increase in capability and scale as Defence outputs adjust to operational need or updated strategic direction.

1.8 REQUIRED IOC AND FOC DATES

1.8.1 Initial Operating Capability (IOC). Sufficient survey capability delivered to support FE@R&S Bde; will be declared once 2 x LS, 2 x MS and 2 x HS sets are held at readiness for deployment alongside trained users in accordance with AHQ and Fd Army priorities. Planning assumption for IOC – 01 Nov 2023.

Capability Milestone	Required Date	Measure of Effectiveness	High Level Measures of Performance	
IOC	01 Nov 2023	Assets held ready to deploy in support of FE@R&S	Training	4 x Sub-Units resourced with trained personnel able to use the LS, MS and HS capabilities on deployed operations worldwide.
			Equipment	The following sets of equipment, including all ancillaries and C-Class items, distributed to trained users and available for deployment at high readiness in accordance with AHQ priorities: 2 x LS, 2 x MS, 2 x HS
			Personnel	Priority users trained, structured and organised, at high readiness for deployment on operations worldwide.
			Information	All high-level information requirements to be delivered by IOC.
			Doctrine	ME Survey doctrine updated to reflect enhanced GROMA system capabilities.
			Organisational	4 x Sub-Units converted by IOC.
			Infrastructure	Infrastructure converted to store and secure the following sets of equipment: 2 x LS 2 x MS 2 x HS
			Logistics	Equipment cleared for transport via all military logistic lift platforms, including strategic air and rotary wing platforms, prior to IOC.
			Security	Defence able to store, track and account for issued equipment.
			Interoperability	GROMA equipment able to transfer collected data files to

Version 9

				in-service engineer design and management IT systems.
			Resilience	Equipment capable of being used on deployed operations with minimal logistic support and spares or replacement components available for demand.

Table 2- Initial Operating Capability

1.8.2 Full Operating Capability (FOC). All Project GROMA procurement phase 1 capability has been delivered. FOC will be declared once the full Land Fleet Requirement (LFR) is distributed to trained users and is available for deployment in accordance with AHQ and Fd Army defined capability requirements. Planning Assumption for FOC – 01 Aug 2024.

Capability Milestone	Required Date	Measure of Effectiveness	High Level Measures of Performance	
FOC	01 Nov 2024	All assets held at readiness.	All	All military surveyor personnel trained on the new equipment solution and the full Land Fleet Requirement (LFR) procured and distributed in accordance with project 3OA's.

Table 3- Full Operating Capability

1.9 PLANNED OSD

1.9.1 The OSD for the GROMA capability, due to the rate of industry technology developments in the survey field, is set at 2030.

1.10 ASSUMPTIONS

1.10.1 A full list of assumptions will be held on ADAM as Third Order Assumptions (3OAs) and the Master Data Assumptions List (MDAL) at the Programme level.

a. Defence Tasks.

(1) Future Strategic Defence and Security Reviews (SDSR) may change the specific nature of tasks but will not remove the requirement for GROMA. The requirements and subsequent project work for GROMA are based on DSD 16. Future DSDs may affect the quantity of each GROMA capability required, readiness levels, the duration of deployment, etc. However, it will not affect the requirement for GROMA as a capability.

(2) GROMA will provide adequate equipment to support all routine Defence activity, including:

(a) UK CT0 – CT4 training events.

(b) All Joint Force Enabling Exercises (JFEE's) and overseas construction activity.

(c) UK based planned trade training activity.

Version 9

- (d) Pre-Deployment Training (PDT) activities.
 - (e) Operational deployments
- b. **Operational Effectiveness.** The provision of a replacement capability will have no detrimental effect on operational effectiveness.
- c. **Lifespan.**
 - (1) Envisaged capability lifespan of GROMA will be 8-year service life.
 - (2) IOC will be declared once 2 x LS, 2 x MS and 2 x HS sets are held at readiness for deployment alongside trained users in accordance with AHQ and Fd Army priorities. Assumed Feb 2024.
 - (3) FOC will be declared once the full Land Fleet Requirement (LFR) is distributed to trained users and is available for deployment in accordance with AHQ and Fd Army defined capability requirements. Assumed Nov 2024.
 - (4) The GROMA solution will remain in-service until an OSD of 2030.
 - (5) GROMA 2 will replace GROMA and deliver IOC by NLT 2030.
 - (6) GROMA equipment may have its service life extended beyond 2030 if the equipment remains fit for purpose and is economically viable
 - (7) ME Survey tasks will not change before the scheduled OSD.
- d. **Refurbishment.** GROMA shall be able to operate for up to 24 months without any requirement for refurbishment.
- e. **Priorities.** The fielding plan will deliver equipment to users in accordance with both Fd Army priorities and directed readiness timelines as outlined in the Army Defence Plan and Army Readiness Order 19 (ARO 19).
- f. **Procurement.** GROMA is not a candidate for Private Funding Initiative (PFI).
- g. **Delivery Strategy.**
 - (1) GROMA delivery strategy will include through life support, including design, management, construction, operation, maintenance and disposal.
 - (2) The GROMA capability sponsor is Capability Ground Manoeuvre (Mvr Sp) through life.
 - (3) GROMA equipment will be managed through life by Operational Infrastructure (DE&S) and Operational Infrastructure Through Life Support (OI TLS).
 - (4) The GROMA solution will exploit capability improvement opportunities, such as the integration of LIDAR scanners and photogrammetry cameras for the collect function, where identified and considered deliverable within the approved financial profile.

Version 9

h. **Equipment Ownership.** GROMA may be met with a combination of support solutions, with most of the fleet held by the User in line with the User's readiness, the remainder of the fleet held in depot as a repair pool held at R8 (90 days NTM).

i. **Training.**

(1) GROMA through life training will be provided through the Defence Schools. All Class 3 – 1 initial trade training will be provided through the RSME

(2) Trained operators of the current survey solution will require uplift training on the new system once identified.

(3) Conversion training on new equipment will be provided by contractor as a minimum of Train-the-Trainer (T3) packages. A LORA will be required to enable training schools to respond to PASE.

(4) A Training Needs Analysis (TNA) will ensure that all personnel required to use the capability in the execution of their duties receive appropriate training.

j. **Personnel.**

(1) The capability will not increase the manpower burden on Defence. Assume extant Career Employment Groups will endure.

(2) The user centre of excellence for GROMA capability will be 170 (Infra Sp) Engr Gp based at Chetwynd Barracks, Chilwell.

k. **CBRN.** GROMA may operate in a CBRN environment but will not provide the User specialist protection from CBRN threats or be protected against CBRN threats itself. Protection will be provided to the soldier through PPE and through decontamination protocols.

l. **Power Interface.** GROMA will not purchase its own power generation systems so will need to interface with host nation power and Defence general purpose power sources (MAN-P and or SIP in the deployed environment). It will have power efficiency measures placed upon it, therefore may use renewable sources and/or power storage. Interoperability will be managed through LOSA compliance.

m. **Regulatory Compliance.**

(1) GROMA will comply with appropriate and applicable regulations in the provision of the capability.

(2) The GROMA solution must meet all UK environmental and Health and Safety regulatory requirements

(3) The GROMA solution must meet all Defence policy requirements.

1.11 FREEDOMS (F), CONSTRAINTS (C) and LIMITATIONS (L)

1.11.1 The following Freedoms (F) and Constraints (C) exist in the delivery of GROMA:

- a. GROMA shall consist of an integrated capability that enables users to work simultaneously with Total Stations (TS) and Global Navigation Satellite

Version 9

System (GNSS). **(C)**

- b. All updated and enhanced survey equipment must be rated at **IP 55** or above of the International Electrotechnical Commission (IEC) standard 60529 or EN 60529 to meet waterproof requirements when being used in tropical zones with high humidity and heavy rainfall weather conditions. **(C)**
- c. GROMA data processing software must be delivered in a single software platform capable of processing both TS and GNSS data under a minimum of licences. **(C)**
- d. GROMA must enable users to operate collaboratively alongside current in-service software systems. **(C)**
- e. **Size Weight and Power (SWaP).** The GROMA SWaP burden must be minimised, and capability enhancements fully justified against any increased burden at the point of use. The dismounted user sees an increased burden as impracticable whilst increasing operating risk for those involved in activities in the direct fire zone. **(C)**
- f. **Land Platforms.** The advent of the Land Open Systems Architecture provides considerable opportunity for reducing some of the cost and complexity of integrating GROMA into base infrastructure management solutions. **(F)**

1.12 DELIVERY PRIORITIES

1.12.1 Project GROMA deliverables are to be prioritised as follows to minimise capability risk arising through equipment obsolescence²:

- a. **GNSS equipment.** Operational Infrastructure (OI) Infrastructure Team shall deliver 60 sets of GNSS equipment in procurement phase 1³. Each GNSS equipment set shall consist of a rover and base with a minimum IP Rating of IP 55 EN 60529 standard.
- b. **TS equipment.** OI Infrastructure Team shall deliver 66 TS equipment in procurement phase 1. TS equipment shall consist of an integrated system capability to enable users to work simultaneously with TS and GNSS. The TS equipment must have a minimum IP Rating of IP 55 EN 60529 standard.
- c. **Data processing software.** OI Infrastructure Team shall deliver 84 data processing licences in procurement phase 1, with the addition of 6 educational licences for use in the training environment.
- d. **Training.** Training to the Holdfast Training Services (HTS) Instructors and Corps surveyors will be delivered as a component part of Project GROMA.

² N&Ns for all surveying assets will be confirmed through the Project GROMA 3OAs.

³ Procurement phase 1 is defined as the period from contract let until FOC

Version 9

- e. **Echo Sounder.** OI Infrastructure Team shall deliver Echo sounders for hydrographic survey post IOC and in advance of FOC.

1.13 STRUCTURE OF SYSTEM REQUIREMENTS

1.13.1 **Details of Structure within Parts 2 & 3.** Each System Requirement within Part 2 & 3 is laid out in a hierarchal structure and has several attributes, of which the most significant are as follows:

- a. **System Requirement Identification (SR ID).** This provides a unique identifier to each system requirement, enabling all parties to be able to identify and discuss specific requirements with certainty.
- b. **Object Number** – Shows the section number for each section of the requirements table.
– Shows the section heading for each section of the requirements table.
- c. **System Requirement** - Describes a function in qualitative terms.
- d. **Justification** - The justification for each statement outlines the reason why the requirement is a user need. This draws on the CONEMP and high-level concepts/doctrine for justification.
- e. **Priority** – Gives the priority of the System Requirement. The priority of an SR must not be higher than its highest-priority parent URs, whilst each UR must be supported by at least one SR of equal priority to itself. Definitions of priorities are given in Table 4.
- f. **Measure of Performance (MoP)** - Specifies the performance criteria in terms of the minimum (“**Threshold**”), and aspirational (“**Objective**”) boundaries required.
- g. **Verification Criteria** – The Verification methods used to confirm fulfilment of System Requirements are as described in Table 5.
- h. **Status** - When initially added to the SRD each Requirement is allocated as a ‘candidate’ for assessment. Whilst the SRD is still in the pre-Initial Gate stage it will show all requirements as ‘Candidate’. Initial Gate will formally baseline them as ‘Requirements’. They may later be ‘traded’ or ‘cancelled’ but should never be deleted. Status definitions are described in Table 6.
- i. **Remarks** - Supplementary information providing further clarification were felt necessary.
- j. **Parent UR** – Reference to the parent UR to maintain the ‘golden thread’.

1.13.2 **Requirement Priorities.** Requirement priorities within this SRD have been tailored to support GROMA. The categories of system requirement priority are characterised as follows.

Version 9

All requirements in Part 3 of the SRD are assigned priorities in accordance with the definitions in Table 4.

Priority Code	Definition	Meaning	Trade Authority
M	Mandatory	A system requirement, generally a User Constraint, designated as such for legal or safety reasons and which may not be traded.	Safety and legislative requirements, non-tradable
Key	Key System Requirement (KSR)	A system requirement that is driven by a Key User Requirement. A KSR may not be traded below the Threshold without major implications for capability / project feasibility	Capability cannot be accepted into service unless they are met (IAC approval to trade)
1	High Priority	Highest priority reflecting a primary system requirement that may drive design and/or cost and which may tolerate acceptable levels of risk to achieve the aim.	Senior Responsible Owner (SRO)
2	Medium Priority	A secondary system requirement, which may have design and/or cost implications but will not tolerate project risk to achieve the aim.	OI TL authority following consultation with AD Mil Eng Cap and AD Eqpt Plans
3	Low Priority	Lowest priority reflecting a tertiary system requirement, which may have design implications but will not have cost implications and which will not tolerate project risk to achieve the aim.	Senior Requirements Manager authority to trade

Table 4 – System Requirement Priorities

1.13.3 Verification Criteria.

Verification Code	Verification Method	Description
AA	Acceptance Audit	The examination of evidence from any source (including read across from other systems or environments) that provides adequate assurance that a requirement will be met without necessitating further tests or trials. (Note: The nature of the audit must be agreed at the outset with the Acceptance Authority.)
MS	Modelling & Simulation	The provision of evidence from numerical models or simulated environments that gives increased confidence that a requirement will be met. (Note: The numerical model or simulation used must be agreed at the outset with the Acceptance Authority.)

Version 9

DI	Design Inspection	The provision of evidence at the design stage, usually in the course of a design review, or series of design reviews, that gives increased confidence that a requirement will be met. The evidence presented may include analysis, calculations, plans, physical models, mock-ups, drawings, virtual (computer generated) objects or other forms of realisation.
IC	Information or Certification	The provision of a certificate of conformance or a comparable form of verified information that gives assurance that a requirement has been met.
II/T	Installation Inspection or Test	A visual test to verify that the build standard of an article is in accordance with the verified design.
FT	Functional Trial	A trial of hardware and/or software carried out in controlled conditions to provide evidence that a requirement has been met. May be whole equipment or element(s) thereof. May be conducted during development or on finished products. Nature and scope of Functional Trials to be agreed with the Acceptance Authority at the Outset. Each component system may require more than one Functional Trial.
IT	Interoperability Trial	A trial whose primary objective is to provide evidence of the effectiveness of an interface with other systems or forces.
UT	User Trial	A trial of completed prototypes or production standard equipment, in representative operating conditions to provide evidence that a requirement has been met.
IST	In Service Trial	Evidence provided during the in-service life of the system to demonstrate that a requirement is still being met (Note: Normally reserved for R&M and Interoperability requirements).

Table 5 – Verification Criteria

1.13.4 Status of System Requirements. All requirements are assigned a status in accordance the definitions contained in Table 6.

Status	Meaning
Candidate	On first addition to the SRD, or re-instatement.
Traded	If the requirement is still valid but satisfaction is deferred indefinitely, typically because of trade-off activity.
Transferred	If relocated out of the SRD into another SRD, typically because of trade-off activity.
Cancelled	If no longer valid because the operational need has changed.

Table 6 – Status definitions

Version 9

3.1 FUNCTIONAL REQUIREMENTS**3.1.1 Performance****3.1.1.1 Hardware**

- 3.1.1.1.1 Distance Measurer
- 3.1.1.1.2 Automatic Level
- 3.1.1.1.3 Digital Level
- 3.1.1.1.4 Rotating Laser Level
- 3.1.1.1.5 Total Station
- 3.1.1.1.6 Field Controller
- 3.1.1.1.7 Two Way Radios
- 3.1.1.1.8 GNSS
- 3.1.1.1.9 Echo Sounder
- 3.1.1.1.10 LIDAR Scanner

3.1.1.2 Software

- 3.1.1.2.1 Survey Processing Software

3.1.2 Users

- 3.1.2.1 Operating Manpower
- 3.1.2.2 Remote Function

3.1.3 Power

- 3.1.3.1 Mains Power
- 3.1.3.2 Batteries

3.1.4 Operating Environment**3.1.4.1 Climatic**

- 3.1.3.1.1 Hot Climates
- 3.1.3.1.2 Humid Climates
- 3.1.3.1.3 Cold Climates
- 3.1.3.1.4 Maritime Climates

3.1.4.2 Geographic**3.1.4.3 Terrain****3.1.4.4 Resilience**

- 3.1.4.4.1 Dust and Sand
- 3.1.4.4.2 Water
- 3.1.4.4.3 Salt Laden Atmospheres
- 3.1.4.4.4 Mould
- 3.1.4.4.5 Freeze / Thaw
- 3.1.4.4.6 Icing
- 3.1.4.4.7 Acid Corrosion
- 3.1.4.4.8 Fluid Contamination
- 3.1.4.4.9 Drops and Shocks

3.1.5 Deploy

- 3.1.5.1 Readiness
- 3.1.5.2 Set-Up & Recovery
- 3.1.5.3 Sea Deployment
- 3.1.5.4 Air Deployment
 - 3.1.5.4.1 Fixed Wing
 - 3.1.5.4.2 Rotary Wing
- 3.1.5.5 Ground Deployment
 - 3.1.5.5.1 Road
 - 3.1.5.5.2 Rail
 - 3.1.5.5.3 Man Portability
- 3.1.5.6 Packaging
 - 3.1.5.6.1 Hard Transit Case
 - 3.1.5.6.2 Soft Transit Case

Version 9

3.2 NON-FUNCTIONAL REQUIREMENTS**3.2.1 Interoperability**

- 3.2.1.1 Modularity
- 3.2.1.2 Current Defence Capabilities
- 3.2.1.3 Future Defence Capabilities

3.2.2 System Management

- 3.2.2.1 Built in Test (BIT)

3.2.3 Sustain

- 3.2.3.1 Integrated Logistics & Support (ILS)
 - 3.2.3.1.1 Storage
 - 3.2.3.1.2 Service Life
 - 3.2.3.1.3 Logistic Support
 - 3.2.3.1.4 Complete Equipment Schedule (CES)
 - 3.2.3.1.5 Publications
 - 3.2.3.1.6 Future Proofing
 - 3.2.3.1.7 Asset Tracking and Security
- 3.2.3.2 Availability, Reliability, Maintainability (ARM)
 - 3.2.3.2.1 General
 - 3.2.3.2.2 Skills
 - 3.2.3.2.3 Corrective Maintenance
 - 3.2.3.2.4 Preventative Maintenance
- 3.2.3.3 In-Service Support

3.2.4 Prepare

- 3.2.4.1 Training

3.2.5 Protect

- 3.2.5.1 Emissions
- 3.2.5.2 Security

3.2.6 Human Factors Integration**3.2.7 Safety & Environmental****3.2.8 Legislation & Compliance****3.2.9 Disposal**

Version 9

PART 2**2. KEY SYSTEM REQUIREMENTS**

There are currently 55 proposed Candidate KSR's as outlined in the table below.

SR ID	Object Number	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-3			Light Medium Heavy	All	The System shall enable military survey tasks.					Candidate		1 2
SR-32			Light	Digital Level	The Digital Level shall be able to take accurate measurements.					Candidate		1 2
SR-63			Light	Rotating Laser Level	The laser shall be compliant with safety legislation.					Candidate		1 2
SR-87			Medium Heavy	Total Station	The Total Station shall be able to take record and store measurements.					Candidate		1 2
SR-88			Medium Heavy	Total Station	The Total Station shall be able to import and export data.					Candidate		1 2
SR-90			Medium Heavy	Total Station	The Total Station and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-108			Medium Heavy	Field Controller	The Field Controller shall be able to take record and store measurements.					Candidate		1 2
SR-109			Medium Heavy	Field Controller	The Field Controller shall be able to import and export data.					Candidate		1 2
SR-131			Heavy	GNSS	The GNSS and all its ancillaries shall be compatible with the other Medium and Heavy Survey sub-systems.					Candidate		1 2
SR-132			Heavy	GNSS	The GNSS and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-141			Heavy	GNSS	The GNSS shall be able to take record and store measurements.					Candidate		1 2
SR-194			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.					Candidate		1 2
SR-195			Medium Heavy	Survey Processing Software	Survey Processing Software shall be delivered in a single software platform.					Candidate		1 2
SR-207			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-209			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise, and manage survey data and products.							1 2

Version 9

SR ID	Object Number	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-229			Light Medium Heavy	All	The System shall be able to operate for a prolonged period without access to in-service military power generation systems.					Candidate		3 17
SR-232			Light Medium Heavy	All	Batteries supplied with the System must be safe for transportation.					Candidate		6 7
SR-233			Light Medium Heavy	All	Batteries supplied with the System must be safe for transportation.					Candidate		6 7
SR-237			Light Medium Heavy	All	The System shall be able to operate in hot, dry climates.					Candidate		9
SR-238			Light Medium Heavy	All	The System shall be able to be stored in hot, dry climates without degradation.					Candidate		9
SR-240			Light Medium Heavy	All	The System shall be able to operate in hot & humid climates.					Candidate		9
SR-241			Light Medium Heavy	All	The System shall be able to be stored in hot & humid climates without degradation.					Candidate		9
SR-243			Light Medium Heavy	All	The System shall be able to operate in cold climates.					Candidate		9
SR-244			Light Medium Heavy	All	The System shall be able to be stored in cold climates without degradation.					Candidate		9
SR-246			Light Medium Heavy	All	The System shall be able to operate in maritime climates.					Candidate		9
SR-247			Light Medium Heavy	All	The System shall be able to be stored in maritime climates without degradation.					Candidate		9
SR-257			Light Medium Heavy	All	The System shall be resistant to the effects of Dust and sand					Candidate		9
SR-259			Light Medium Heavy	All	The system shall remain safe, with no drop-in performance, when exposed to Driving Rain					Candidate		9
SR-260			Light Medium Heavy	All	The system shall remain safe, with no drop-in performance, when exposed to precipitation.					Candidate		9
SR-265			Medium Heavy	Total Station	The Total Station shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-293			Light Medium Heavy	All	The System shall be capable for Operators to conduct accuracy and calibration checks and or adjustments.					Candidate		1 2

SR ID	Object Number	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-297			Light Medium Heavy	All	The System must comply with maritime dangerous cargo regulations.					Candidate		6 7 15
SR-298			Light Medium Heavy	All	The System shall be able to be transported for deployment by sea without degradation.							6 7
SR-302			Light Medium Heavy	All	The System must comply with commercial air cargo regulations and legislation							6 7 15
SR-304			Light Medium Heavy	All	The System shall be able to be transported by military Fixed Wing aircraft without degradation.							6 7
SR-308			Light Medium Heavy	All	The System shall be able to be transported by military Rotary Wing aircraft without degradation.							6 7
SR-313			Light Medium Heavy	All	The System must comply with commercial vehicles cargo regulations and legislation.							6 7 15
SR-314			Light Medium Heavy	All	The System shall be able to be transported by military vehicle without degradation.							6 7
SR-317			Light Medium Heavy	All	The System must comply with rail transport regulations.							6 7 15
SR-318			Light Medium Heavy	All	The System shall be able to be transported by rail without degradation.							6 7
SR-322			Light Medium Heavy	All	The System shall have modular components that are demountable and man-portable.							6 7
SR-350			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.							8
SR-430			Light Medium Heavy	All	The training solution shall comply with MoD training policies.							4 5
SR-453			Light Medium Heavy	All	The System shall be safe by design (NOT training) and have a safe system of work. System is safe during all operations:- a. Storage and handling b. Deployment c. Assembly; d. Operation; e. Strike and repack; f. Maintenance; g. Decommissioning; h. Dismantling; i. Redeployment; j. Disposal.							15 16

Version 9

SR ID	Object Number	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-454			Light Medium Heavy	All	The System design shall be compliant with safety policies and guidance.							15 16
SR-455			Light Medium Heavy	All	Safety must be managed in accordance with MOD policy.							15 16
SR-456			Light Medium Heavy	All	The System shall shut down in a fail-safe manner in the event of a failure.							15 16
SR-457			Light Medium Heavy	All	The supplier shall identify any Specialist Personal Protective Equipment required for:							
SR-458			Light Medium Heavy	All	Any lasers used by the System shall be compliant with safety legislation.							
SR-460			Light Medium Heavy	All	The System must comply with appropriate safety regulations.							
SR-461			Light Medium Heavy	All	The System must conform with European Directives.							
SR-462			Light Medium Heavy	All	The System must comply with health and safety requirements.							
SR-463			Light Medium Heavy	All	The System shall comply with all relevant environmental regulations and legislation.							
SR-464			Light Medium Heavy	All	The System shall be capable of being disposed in accordance with the current legal and environmental requirements.							15 16
SR-466			Light Medium Heavy	All	The System and associated elements shall be capable of disposal by the authority safely and economically at the end of its in-service life.							15 16

3. SYSTEM REQUIREMENTS

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-1	3.1	FUNCTIONAL										
SR-2	3.1.1	PERFORMANCE										
SR-3			Light Medium Heavy	All	The System shall enable military survey tasks.					Candidate		1 2
SR-4	3.1.1.1	Hardware										

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-5	3.1.1.1.1	Distance Measurer										
SR-6			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-7			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-8			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements at a variety of ranges.					Candidate		1 2
SR-9			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-10			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-11			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-12			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-13			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-14			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-15			Light	Distance Measurer	The Distance Measurer shall be able to take accurate measurements					Candidate		1 2
SR-16			Light	Distance Measurer	The Distance Measurer shall be supplied with ancillaries to enable use.					Candidate		3 6 7 8
SR-17			Light	Distance Measurer	The Distance Measurer shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-18			Light	Distance Measurer	The operators will be able to use the Distance Measurer for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-19			Light	Distance Measurer	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-20	3.1.1.1.2	Automatic Level										
SR-21			Light	Automatic Level	The Automatic Level shall be able to take accurate measurements.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-22			Light	Automatic Level	The Automatic Level shall be able to take accurate measurements.					Candidate		1 2
SR-23			Light	Automatic Level	The Automatic Level shall be fitted with a Compensator.					Candidate		1 2
SR-24			Light	Automatic Level	The Automatic Level shall be fitted with a Compensator.					Candidate		1 2
SR-25			Light	Automatic Level	The Automatic Level shall be able to measure horizontal angles					Candidate		1 2
SR-26			Light	Automatic Level	The Automatic Level shall be able to measure horizontal angles					Candidate		1 2
SR-27			Light	Automatic Level	The Automatic Level shall be able to take accurate measurements at a variety of ranges.					Candidate		1 2
SR-28			Light	Automatic Level	The Automatic Level shall be able to take accurate measurements.					Candidate		1 2
SR-29			Light	Automatic Level	The Automatic Level shall be supplied with ancillaries to enable use.					Candidate		3 6 7 8
SR-30			Light	Automatic Level	The Automatic Level shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-31	3.1.1.1.3	Digital Level										
SR-32			Light	Digital Level	The Digital Level shall be able to take accurate measurements.					Candidate		1 2
SR-33			Light	Digital Level	The Digital Level shall be able to take accurate measurements.					Candidate		1 2
SR-34			Light	Digital Level	The Digital Level shall be able to take accurate measurements.					Candidate		1 2
SR-35			Light	Digital Level	The Digital Level shall be able to take accurate measurements.					Candidate		1 2
SR-36			Light	Digital Level	The Digital Level shall be fitted with a Compensator.					Candidate		1 2
SR-37			Light	Digital Level	The Digital Level shall be fitted with a Compensator.					Candidate		1 2
SR-38a			Light	Digital Level	The Digital Level shall be able to measure horizontal angles					Candidate		1 2
SR-39			Light	Digital Level	The Digital Level shall be able to take accurate measurements at a variety of ranges.					Candidate		1 2
SR-40			Light	Digital Level	The Digital Level shall be able to take accurate measurements at a variety of ranges.					Candidate		1 2
SR-41			Light	Digital Level	The Digital Level shall be able to take accurate measurements.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-42			Light	Digital Level	The Digital Level shall be able to take accurate measurements rapidly.					Candidate		1 2
SR-43			Light	Digital Level	The Digital Level shall be able to take record and store measurements.					Candidate		1 2
SR-44			Light	Digital Level	The Digital Level shall be able to take record and store measurements.					Candidate		1 2
SR-45			Light	Digital Level	The Digital Level shall be able to take record and store measurements.					Candidate		1 2
SR-46			Light	Digital Level	The Digital Level shall be able to export data.					Candidate		1 2
SR-47			Light	Digital Level	The operators will be able to use the Digital Level for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-48			Light	Digital Level	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-49			Light	Digital Level	The Digital Level shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-50			Light	Digital Level	The Digital Level shall be supplied with ancillaries to enable use.					Candidate		1 2
SR-51			Light	Digital Level	The Digital Level shall be capable of remote operation					Candidate		1 2
SR-52	3.1.1.1.4	Rotating Laser Level										
SR-53			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-54			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-55			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-56			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-57			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-58			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-59			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2
SR-60			Light	Rotating Laser Level	The Rotating Laser Level shall be able to create accurate levels and slopes.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-61			Light	Rotating Laser Level	The Rotating Laser Level shall provide an operator Interface.					Candidate		1 2
SR-62			Light	Rotating Laser Level	The operator shall be able to check accuracy and calibrate the Rotating Laser Level.					Candidate		1 2
SR-63			Light	Rotating Laser Level	The laser shall be compliant with safety legislation.					Candidate		1 2
SR-64			Light	Rotating Laser Level	The operators will be able to use the Rotating Laser Level for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-65			Light	Rotating Laser Level	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-66			Light	Rotating Laser Level	The Rotating Laser Level shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-67			Light	Rotating Laser Level	The Rotating Laser Level shall be supplied with ancillaries to enable use.					Candidate		3 6 7 8
SR-68			Light	Rotating Laser Level	The Rotating Laser Level shall be capable of remote operation					Candidate		3 6 7 8
SR-69	3.1.1.1.5	Total Station										
SR-70			Medium Heavy	Total Station	Measure horizontal and vertical angles accurately and swiftly.					Candidate		1 2
SR-71			Medium Heavy	Total Station	Measure distances accurately and swiftly.					Candidate		1 2
SR-72			Medium Heavy	Total Station	Measure distances accurately and swiftly.					Candidate		1 2
SR-73			Medium Heavy	Total Station	Measure distances accurately and swiftly.					Candidate		1 2
SR-74			Medium Heavy	Total Station	The Total Station shall be able to take accurate measurements at a variety of ranges.					Candidate		1 2
SR-75			Medium Heavy	Total Station	The operator shall be able to check accuracy and calibrate the Total Station					Candidate		1 2
SR-76			Medium Heavy	Total Station	The Total Station shall be fitted with a Compensator.					Candidate		1 2
SR-77			Medium Heavy	Total Station	The Total Station shall be fitted with a Compensator.					Candidate		1 2
SR-78			Medium Heavy	Total Station	The Total Station shall be fitted with a plummet.					Candidate		1 2
SR-79			Medium Heavy	Total Station	The Total Station shall be capable of Robotic/Automatic function.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-80			Medium Heavy	Total Station	The Total Station shall be capable of Robotic/Automatic function.					Candidate		1 2
SR-81			Medium Heavy	Total Station	The Total Station shall be capable of Robotic/Automatic function.					Candidate		1 2
SR-82			Medium Heavy	Total Station	The Total Station shall be capable of Robotic/Automatic function.					Candidate		1 2
SR-83			Medium Heavy	Total Station	The Total Station shall be capable of remote controlled function.					Candidate		1 2
SR-84			Medium Heavy	Total Station	The Total Station shall be able to take accurate measurements.					Candidate		1 2
SR-85			Medium Heavy	Total Station	The Total Station shall be able to take record and store measurements.					Candidate		1 2
SR-86			Medium Heavy	Total Station	The Total Station shall be able to take record and store measurements.					Candidate		1 2
SR-87			Medium Heavy	Total Station	The Total Station shall be able to take record and store measurements.					Candidate		1 2
SR-88			Medium Heavy	Total Station	The Total Station shall be able to import and export data.					Candidate		1 2
SR-89			Medium Heavy	Total Station	The Total Station shall be able to import/export data.					Candidate		1 2
SR-90			Medium Heavy	Total Station	The Total Station and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-91			Medium Heavy	Total Station	The Total Station and all its ancillaries shall be compatible with the other survey instruments.					Candidate		1 2
SR-92			Medium Heavy	Total Station	The operators will be able to use the Total Station for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-93			Medium Heavy	Total Station	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-94			Medium Heavy	Total Station	The Total Station shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-95			Medium Heavy	Total Station	The Total Station shall be provided with a means to carry hands free.					Candidate		3 6 7 8
SR-96			Medium Heavy	Total Station	The Total Station shall be supplied with onboard software and ancillaries to enable use.					Candidate		3 6 7 8
SR-97			Medium Heavy	Total Station	The Total Station shall be fitted with an on-board camera.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-98			Medium Heavy	Total Station	The Total Station shall be able to take record and store measurements.					Candidate		1 2
SR-99			Medium Heavy	Total Station	The Total Station shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-100			Medium Heavy	Total Station	The Total Station and all its ancillaries shall be capable of updating and enhancing.					Candidate		1 2
SR-101	3.1.1.1.7	Field Controller										
SR-102			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-103			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-104			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-105			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-106			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-107			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-108			Medium Heavy	Field Controller	The Field Controller shall be able to take record and store measurements.					Candidate		1 2
SR-109			Medium Heavy	Field Controller	The Field Controller shall be able to import and export data.					Candidate		1 2
SR-110			Medium Heavy	Field Controller	The Field Controller shall be able to import/export data.					Candidate		1 2
SR-111			Medium Heavy	Field Controller	The Field Controller and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-112			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-113			Medium Heavy	Field Controller	The Field Controller shall be able operate the Survey Processing Software to import, export, process, store, manage, edit and use the survey data.					Candidate		1 2
SR-114			Medium Heavy	Field Controller	The Field Controller shall be able to remotely control the systems.					Candidate		1 2
SR-115			Medium Heavy	Field Controller	The Field Controller shall be able to remotely control the survey					Candidate		1 2
SR-116			Medium Heavy	Field Controller	The Field Controller shall be supplied with ancillaries to enable use.					Candidate		3 6 7 8
SR-117			Medium Heavy	Field Controller	The Field Controller shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-118			Medium Heavy	Field Controller	The Field Controller shall be provided with a soft transit case (rucksack).					Candidate		3 6 7 8
SR-119			Medium Heavy	Field Controller	The operators will be able to use the Field Controller for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-120			Medium Heavy	Field Controller	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-121	3.1.1.1.8	Two Way Radios										
SR-122			Medium Heavy	Two Way Radios	The Two-Way Radios shall be service approved.					Candidate		1 2
SR-123			Medium Heavy	Two Way Radios	The Two-Way Radios shall be able to operate at distance.					Candidate		1 2
SR-124			Medium Heavy	Two Way Radios	The Two-Way Radios shall be able to operate on multiple channels.					Candidate		1 2
SR-125			Medium Heavy	Two Way Radios	The Two-Way Radios shall be able to be operated hands free.					Candidate		1 2
SR-126			Medium Heavy	Two Way Radios	The Two-Way Radios shall provide an operator Interface.					Candidate		1 2
SR-127			Medium Heavy	Two Way Radios	The operators will be able to use the Two-Way Radios for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-128			Medium Heavy	Two Way Radios	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-129			Medium Heavy	Two Way Radios	The Two-Way Radio shall be provided with a hard transit case.					Candidate		3 6

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
												7 8
SR-130	3.1.1.1.9	GNSS										
SR-131			Heavy	GNSS	The GNSS and all its ancillaries shall be compatible with the other Medium and Heavy Survey sub-systems.					Candidate		1 2
SR-132			Heavy	GNSS	The GNSS and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-133			Heavy	GNSS	The GNSS shall track al satellites, signals and constellations.					Candidate		1 2
SR-134			Heavy	GNSS	The GNSS shall determine position accurately and swiftly.					Candidate		1 2
SR-135			Heavy	GNSS	The GNSS shall determine position accurately and swiftly.					Candidate		1 2
SR-136			Heavy	GNSS	The GNSS shall determine position accurately and swiftly.					Candidate		1 2
SR-137			Heavy	GNSS	The GNSS shall determine position accurately and swiftly. The GNSS shall be able to compensate for tilt.					Candidate		1 2
SR-138			Heavy	GNSS	The GNSS shall determine position accurately and swiftly.					Candidate		1 2
SR-139			Heavy	GNSS	The GNSS shall be able to take record and store measurements.					Candidate		1 2
SR-140			Heavy	GNSS	The GNSS shall be able to take record and store measurements.					Candidate		1 2
SR-141			Heavy	GNSS	The GNSS shall be able to take record and store measurements.					Candidate		1 2
SR-142			Heavy	GNSS	The GNSS shall be able to import/export data.					Candidate		
SR-143			Heavy	GNSS	The GNSS shall be able to import/export data.					Candidate		1 2
SR-144			Heavy	GNSS	The operators will be able to use the GNSS for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-145			Heavy	GNSS	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-146			Heavy	GNSS	The GNSS shall be supplied with ancillaries to enable use.					Candidate		1 2 3 6 7 8

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-147			Heavy	GNSS	The GNSS shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-148												
SR-149	3.1.1.1.10	Echo Sounder								Candidate		
SR-150			Heavy	Echo Sounder	The Echo Sounder shall be able to measure depths accurately.					Candidate		1 2
SR-151			Heavy	Echo Sounder	The Echo Sounder shall be able to measure depths accurately.					Candidate		1 2
SR-152			Heavy	Echo Sounder	The Echo Sounder shall be able to measure depths accurately.					Candidate		1 2
SR-153			Heavy	Echo Sounder	The Echo Sounder shall be able to measure depths accurately.					Candidate		1 2
SR-154			Heavy	Echo Sounder	The Echo Sounder shall be able to measure depths accurately.					Candidate		1 2
SR-155			Heavy	Echo Sounder	The Echo Sounder shall be able to measure depths accurately. Compensate for heave, pitch, roll and tide.					Candidate		1 2
SR-156			Heavy	Echo Sounder	The Echo Sounder shall be able to take record and store measurements.					Candidate		1 2
SR-157			Heavy	Echo Sounder	The Echo Sounder shall be able to take record and store measurements.					Candidate		1 2
SR-158			Heavy	Echo Sounder	The Echo Sounder shall be able to take record and store measurements.					Candidate		1 2
SR-159			Heavy	Echo Sounder	The Echo Sounder shall be able to import/export data.					Candidate		1 2
SR-160			Heavy	Echo Sounder	The Echo Sounder and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-161			Heavy	Echo Sounder	The Echo Sounder and all its ancillaries shall be compatible with the other Medium and Heavy Survey sub-systems.					Candidate		1 2
SR-162			Heavy	Echo Sounder	The Echo Sounder shall be able to import/export data.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-163			Heavy	Echo Sounder	The operators will be able to use the Echo Sounder for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-164			Heavy	Echo Sounder	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-165			Heavy	Echo Sounder	The Echo Sounder shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-166			Heavy	Echo Sounder	The Echo Sounder shall be supplied with ancillaries to enable use.					Candidate		3 6 7 8
SR-167	3.1.1.1.11	LIDAR Scanner										
SR-168			Heavy	LIDAR Scanner	Measure distances accurately and swiftly.					Candidate		1 2
SR-169			Heavy	LIDAR Scanner	Measure distances accurately and swiftly.					Candidate		1 2
SR-169			Heavy	LIDAR Scanner	Measure distances accurately and swiftly.					Candidate		1 2
SR-170			Heavy	LIDAR Scanner	Measure distances accurately and swiftly.					Candidate		1 2
SR-171			Heavy	LIDAR Scanner	Measure distances accurately and swiftly.					Candidate		1 2
SR-172			Heavy	LIDAR Scanner	The LIDAR Scanner shall be fitted with a Compensator.					Candidate		1 2
SR-173			Heavy	LIDAR Scanner	Measure horizontal and vertical angles accurately and swiftly.					Candidate		1 2
SR-174			Heavy	LIDAR Scanner	Measure distances accurately and swiftly.					Candidate		1 2
SR-175			Heavy	LIDAR Scanner	The LIDAR Scanner shall be fitted with a plummet.					Candidate		1 2
SR-176			Heavy	LIDAR Scanner	The LIDAR Scanner shall be easy to operate					Candidate		1 2
SR-177			Heavy	LIDAR Scanner	The operator shall be able to check accuracy and calibrate the LIDAR Scanner					Candidate		1 2
SR-178			Heavy	LIDAR Scanner	The LIDAR Scanner shall be capable of remote-controlled function.					Candidate		1 2
SR-179			Heavy	LIDAR Scanner	The LIDAR Scanner shall be able to take record and store measurements.					Candidate		1 2
SR-180			Heavy	LIDAR Scanner	The LIDAR Scanner shall be able to take record and store measurements.					Candidate		1 2
SR-181			Heavy	LIDAR Scanner	The LIDAR Scanner shall be able to take record and store measurements.					Candidate		1 2
SR-182			Heavy	LIDAR Scanner	The LIDAR Scanner shall be able to import/export data.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-183			Heavy	LIDAR Scanner	The LIDAR Scanner and all its ancillaries shall be compatible with Survey Processing Software.					Candidate		1 2
SR-184			Heavy	LIDAR Scanner	The LIDAR Scanner and all its ancillaries shall be compatible with the other Medium and Heavy Survey sub-systems.					Candidate		1 2
SR-185			Heavy	LIDAR Scanner	The LIDAR Scanner shall be able to import/export data.					Candidate		1 2
SR-186			Heavy	LIDAR Scanner	The operators will be able to use the LIDAR Scanner for a prolonged period without access to in-service military power generation systems.					Candidate		3 6 7 8
SR-187			Heavy	LIDAR Scanner	The System shall be able to re-charge any powered elements of the system using in-service military power generation systems and civilian power supplies.					Candidate		3 6 7 8
SR-188			Heavy	LIDAR Scanner	The LIDAR Scanner shall be provided with a hard transit case.					Candidate		3 6 7 8
SR-189			Heavy	LIDAR Scanner	The LIDAR Scanner shall be supplied with ancillaries to enable use.					Candidate		3 6 7 8
SR-190			Heavy	LIDAR Scanner	The LIDAR Scanner shall be fitted with an on-board camera.					Candidate		1 2
SR-191			Heavy	LIDAR Scanner	The LIDAR Scanner shall be able to take record and store measurements.					Candidate		
SR-192	3.1.1.2	SOFTWARE										
SR-193	3.1.1.2.1	Survey Processing Software								Candidate		
SR-194			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.					Candidate		1 2
SR-195			Medium Heavy	Survey Processing Software	Survey Processing Software shall be delivered in a single software platform.					Candidate		1 2
SR-196			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.					Candidate		1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-197			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.					Candidate		1 2
SR-198			Medium Heavy	Survey Processing Software	The supplier shall provide global support and maintenance.					Candidate		1 2
SR-199			Medium Heavy	Survey Processing Software	The supplier shall provide global support and maintenance.					Candidate		1 2
SR-200			Medium Heavy	Survey Processing Software	The Survey Processing Software shall be compatible with the in-service Design Draughtsman software.					Candidate		1 2
SR-201			Medium Heavy	Survey Processing Software	The Survey Processing Software shall be able to import, export and store data in all industry standard formats.					Candidate		1 2
SR-202			Medium Heavy	Survey Processing Software	The Survey Processing Software shall be able to import, export and store data in all industry standard formats.					Candidate		1 2
SR-203			Medium Heavy	Survey Processing Software	The Survey Processing Software shall be able to import, export and store data in all industry standard formats.					Candidate		1 2
SR-204			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-205			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-206			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-207			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-208			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise, and manage survey data and products.							1 2
SR-209			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise, and manage survey data and products.							1 2
SR-210			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise, and manage survey data and products.							1 2
SR-211			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise, and manage survey data and products.							1 2

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-212			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise, and manage survey data and products.							1 2
SR-213			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-214			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-215			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-216			Medium Heavy	Survey Processing Software	The Survey Processing Software shall provide a field to office workflow, able to process, interpret, produce, organise and manage survey data and products.							1 2
SR-217	3.1.2	USERS										
SR-218	3.1.2.1	Operating Manpower										
SR-219			Light Medium Heavy	All	The System shall require a minimal amount of time and manpower to set-up, operate and recover.					Candidate		1 2
SR-220	3.1.2.2	Remote Function										
SR-221			Light	All	The System shall be capable of remote operation.					Candidate		1 2
SR-222			Medium Heavy	All	The System shall be capable of remote operation.					Candidate		1 2
SR-223	3.1.3	POWER										
SR-224	3.1.3.1	Mains Power										
SR-225			Light Medium Heavy	Battery charging units	The System can be powered using UK mains, overseas mains, and in-service power generation systems.					Candidate		3 17
SR-226			Light Medium Heavy	Battery charging units	The System can be powered using UK mains, overseas mains, and in-service power generation systems.					Candidate		3 17
SR-227			Light Medium Heavy	Battery charging units	The System can be powered using UK mains, overseas mains, and in-service power generation systems.					Candidate		3 17
SR-228	3.1.3.2	Batteries										
SR-229			Light Medium Heavy	All	The System shall be able to operate for a prolonged period without access to in-service military power generation systems.					Candidate		3 17

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-230			Medium Heavy	Total Station Field Controller GNSS Echo Sounder LIDAR Scanner	The System shall be able to operate for a prolonged period.					Candidate		3 17
SR-231			Light Medium Heavy	All	The System shall be able to access information to monitor the status of power sources.					Candidate		6 7
SR-232			Light Medium Heavy	All	Batteries supplied with the System must be safe for transportation.					Candidate		6 7
SR-233			Light Medium Heavy	All	Batteries supplied with the System must be safe for transportation.					Candidate		6 7
SR-234	3.1.4	OPERATING ENVIRONMENT										
SR-235	3.1.4.1	Climatic										
SR-236	3.1.4.1.1	Hot climates										
SR-237			Light Medium Heavy	All	The System shall be able to operate in hot, dry climates.					Candidate		9
SR-238			Light Medium Heavy	All	The System shall be able to be stored in hot, dry climates without degradation.					Candidate		9
SR-239	3.1.4.1.2	Humid climates										
SR-240			Light Medium Heavy	All	The System shall be able to operate in hot & humid climates.					Candidate		9
SR-241			Light Medium Heavy	All	The System shall be able to be stored in hot & humid climates without degradation.					Candidate		9
SR-242	3.1.4.1.3	Cold climates										
SR-243			Light Medium Heavy	All	The System shall be able to operate in cold climates.					Candidate		9
SR-244			Light Medium Heavy	All	The System shall be able to be stored in cold climates without degradation.					Candidate		9

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-245	3.1.4.1.4	Maritime climates										
SR-246			Light Medium Heavy	All	The System shall be able to operate in maritime climates.					Candidate		9
SR-247			Light Medium Heavy	All	The System shall be able to be stored in maritime climates without degradation.					Candidate		9
SR-248	3.1.4.2	Geographic										
SR-249			Light Medium Heavy	All	The System shall be able to operate in Core Region environments.					Candidate		
SR-250	3.1.4.3	Terrain										
SR-251			Light Medium Heavy	All	The System shall be able to operate in Core Region environments.					Candidate		
SR-252			Light Medium Heavy	All	The System shall be able to operate at high altitudes (low pressures)					Candidate		9
SR-253			Light Medium Heavy	All	The system shall be able to operate at low altitudes (high pressures).					Candidate		9
SR-254			Light Medium Heavy	All	The system shall be capable of being transported at high altitudes (low pressure).					Candidate		9
SR-255	3.1.4.4	Resilience										
SR-256	3.1.4.4.1	Resilience to Dust and Sand										
SR-257			Light Medium Heavy	All	The System shall be resistant to the effects of Dust and sand					Candidate		9
SR-258	3.1.4.4.2	Resilience to Water										
SR-259			Light Medium Heavy	All	The system shall remain safe, with no drop-in performance, when exposed to Driving Rain					Candidate		9
SR-260			Light Medium Heavy	All	The system shall remain safe, with no drop-in performance, when exposed to precipitation.					Candidate		9
SR-261			Light	Distance Measurer	The Distance Measurer shall be resistant to the effects of Dust and Sand, and remain safe, with no drop-in performance, when exposed to precipitation.					Candidate		9
SR-262			Light	Automatic Level	The Automatic Level shall be resistant to the effects of Dust and Sand, and shall remain safe, with no drop-in performance, when exposed to precipitation.					Candidate		9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-263			Light	Digital Level	The Digital Level shall be resistant to the effects of Dust and Sand, and shall remain safe, with no drop-in performance, when exposed to precipitation.					Candidate		9
SR-264			Light	Rotating Laser Level	The Rotating Laser Level shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-265			Medium Heavy	Total Station	The Total Station shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-266			Medium Heavy	Field Controller	The Field Controller shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-267			Medium Heavy	Two Way Radios	The Two-Way Radios shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-268			Heavy	GNSS	The GNSS shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-269			Heavy	Echo Sounder	The Echo Sounder shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation or immersion					Candidate		9
SR-270			Heavy	LIDAR Scanner	The LIDAR Scanner shall be resistant to the effects of Dust and Sand and shall remain safe, with no drop in performance, when exposed to precipitation.					Candidate		9
SR-271	3.1.4.4.3	Resistance to Salt Atmospheres and Immersion										
SR-272			Light Medium Heavy	All (except Echo Sounder)	The system shall be resistant to the effects of a salt atmosphere.					Candidate		9
SR-273				Echo sounder	The Echo Sounder shall be resistant to the effects of a salt atmosphere.					Candidate		9
SR-274			Light Medium Heavy	All (except Echo Sounder)	The system shall be protected from corrosion in a salt atmosphere.					Candidate		9
SR-275			Heavy	Echo sounder	The Echo Sounder shall be protected from corrosion in a salt atmosphere.					Candidate		9
SR-276			Heavy	Echo sounder	Salt Water Immersion					Candidate		9
SR-277	3.1.4.4.4	Resistance to Mould										
SR-278			Light Medium Heavy	All	The System shall be resistant to the effects of Micro Biological Contamination (MBC).					Candidate		9
SR-279	3.1.4.4.5	Resilience to Freeze/Thaw										

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-280			Light Medium Heavy	All	The System shall be able to operate in regions where it will experience repeated freeze / thaw action.					Candidate		9
SR-281	3.1.4.4.6	Resilience to Icing										
SR-282			Light Medium Heavy	All	The System shall be able to operate and survive in regions where it will be exposed to icing conditions					Candidate		9
SR-283	3.1.4.4.7	Resistance to Acid Corrosion										
SR-284			Light Medium Heavy	All	The System shall be resistant to acid corrosion.					Candidate		9
SR-285	3.1.4.4.8	Resistance to Fluid Contamination								Candidate		
SR-286			Light Medium Heavy	All	The System shall be resistant to fluid contamination					Candidate		9
SR-287	3.1.4.4.9	Resilience to Drops and Shocks										
SR-288			Light Medium Heavy	Distance Measurer Automatic Level Digital Level Field Controller Two Way Radios	The System shall be resilient to drops and shocks.					Candidate		8 9
SR-289			Heavy	GNSS	The System shall be resilient to drops and shocks.					Candidate		8 9
SR-290			Light Medium Heavy	Rotating Laser Level Total Station Echo Sunder LIDAR Scanner	The System shall be resilient to drops and shocks.					Candidate		8 9
SR-291	3.1.5	DEPLOY										
SR-292	3.1.5.2	Set-Up & Recovery										
SR-293			Light Medium Heavy	All	The System shall be capable for Operators to conduct accuracy and calibration checks and or adjustments.					Candidate		1 2
SR-294			Light Medium Heavy	All	Individual components of the system shall be capable of being rapidly unpacked from storage, or from tactical movement and made ready for use.					Candidate		1 2
SR-295			Light Medium Heavy	All	Individual components of the system shall be capable of being rapidly packed and ready for transportation or tactical movement.					Candidate		1 2
SR-296	3.1.5.3	Sea Deployment										
SR-297			Light Medium Heavy	All	The System must comply with maritime dangerous cargo regulations.					Candidate		6 7 15

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-298			Light Medium Heavy	All	The System shall be able to be transported for deployment by sea without degradation.	██████	██████	██████	██████	Candidate	██████	6 7
SR-299			Light Medium Heavy	All	The System shall be deployable by Maritime Vessels.	██████	██████	██████	██████	Candidate	██████	6 7
SR-300			Light Medium Heavy	All	The System shall be tactically deployable by sea	██████	██████	██████	██████	Candidate		6 7
SR-301	3.1.5.4	Air Deployment										
SR-302			Light Medium Heavy	All	The System must comply with commercial air cargo regulations and legislation	██████	██████	██████	██████	Candidate		6 7 15
SR-303	3.1.5.4.1	Fixed Wing										
SR-304			Light Medium Heavy	All	The System shall be able to be transported by military Fixed Wing aircraft without degradation.	██████	██████	██████	██████	Candidate	██████	6 7
SR-305			Light Medium Heavy	All	The System shall be able to be transported for deployment by Fixed Wing air without degradation	██████	██████	██████	██████	Candidate	██████	6 7
SR-306			Light Medium Heavy	All	The System shall be configurable for strategic deployment on standard aircraft pallets.	██████	██████	██████	██████	Candidate		6 7
SR-307	3.1.5.4.2	Rotary Wing										
SR-308			Light Medium Heavy	All	The System shall be able to be transported by military Rotary Wing aircraft without degradation.	██████	██████	██████	██████	Candidate	██████	6 7
SR-309			Light Medium Heavy	All	The System shall be able to be transported for tactical deployment by air by underslung loading on specified military Rotary Wing aircraft.	██████	██████	██████	██████	Candidate		6 7
SR-310			Light Medium Heavy	All	The System shall be able to be transported for tactical deployment by air internally on specified military Rotary Wing aircraft.	██████	██████	██████	██████	Candidate		6 7
SR-311	3.1.5.5	Ground Deployment										
SR-312	3.1.5.5.1	Road										
SR-313			Light Medium Heavy	All	The System must comply with commercial vehicles cargo regulations and legislation.	██████	██████	██████	██████	Candidate		6 7 15
SR-314			Light Medium Heavy	All	The System shall be able to be transported by military vehicle without degradation.	██████	██████	██████	██████	Candidate		6 7
SR-315			Light Medium Heavy	All	The System shall be deployable by Military Vehicles.	██████	██████	██████	██████	Candidate		6 7
SR-316	3.1.5.5.2	Rail										

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-317			Light Medium Heavy	All	The System must comply with rail transport regulations.					Candidate		6 7 15
SR-318			Light Medium Heavy	All	The System shall be able to be transported by rail without degradation.					Candidate		6 7
SR-319			Light Medium Heavy	All	The System shall be deployable by rail in the UK.					Candidate		6 7
SR-320			Light Medium Heavy	All	The System shall be deployable by rail in the EU.					Candidate		6 7
SR-321	3.1.5.5. 3	Man-Portability										
SR-322			Light Medium Heavy	All	The System shall have modular components that are demountable and man-portable.					Candidate		6 7
SR-323			Light	Distance Measurer	The Distance Measurer shall be man-portable					Candidate		6 7
SR-324			Light	Automatic Level	The Automatic Level shall be man-portable					Candidate		6 7
SR-325			Light	Digital Level	The Digital Level shall be man-portable					Candidate		6 7
SR-326			Light	Rotating Laser Level	The Rotating Laser Level shall be man-portable					Candidate		6 7
SR-327			Medium Heavy	Total Station	The Total Station shall be man-portable					Candidate		6 7
SR-328			Medium Heavy	Field Controller	The Field Controller shall be man-portable					Candidate		6 7
SR-329			Heavy	GNSS	The GNSS shall be man-portable					Candidate		6 7
SR-330			Heavy	Echo Sounder	The Echo Sounder shall be man-portable					Candidate		6 7
SR-331			Heavy	LIDAR Scanner	The LIDAR Scanner shall be man-portable					Candidate		6 7
SR-332			Light	Distance Measurer	The Distance Measurer shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-333			Light	Automatic Level	The Automatic Level shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-334			Light	Digital Level	The Digital Level shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-335			Light	Rotating Laser Level	The Rotating Laser Level shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-336			Medium Heavy	Total Station	The Total Station shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-337			Medium Heavy	Field Controller	The Field Controller shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-338			Heavy	GNSS	The GNSS shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-339			Heavy	Echo Sounder	The Echo Sounder shall be man-portable when packed in its hard transit case.					Candidate		6 7
SR-340			Heavy	LIDAR Scanner	The LIDAR Scanner shall be man-portable when packed in its hard transit case.					Candidate		6 7

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-341	3.1.5.6	Packaging										
SR-342	3.1.5.6.1	Hard Transit Case										
SR-343			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System from Dust and Sand during transit and storage	██████	██████	██████	██████	Candidate	██████	8
SR-344			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System from Dust and Sand during transit and storage	██████	██████	██████	██████	Candidate		8
SR-345			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System from Water during transit and storage	██████	██████	██████	██████	Candidate	██████	8
SR-346			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System from Water during transit and storage	██████	██████	██████	██████	Candidate	██████	8
SR-347			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System from drops and shocks during transit and storage.	██████	██████	██████	██████	Candidate	██████	8
SR-348			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate	██████	8
SR-349			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate	██████	8
SR-350			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate		8
SR-351			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate	██████	8
SR-352			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate		8
SR-353			Light Medium Heavy	All	The System shall be provided with a hard transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate		8
SR-354	3.1.5.6.1	Soft Transit Case								Candidate		8
SR-355			Light Medium Heavy	All	The System shall be provided with a soft transit case that protects the System from Dust and Sand during transit and storage	██████	██████	██████	██████	Candidate		8
SR-356			Light Medium Heavy	All	The System shall be provided with a soft transit case that protects the System from Water during transit and storage	██████	██████	██████	██████	Candidate		8
SR-357			Light Medium Heavy	All	The System shall be provided with a soft transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate		8
SR-358			Light Medium Heavy	All	The System shall be provided with a soft transit case that protects the System during transit and storage.	██████	██████	██████	██████	Candidate		8
SR-359	3.2	NON-FUNCTIONAL										
SR-360	3.2.1	INTEROPERABILITY										

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-361	3.2.1.1	Modularity										
SR-362			Light Medium Heavy	All	GROMA sub-capabilities shall be scalable.	██████	██████	██████	██████	Candidate		1 2
SR-363			Light Medium Heavy	All	GROMA sub-capabilities shall be scalable.	██████	██████	██████	██████	Candidate		1 2
SR-364			Light Medium Heavy	All	GROMA sub-systems shall be compatible with other GROMA sub-systems.	██████	██████	██████	██████	Candidate		1 2
SR-365	3.2.1.2	Current Capabilities										
SR-366			Light Medium Heavy	All	The System shall be interoperable with in-service capabilities.	██████	██████	██████	██████	Candidate		1 2
SR-367			Light Medium Heavy	All	The System shall be interoperable with other military forces.	██████	██████	██████	██████	Candidate		1 2
SR-368			Light Medium Heavy	All	The System shall be interoperable with other government agencies	██████	██████	██████	██████	Candidate		1 2
SR-369	3.2.1.3	Future Capabilities										
SR-370			Light Medium Heavy	All	The System shall be interoperable with future capabilities.	██████	██████	██████	██████	Candidate	██████	1 2 14
SR-371	3.2.2	SYSTEM MANAGEMENT									██████	
SR-372	3.2.2.1	Built in Test (BIT)									██████	
SR-373			Light Medium Heavy	All except optical level	The System shall be fitted with On Board Diagnostics (OBD).	██████	██████	██████	██████	Candidate	██████	13
SR-374			Light Medium Heavy	All	The System shall provide visual identification of health.	██████	██████	██████	██████	Candidate	██████	13
SR-375	3.2.3	SUSTAIN									██████	
SR-376	3.2.3.1	Integrated Logistics & Support (ILS)									██████	
SR-377	3.2.3.1.1	Storage									██████	
SR-378			Light Medium Heavy	All	The System can be stored using existing storage facilities.	██████	██████	██████	██████	Candidate	██████	12 13
SR-379			Light Medium Heavy	All	The System shall not require specialist storage facilities.	██████	██████	██████	██████	Candidate	██████	12 13
SR-380			Light Medium Heavy	All	The System shall require a minimal amount of out-of-use maintenance before being put into storage.	██████	██████	██████	██████	Candidate	██████	12 13
SR-381			Light Medium Heavy	All	It shall be possible to store the System for long periods in military storage, with minimal preventative maintenance required.	██████	██████	██████	██████	Candidate	██████	12 13
SR-382			Light Medium Heavy	All	The System shall require a minimal amount of maintenance before return to fully fit post-storage.	██████	██████	██████	██████	Candidate	██████	12 13

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-383	3.2.3.1.2	Service Life										
SR-384			Light Medium Heavy	All	The System shall have a minimum service life of at least 8 years from the In-Service date for each sub-system.					Candidate		1 2 14
SR-385	3.2.3.1.3	Logistic Support										
SR-386			Light Medium Heavy	All	GROMA shall follow the principles of Integrated Logistic Support.					Candidate		1 2 14
SR-387			Light Medium Heavy	All	The System can be supported using the existing military Joint Supply Chain (JSC)					Candidate		1 2 14
SR-388	3.2.3.1.4	Complete Equipment Schedule (CES)										
SR-389			Light Medium Heavy	All	The System shall be assembled, operated, dismantled using a minimum of specialist tools					Candidate		13
SR-390	3.2.3.1.5	Publications										
SR-391			Light Medium Heavy	All	The System shall possess technical documentation that enables MOD logistic readiness and sustainability					Candidate		11 13 14 15
SR-392			Light Medium Heavy	All	The System shall be provided with a full set of documentation for safe operation of the System					Candidate		11 13 14 15
SR-393			Light Medium Heavy	All	The System shall be provided technical documentation for level 1 preventative and corrective maintenance tasks					Candidate		11 13 14 15
SR-394			Light Medium Heavy	All	Any Complete Equipment Schedule (CES) items identified to support GROMA systems shall be listed with illustration in the relevant section of the AESP pertaining to that system.					Candidate		11 13 14 15
SR-395			Light Medium Heavy	All	Any spares items identified to support GROMA systems shall be listed with illustration in the relevant section of the AESP pertaining to that system.					Candidate		11 13 14 15
SR-396			Light Medium Heavy	All	The System shall be provided with documentation on the operation of all components of the System Including: · Operation · Assembly · Dismantling · Level 1 Tasks · Servicing Schedule · Instructions for installing any auxiliary equipment · Any safety considerations.					Candidate		11 13 14 15

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-397			Light Medium Heavy	All	The System shall be provided with documentation for all level 1 maintenance tasks for all components of the System. Including: · Fault diagnosis · Repair & Servicing Instructions · Inspection Standards · Maintenance / Servicing Schedule · Any safety considerations · Pre-storage preparation and maintenance.					Candidate		11 13 14 15
SR-398	3.2.3.1.6	Future Proofing										
SR-399			Light Medium Heavy	All	The System shall be designed to anticipate and minimise Whole Life Costs including all reasonably predictable upgrades and updates.					Candidate		14
SR-400			Light Medium Heavy	All	The System shall demonstrate the potential for upgrade/technology insertion to ensure durability.					Candidate		14
SR-401			Light Medium Heavy	All	The System shall remain operational until it's planned Out of Service Date (OSD).					Candidate		14
SR-402			Light Medium Heavy	All	The System shall demonstrate the potential for upgrade/technology insertion to ensure durability.					Candidate		14
SR-403	3.2.3.1.7	Asset Tracking & Security										
SR-404			Light Medium Heavy	All	GROMA equipment shall be interoperable with in-service Management Information Systems.					Candidate		11
SR-405			Light Medium Heavy	All	The System shall be able to record, locate and have visibility of all Survey capability assets.					Candidate		11
SR-406			Light Medium Heavy	All	The System components must be able to comply with Information Exchange Requirements (IER), Management Inspections and Log C4I asset tracking systems.					Candidate		11
SR-407	3.2.3.2	Availability, Reliability, Maintainability (ARM)										
SR-408	3.2.3.2.1	General										
SR-409			Light Medium Heavy	All	The System shall have a high level of reliability to meet operational availability.					Candidate		13 14
SR-410			Light Medium Heavy	All	The system shall continue to function without the need for preventative maintenance above level 1 throughout the length of deployment.					Candidate		13 14
SR-411			Light Medium Heavy	All	The System shall be maintainable throughout the length of deployment.					Candidate		13 14
SR-412			Light Medium Heavy	All	The System shall be easy to maintain.					Candidate		13 14
SR-413			Light Medium Heavy	All	The System shall be easy to maintain.					Candidate		13 14

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-414	3.2.3.2.2	Skills										
SR-415			Light Medium Heavy	All	The System shall be maintainable using military manpower.	██████	██████	██████	██████	Candidate	██████	13 14
SR-416			Light Medium Heavy	All	The System shall be maintained at readiness by service personnel.	██████	██████	██████	██████	Candidate	██████	13 14
SR-417	3.2.3.2.3	Corrective Maintenance										
SR-418			Light Medium Heavy	All	The System's Level 1 corrective maintenance times shall not exceed 1 hour per failure.	██████	██████	██████	██████	Candidate	██████	13 14
SR-419			Light Medium Heavy	All	The System's 50th percentile Time To Repair (TTR) for corrective level 1 maintenance tasks shall not exceed 20 minutes per failure.	██████	██████	██████	██████	Candidate	██████	13 14
SR-420	3.2.3.2.4	Preventative Maintenance										
SR-421			Light Medium Heavy	All	The System shall require a minimal of preventative maintenance	██████	██████	██████	██████	Candidate	██████	13 14
SR-422			Light Medium Heavy	All	The System shall minimise user level preventative maintenance.	██████	██████	██████	██████	Candidate	██████	13 14
SR-423	3.2.3.3	In-Service Support										
SR-424			Light Medium Heavy	All	The system hardware and software shall be supported by a technical assistance facility.	██████	██████	██████	██████	Candidate	██████	13 14
SR-425			Light Medium Heavy	All	The supplier shall provide technical support.	██████	██████	██████	██████	Candidate	██████	13 14
SR-426			Light Medium Heavy	Survey Processing Software	The supplier shall provide support and maintenance.	██████	██████	██████	██████	Candidate	██████	13 14
SR-427	3.2.4	PREPARE										
SR-428	3.2.4.1	Training										
SR-429	3.2.4.1.1	Training General										
SR-430			Light Medium Heavy	All	The training solution shall comply with MoD training policies.	██████	██████	██████	██████	Candidate	██████	4 5
SR-431			Light Medium Heavy	All	GROMA shall require the minimal amount of training for operators.	██████	██████	██████	██████	Candidate	██████	4 5
SR-432			Light Medium Heavy	All	GROMA shall require the minimal amount of training for maintainers.	██████	██████	██████	██████	Candidate	██████	4 5

Version 9

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-433	3.2.4.1.2	Training Needs Analysis										
SR-434			Light Medium Heavy	All	The Contractor shall conduct a DSAT compliant Training Needs Analysis (TNA) Stage 1 (Scoping Study).	██████	██████	██████	██████	Candidate	██████	4 5
SR-435	3.2.4.1.3	Training & Training Equipment Plans										
SR-436			Light Medium Heavy	All	The Contractor shall provide and execute a Training and Training Equipment plan	██████	██████	██████	██████	Candidate	██████	4 5
SR-437			Light Medium Heavy	All	The Contractor shall facilitate and administer Training Steering Group (TSG) meetings.	██████	██████	██████	██████	Candidate	██████	4 5
SR-438			Light Medium Heavy	All	The Contractor shall maintain any Training Material or Training Equipment for GROMA equipment according to completion of all phases of the TNA.	██████	██████	██████	██████	Candidate	██████	4 5
SR-439			Light Medium Heavy	All	The Contractor shall provide an option to continually supply a physical re-usable Operator T3 Training Package which shall be conduct at the OEM's premises, when requested by the Authority.	██████	██████	██████	██████	Candidate	██████	4 5
SR-440	3.2.5	PROTECT										
SR-441	3.2.5.1	Emissions										
SR-442			Light Medium Heavy	All	The System shall be able to operate with a physical signature appropriate to the environment of use and threat.	██████	██████	██████	██████	Candidate	██████	10
SR-443			Light Medium Heavy	All	The System shall be able to operate with a physical signature appropriate to the environment of use and threat.	██████	██████	██████	██████	Candidate	██████	10
SR-444			Light Medium Heavy	All	GROMA equipment shall be able to operate in an EMC environment.	██████	██████	██████	██████	Candidate	██████	10
SR-445	3.2.5.2	Security										
SR-446			Medium Heavy	All	The System shall be protected against the adverse effects of unauthorised physical interference.	██████	██████	██████	██████	Candidate	██████	1 2
SR-447			Light Medium Heavy	All	The System shall be capable of transferring data to Official Sensitive.	██████	██████	██████	██████	Candidate	██████	1 2
SR-448	3.2.6	HUMAN FACTORS INTEGRATION (HFI)										
SR-449			Light Medium Heavy	All	The System shall be suitable for all aspects of operation by personnel with a wide range of physical characteristics.	██████	██████	██████	██████	Candidate	██████	1 2 13
SR-450			Light Medium Heavy	All	The System shall be suitable for all aspects of operation by personnel wearing a range of military clothing and protective equipment.	██████	██████	██████	██████	Candidate	██████	1 2 13
SR-451			Light Medium Heavy	All	The System shall be maintainable by an Operator wearing protective clothing.	██████	██████	██████	██████	Candidate	██████	1 2 13

SR ID	Obj. No.	Object Heading	Applies to (Sub-Capability)	Applies to (Sub-System)	System Requirement	Justification	Priority	Measure of Performance	Verification Criteria	Status	Remarks	Parent URs
SR-452	3.2.7	SAFETY & ENVIRONMENTAL										
SR-453			Light Medium Heavy	All	The System shall be safe by design (NOT training) and have a safe system of work. System is safe during all operations:- a. Storage and handling b. Deployment c. Assembly; d. Operation; e. Strike and repack; f. Maintenance; g. Decommissioning; h. Dismantling; i. Redeployment; j. Disposal.					Candidate		15 16
SR-454			Light Medium Heavy	All	The System design shall be compliant with safety policies and guidance.					Candidate		15 16
SR-455			Light Medium Heavy	All	Safety must be managed in accordance with MOD policy.					Candidate		15 16
SR-456			Light Medium Heavy	All	The System shall shut down in a fail-safe manner in the event of a failure.					Candidate		15 16
SR-457			Light Medium Heavy	All	The supplier shall identify any Specialist Personal Protective Equipment required for:					Candidate		15 16
SR-458			Light Medium Heavy	All	Any lasers used by the System shall be compliant with safety legislation.					Candidate		15 16
SR-459	3.2.8	LEGISLATION & COMPLIANCE										
SR-460			Light Medium Heavy	All	The System must comply with appropriate safety regulations.					Candidate		15 16
SR-461			Light Medium Heavy	All	The System must conform with European Directives.					Candidate		15 16
SR-462			Light Medium Heavy	All	The System must comply with health and safety requirements.					Candidate		15 16
SR-463			Light Medium Heavy	All	The System shall comply with all relevant environmental regulations and legislation.					Candidate		15 16
SR-464			Light Medium Heavy	All	The System shall be capable of being disposed in accordance with the current legal and environmental requirements.					Candidate		15 16
SR-465	3.2.9	DISPOSAL										
SR-466			Light Medium Heavy	All	The System and associated elements shall be capable of disposal by the authority safely and economically at the end of its in-service life.					Candidate		15 16

Version 9

4. CONTEXT DOCUMENTS*Context documents could include:*

- *The User Requirement Document (URD) - including its Part 4 Context Documents.*
- *The Acquisition Strategy.*
- *The Acceptance Strategy and associated verification test conditions.*
- *The Concept of Use and Employment (CONUSE and CONEMP) for the system.*
- *The operational process or mission profiles that will use the system - not the system's operating procedure.*
- *The SRD or specification of the legacy system to be updated or upgraded - if applicable.*
- *Reference to specifications for [Defence Lines of Development \(DLoD\)](#) solutions, including the Equipment Contract Specifications.*
- *Reference to SRDs for interoperating systems, or associated Information Exchange Requirements (IERs) or Interface Control Documents if they exist.*
- *Reference to associated architectures or models.*
- *Operational Analysis and trade study reports, associated scenarios and vignettes.*
- *Other references, MOD policies or Standards.*

[Part 4 references context documents and supporting papers so that the SRD is self-contained and can stand-alone. Context documents may be included at the discretion of the Requirements Manager. Most supporting documentation is included to provide additional understanding or because it is referred to frequently in the SRD. Additional documents are particularly valuable to readers who may not be familiar with the background to the requirement, for example industry. All system requirements must be included in [Part 3](#) of the SRD regardless of these documents. Context documents must provide the supplementary information required for verification and system acceptance, expressing the conditions under which the performance must be achievable.]

Reference	Description
	Concept of Employment
	Concept of Use
HoC GM Mvr SP Cap Dev URD	User Requirement Document
BESD	Battlefield Equipment Support Doctrine, Version 2.1, Nov 2015.
D Sp Plan 16/17	Reducing the Logistic Need.
Def Stan 00-003	Design Guidance for the Transportability of Equipment
Def Stan 00-035	Environmental Handbook for Defence Materiel.
Def Stan 00-056	Safety Management Requirements for Defence Systems
Def Stan 00-042	Reliability and Maintainability Assurance Activity
Def Stan 00-251	Human Factors Integration for Defence Systems

Version 9

Reference	Description
Def Stan 00-600	Integrated Logistics Support requirements for MOD projects
Def Stan 00-601	MOD Business Rules - Contracting for Technical Documentation
Def Stan 05-057	Configuration Management of Defence Materiel
Def Stan 08-006	Counter-Surveillance Requirements.
Def Stan 23-013	Generic Base Architecture (GBA)
Def Stan 59-411	Electromagnetic Compatibility. Part 1 - Management and Planning.
DSD 16	Defence Strategic Direction 16.
DTSM	Defence Training Systems Manual.
HASAWA	The Health and Safety at Work etc Act 1974.
JSP 317	Joint Service Safety Policy for the storage and handling of Fuels, Lubricants and Associated products
JSP 371	MoD Manual on Pest Management.
JSP 375	Management of Health and Safety in Defence.
JSP 418	Management of Environmental Protection in Defence.
JSP 440	The Defence Manual of Security, Resilience and Business Continuity.
JSP 454	Land Systems Safety Management Policy and Guidance
JSP 815	Defence Health, Safety and Environmental Protection.
JSP 822	Defence Direction and Guidance for Training and Education.
JSP 912	Human Factors Integration for Defence Systems

Version 9

5. GLOSSARY OF ABBREVIATIONS AND TERMS

[The Glossary should include definitions and explanations for all terms that could cause confusion, as well as references and acronyms.]

Review these abbreviations - there are a lot of words that are not in the document text so do not need to be included

Term	Definition
AC	Army Co-operation
AESP	Army Equipment Support Publication
BESD	British Equipment Support Doctrine
C&J	Carpentry & Joinery
C2	Command and Control
CBRN	Chemical, Biological, Radiological and Nuclear
CES	Complete Equipment Schedule
CIS	Command Information Systems
COSHH	Control of Substances Hazardous to Health
CSCM	Counter Surveillance Control Measures
DC	Damage Control
DSAT	Defence Systems Approach to Training
DSD	Defence Strategic Direction
GROMA	Project name for the purchase and support on Military Engineering Survey equipment
DTSM	Defence Training Systems Manual
ECP	Emergency and Contingency Plan
ED	Emergency Department
EMC	Electro Magnetic Compatibility
EMP	Electro-Magnetic Pulse
ES	Equipment Support
GBA	Generic Base Architecture
GIS	Geographical Information Systems
GMTI	Ground Moving Target Indicator
H&S	Health and Safety
HASAWA	Health and Safety at Work Act
HFI	Human Factors Integration
HQ	Headquarters

Version 9

Term	Definition
HUMS	Health and Usage Monitoring Systems
IPE	Individual Protective Equipment
ISO	International Standards Organisation
IT	Information Technology
JAMES	Joint Asset Management and Engineering Solutions
JSP	Joint Service Publication
LAN	Local Area Network
LORA	Level of Repair Analysis
LOSA	Land Open Systems Architecture
MENA	Middle East and North Africa
MHE	Material Handling Equipment
MIS	Management Information System
MOD	Ministry of Defence
MWA	Main Working Area
NATO	North Atlantic Treaty Organisation
OEM	Original Equipment Manufacturer
OI	Operational Infrastructure
PASE	Planning Assumption for Service Entry
PLS	Palletised Loading System
PPE	Personal Protective Equipment
RCM	Reliability Centred Maintenance
SECRET	SECRET Classification
SSA	Sub-Saharan Africa
STANAG	Standardisation Agreement
STTE	Special Tools and Test Equipment
TESSOC	Terrorism Espionage Subversion Sabotage and Organised Crime
UK	United Kingdom