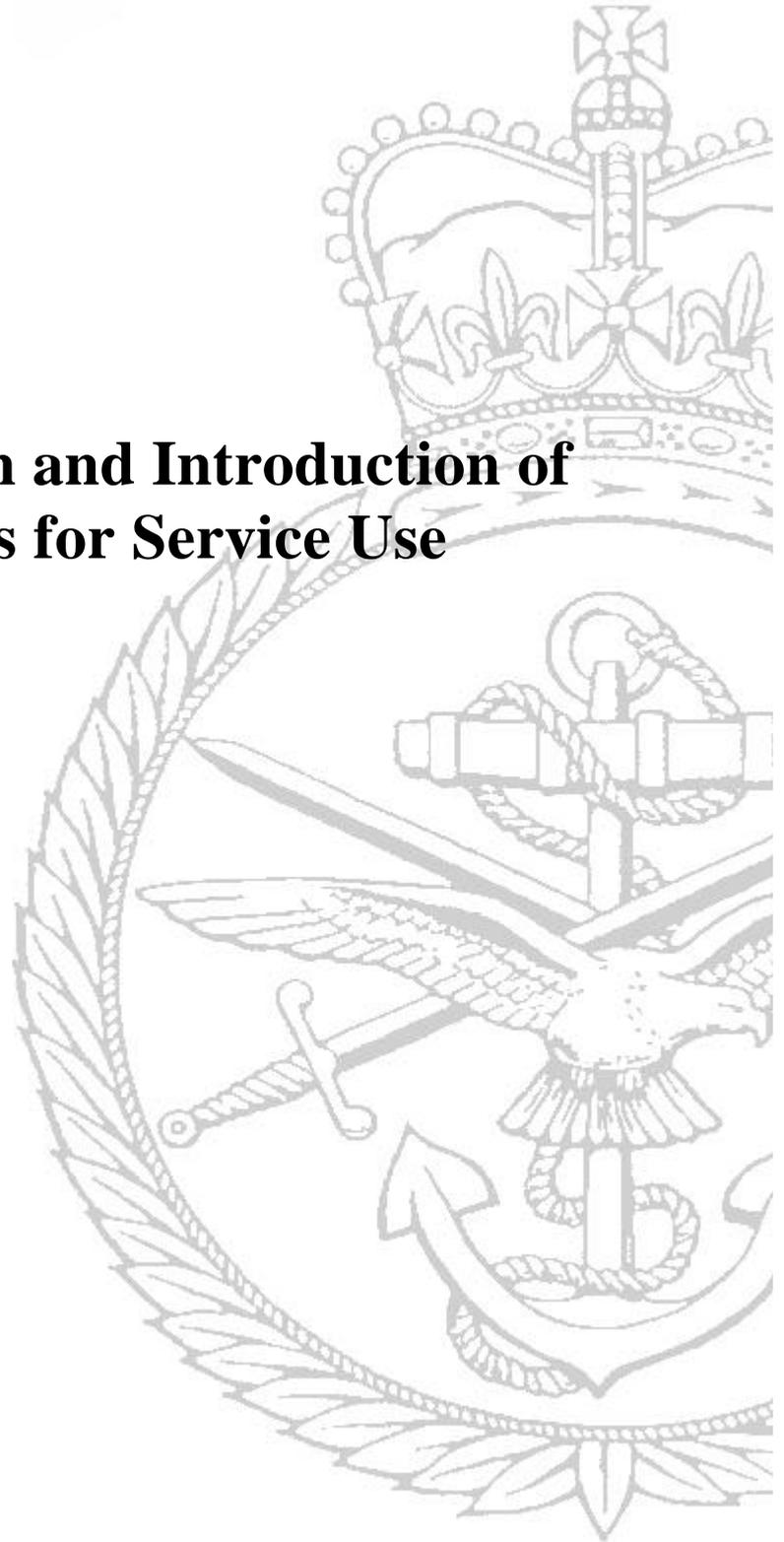




# Ministry of Defence Defence Standard 61-17

Issue 4 Publication Date 31 October 2001

## The Selection and Introduction of Batteries for Service Use



## AMENDMENT RECORD

Amd No	Date	Text Affected	Signature and Date

### REVISION NOTE

The standard has been revised to update its content

### HISTORICAL RECORD

**This standard supersedes the following:**

Interim Defence Standard (Def Stan) 61-17 Issue 3 dated 8<sup>th</sup> May 1992.

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**PREFACE**

**Standards for Defence**

**The Selection and Introduction**

**of Batteries for**

**Service Use**

- a.** This standard provides a guide to the introduction of batteries for Ministry of Defence use.
- b.** This standard has been produced on behalf of the Defence Materiel Standardization Committee (DMSC), by the Defence Battery Standardization Committee (DBSC), as there is no suitable National or other standard which is acceptable to the Ministry of Defence.
- c.** This standard has been agreed by the authorities concerned with its use and is intended to be used whenever relevant in all future designs, contracts, orders etc. and whenever practicable by amendment to those already in existence. If any difficulty arises which prevents application of this Defence Standard the UK Defence Standardization (DStan) shall be informed so that a remedy may be sought.
- d.** Any enquiries regarding this standard in relation to an invitation to tender or a contract in which it is incorporated are to be addressed to the responsible technical or supervising authority named in the invitation to tender or contract.
- e.** Compliance with this Defence Standard shall not in itself relieve any person from any legal obligations imposed upon them.
- f.** This standard has been devised solely for the use of the Ministry of Defence (MOD) and its contractors in the execution of contracts for the MOD. To the extent permitted by law, the MOD hereby excludes all liability whatsoever and howsoever arising (including, but without limitation, liability resulting from negligence) for any loss or damage however caused when the standard is used for any other purpose.

**TEXT**

**Standards for Defence  
The Selection and Introduction  
of Batteries for  
Service Use**

**SECTION 1 GENERAL REQUIREMENTS**

**0 INTRODUCTION**

**0.1** This standard details the activities that shall be followed to facilitate the endorsement of batteries by the Tri-Service Battery Management Authority (TSBMA) for specific applications.

**0.2** Further guidance on battery performance and selection criteria, together with MOD battery procurement policy aspects can be found within the AMS.

**1 SCOPE**

**1.1** This standard is intended for use by MOD and Industry.

**1.2** This standard may be invoked directly by a MOD invitation to tender, contract or referenced by other MOD battery specifications.

**1.3** The requirements of this standard are applicable:

- a.** For the introduction of a new battery into service.
- b.** For a new application for an existing in-service battery.
- c.** When extending the scope of requirements for an existing equipment that includes batteries.
- d.** In the procurement of equipment (including COTS and proprietary equipment) that include batteries.
- e.** In the replacement of existing battery types.

**1.4** Contractors shall ensure that these requirements are incorporated in relevant subcontract activities.

## **SECTION 1 GENERAL REQUIREMENTS**

**1.5** Additional requirements may be contractually invoked by other standards and specifications e.g.

- a. Def Stan 00-970: Design Requirements for Service Aircraft.
- b. Def Stan 05-123: Technical Procedures for the Procurement of Aircraft Weapon and Electronic Systems.
- c. Def Stan 07-85: Design Requirements for Weapons and Associated Systems.

## **2 WARNING**

The Ministry of Defence (MOD), like its contractors, is subject to both United Kingdom and European laws regarding Health and Safety at Work, without exemption. All Defence Standards either directly or indirectly invoke the use of processes and procedures that could be injurious to health if adequate precautions are not taken. Defence Standards or their use in no way absolves users from complying with statutory and legal requirements relating to Health and Safety at Work.

## **3 RELATED DOCUMENTS**

**3.1** The publications shown below are referred to in the text of this standard. Publications are grouped and listed in alpha-numeric order.

<b>Designation</b>	<b>Title</b>
AMS	Acquisition Management System
Def Stan 00-00 Part 2	Standards for Defence
Def Stan00-35	Environmental Handbook for Defence Materiel
Def Stan 00-60	Integrated Logistic Support
Def Stan 61-21 (series)	Generic Specification for Batteries

**3.2** Reference in this standard to any related document means in any invitation to tender or contract the edition and all amendments current at the date of such tender or contract unless a specific edition is indicated.

**3.3** In consideration of **3.2** above, users shall be fully aware of the issue and amendment status of all related documents, particularly when forming part of an invitation to tender or contract. Responsibility for the correct application of standards rests with users.

**3.4** DStan can advise regarding where related documents are obtained from. Requests for such information can be made to the DStan Helpdesk. How to contact the helpdesk is shown on the outside rear cover of Def Stans.

## SECTION 1 GENERAL REQUIREMENTS

### 4 DEFINITIONS

For the purpose of this standard the following definitions apply:

#### 4.1 Mandatory Clauses in Defence Standards.

Defined as clauses that use the word “shall”. Optional or non-mandatory clauses use the word “should”.

#### 4.2 Standard Sponsor.

Defined as the MOD sponsor for the preparation of a Defence Standard.

### 5 ABBREVIATIONS

<b>Designation</b>	<b>Title</b>
AMS	Acquisition Management System
BS	British Standard
BS EN	European Standard (British Standard Euro Norm)
DBSC	Defence Battery Standardization Committee
Def Stan	Defence Standard
DLO	Defence Logistics Organisation
DPA	Defence Procurement Agency
DStan	UK Defence Standardization
ES	Equipment Support
ILS	Integrated Logistic Support
ISO	International Standards Organization
IPR	Intellectual Property Rights
MOD	Ministry of Defence
PDSA	Post Design Services Authority
PM	Project Manager (MOD)
TSBMA	Tri-Service Battery Management Authority
UK	United Kingdom
WLC	Whole Life Cost

## **SECTION 2 ROLES AND RESPONSIBILITIES**

### **6 TRI-SERVICE BATTERY MANAGEMENT AUTHORITY (TSBMA)**

**6.1** The Tri-Service Battery Management Authority (TSBMA) provides the formal channel by which a selected battery may be endorsed for Service use. Its aims are to ensure that all relevant battery issues are appropriately and economically addressed.

**6.2** Key members of the TSBMA, their roles and responsibilities are detailed below, contact details are provided in Table 7 at Annex E.

**6.3** CSE IPT: Provide Chairperson and Secretarial support functions of the TSMBA.

**6.4** Defence Procurement Agency (DPA): Air Land Technology Group (ALTG).

ALTG-ADRP3e is the battery technical focus in the Defence Procurement Agency (DPA), responsible for the implementation of policy for battery acquisition. Responsibilities include standardisation, airworthiness, transportation, disposal and hazard characterisation.

**6.5** DLO Equipment Support (ES): Air, Land and Sea.

Representatives from the Air, Land and Sea areas are the focal point for all specific platforms within their area. They are responsible for providing logistic support for all the batteries that they procure and shall ensure that their departmental requirements and policies are satisfied.

**6.6** Defence Logistic Organisation (DLO): Battery Provisioning.

The main battery procurement organisations are the Non Project Procurement Organisation (NPPO), the Equipment Support Provision and Procurement Authority (ESPPA), the Combat Support Equipment (CSE) IPT and the Avionics and (Air) Electronics Warfare IPT.

### **7 RESPONSIBILITIES**

**7.1** The Project Manager (MOD) has overall responsibility for all stages of battery procurement for their projects.

**7.2** The Project Manager/Project Officer shall complete and submit the application form (Annex B) to the Tri-Service Battery Management Authority (TSBMA). Explanatory notes to assist in the completion of the form are provided in Annex A, more detailed guidance may be obtained through the AMS.

**7.3** Codification of a new battery, for service use, should not be initiated by the Project Office until the endorsement letter (Annex D) has been issued.

**7.4** The TSBMA shall carry out an initial assessment. The application shall then be directed to the appropriate MOD office, which will liaise directly with the Project Office as necessary.

**SECTION 2 ROLES AND RESPONSIBILITIES**

**7.5** Members of the TSBMA shall assess the application, identify any concerns or limitations and recommend means of their resolution. Response to the Project Office shall be provided using the reply form at Annex C

**7.6** Subsequent to the resolution of any limitations, the TSBMA shall issue a formal letter of endorsement (using the reply form at Annex D) to the applicant Project Office, copies of which shall be distributed to the appropriate members of the TSBMA.

**ANNEX A**

**APPLICATION FORM GUIDANCE NOTES**

**A.0 SECTION A APPLICANT DETAILS**

This section contains information relating to the project and contact details.

## ANNEX A

## APPLICATION FORM GUIDANCE NOTES

**A.1 SECTION B DEFINITION OF THE REQUIREMENT****A.1.1 General.**

Key information for consideration of the battery requirements should be contained within the Operational Requirement (OR) for the equipment. Details from the OR shall be provided in section B of the application form (Annex B).

**A.1.2 Operational Maximum and Minimum Temperature.**

The maximum and minimum temperatures that the battery will experience during use shall be stated. These may differ from the ambient range defined for the equipment. Consideration should be given to heat transfer radiated from adjacent equipment and also heat generated within the battery itself. Certain applications e.g. memory protection, may require the battery to be operational across the full equipment storage range, even though the equipment itself may be turned off. Guidance on the specification of natural environments may be obtained from Defence Standard 00-35 (Environmental Handbook for Defence Materiel).

**A.1.3 Storage Maximum and Minimum Temperature.**

The maximum and minimum temperatures that the battery will experience shall be stated.

**A.1.4 Storage Duration.**

Storage duration is the intervening period between battery manufacture and use. Performance degradation occurs in all battery types and careful product selection will minimise the risk of failure where long storage duration is anticipated.

Storage duration may be a significant issue where a battery is required to remain dormant within the equipment for a number of years before it is used.

**A.1.5 Mission Time.**

Careful consideration should be given to the 'Desirable' and 'Essential' mission times. If the requirement is over-specified this will impact on the cost, size and weight of the battery. It should be noted that battery performance varies with temperature.

**A.1.6 Ability to Exchange Batteries to Achieve Mission Time.**

Consideration should be given to the viability of using more than one battery to achieve the mission time. This may not always be possible, however the benefits can include smaller, lighter batteries and reduce the risk of an aborted mission due to a single battery failure.

## **SECTION B DEFINITION OF THE REQUIREMENT**

### **A.1.7 Operational Environment.**

**A.1.7.1** As battery performance is affected by the operational environment, the mechanical and environmental conditions that the battery must withstand shall be stated. A list of generic platforms and environments is provided in Section B of the application form (Annex B). As the nature and severity of individual environments can vary considerably between apparently similar applications, more detailed information may subsequently be required.

**A.1.7.2** The battery itself may not be subjected to the same severity as the platform conditions, e.g. mechanical damping may be provided through the equipment or mountings, or protection may be provided by a shielded enclosure. It should also be noted that the battery “installed life” is generally much less than the service life of the platform. Any battery performance testing should therefore be commensurate with the service and battery life conditions. Selected tests may need to be specified to demonstrate that the battery is suitable for use in the intended application. The selected tests may include:

- a. Vibration.
- b. Acceleration.
- c. Bump.
- d. Shock.
- e. Sealing.
- f. Altitude.
- g. Mould growth.
- h. NBC.
- i. EMC and EMP.

### **A.1.8 Transportation Modes.**

The envisaged transportation modes e.g. Air, Road, Rail, Sea shall be stated as these may require additional assessment for compliance with the relevant transport regulations. It should also be noted that National and International regulations may stipulate different test requirements. If the battery will solely be used within mainland GB this should be stated or it shall be assumed that International carriage consideration is required.

### **A.1.9 State of Charge Indication.**

The requirement may include visible indication of the battery’s state of charge. The complexity of the display may range from a simple go/no go indicator to a bar-graph display. LCD (liquid crystal display) or LED (light emitting diode) displays are often used. State of charge indication can be useful to distinguish charged from discharged batteries.

**SECTION B    DEFINITION OF THE REQUIREMENT**

**1.10    Ability to charge batteries**

Recharging batteries may not be viable in some operational battlefield scenarios. This issue should be considered at an early stage to establish whether both Primary (non-rechargeable) and / or Secondary (rechargeable) batteries may be suitable.

**ANNEX A**

**APPLICATION FORM GUIDANCE NOTES**

**A.2 SECTION C EQUIPMENT CHARACTERISTICS**

**A.2.1 General**

The battery power requirements shall be defined (usually by the equipment manufacturer) taking into account the Operation Requirement and the equipment characteristics. Details of the equipment characteristics shall be provided in Section C of the application form (Annex B).

**A.2.2 Voltage Range**

The maximum and minimum acceptable voltage limits shall be stated. It should be noted that the open circuit (off load) voltage of the battery often exceeds its on-load and nominal values. Battery over-discharge may need to be controlled as this can result in degradation or damage to the battery, host equipment and breach Dangerous Goods transportation criteria.

**A.2.3 Load**

**A.2.3.1** The equipment electrical load shall be stated in terms of current, resistance or power. It is often necessary to examine the equipment load under the intended operating conditions as the load itself may be applied at a constant level, varying levels, or pulses. The ambient temperature may also influence the equipment load.

**A.2.3.2** For complex loads, it is necessary for the equipment manufacturer to define a representative 'Duty Cycle' in order to assess battery performance. Merely determining an average load may be unrepresentative, as under certain conditions the battery may fail to meet peak demands whilst still operating lighter loads. An effect that is more prominent at low temperature.

**A.2.4 Size and Mass Constraints**

It is important that the physical characteristics of the battery are determined early in the equipment development. This may allow the use of standard products within the space envelope and optimise the packaging efficiency. Specific size and weight restrictions shall be stated on the application form (Annex B).

**A.2.5 Battery Interfaces.**

**A.2.5.1 Mechanical Interface.**

The equipment interface shall be defined by reference to the manufacturers' drawing number. The relevant drawing should be attached to the application when possible.

**SECTION C EQUIPMENT CHARACTERISTICS**

**A.2.5.2 Other Interface Requirements.**

The equipment may require information from the battery during use. This may be to simply enable a low battery warning, or in more complex systems, enable power management. The communications between the battery and the equipment may be electrical or by optical link.

ANNEX A

APPLICATION FORM GUIDANCE NOTES

**A.3 SECTION D BATTERY SELECTION**

**A.3.1** When supplied with details of the battery requirements, the TSBMA may be able to propose suitable battery systems for consideration and endorsement by the equipment manufacturer through the Project Office.

**A.3.2** When selecting a battery for Service Use, in order to promote:

- a. Battery rationalisation
- b. Interoperability (batteries and chargers)
- c. Reduced battery and equipment development times.
- d. Reduced lead times for supply and re-supply
- e. Minimise battery development risks and costs.
- f. Lessen battery obsolescence risks

**A.3.3** The following order of preference for product selection shall be considered:

**A.3.3.1** An existing in-service (codified battery).

Many batteries in this category will be supplied against definitive specifications that enable a comparison with the detailed application requirements. Consequently any performance limitations or unassessed characteristics can be quantified and considered.

**A.3.3.2** A commercially available product to a National or International standard.

Whilst many battery types are available to National (BS) or International (BS, EN or ISO) standards a higher level of specification may be required for a specific military application.

**A.3.3.3** A proprietary item.

An item proprietary to a battery or an equipment manufacturer is not the preferred option for MOD, as it may lead to:

- a. Reduced scope for competition when re-provisioning.
- b. Premature obsolescence.
- c. Restrictions imposed by Intellectual Property Rights (IPR).
- d. Restrictions Imposed by proprietary interface designs.
- e. Limitations in supply.
- f. Reduced visibility of performance specifications
- g. Limitations for use in alternative applications.

## **SECTION D BATTERY SELECTION**

### **A.3.3.4** An enhancement to an existing product.

The enhancement of an existing product to meet additional performance requirements is not without risk, but may be economic and viable. However, it should be noted that even comparatively minor changes to a product may invalidate safety and test data and may necessitate reassessment.

### **A.3.3.5** The development of a new battery.

Many new battery developments are essentially enhancements or repackaging of existing products. However, the novel use of cells and batteries or the adoption of new technology may be considered. In such cases protracted programmes may be required with technical demonstration phases prior to committing to development and production.

**ANNEX A**

**APPLICATION FORM GUIDANCE NOTES**

**A.4 SECTION E ADDITIONAL SUPPORT**

**A.4.1 Whole Life Costs (WLC)**

The cost of in-service support is a significant factor in battery selection. Consideration shall be given to the Whole Life Costs (WLC) in determining the economic achievement of the operational requirements. Factors to be considered include the initial battery acquisition costs (including any required development and assessment) together with the in service and support costs and disposal. Where it is considered that a minor limitation against the Operational Requirement could provide a significant reduction in battery acquisition and support costs this will be proposed by the TSBMA to the Project Office. Consideration of the economics of alternative battery solutions shall be based on Integrated Logistic Support (ILS) guidance, which is provided in Def Stan 00-60 and the AMS.

**A.4.2 Battery Supply**

To determine the economic viability as part of battery selection, information on the quantity of batteries required (for the initial and future deployments) together with recurring annual requirements shall be considered. Long lead times associated with proprietary or non-standard products and components can be a significant factor necessitating increased stock holding in order to achieve the required availability.

**A.4.3 Charger Requirements**

If a Secondary (rechargeable) battery is selected, further information is required concerning support for the charger. The charger requirement may be satisfied by:

- a.** Use of an existing charger – Additional quantities may be required that could impact on support resources.
- b.** Modification of an existing charger – This may be undertaken under Post Design Services (PDS) through the relevant equipment support authority. For interoperability it may be necessary to consider the costs and impact of modifying the fleet of chargers to accommodate a new battery variant.
- c.** Development of a new charger - Def Stan 00-60 Integrated Logistic Support activities will need to be assessed.

**A.4.4 Battery Specification Requirements**

**A.4.4.1** If the required battery performance is not encompassed by an extant specification (National, International or proprietary) the generation of new supplement within the Defence Standard 61-21 Series or the amendment of an existing supplement may be required.

**SECTION E    ADDITIONAL SUPPORT**

**A.4.4.2** Where the risk assessment for the battery application warrants the use of Product Conformity Certification, the requirements specified within Def Stan 61-21 and Def Stan 00-00 Part 2 shall be applied.

**A.4.4.3** The requirement for the amendment of an existing supplement or the preparation of a new supplement shall be referred to the Defence Battery Standardization Committee (DBSC) through the TSMBA.

**A.4.5    Technical Publications Requirements**

The main existing Technical Publications relating to batteries are detailed in the AMS. The introduction of new documents or the amendment of existing publications will require the agreement of the appropriate members of the TSBMA. Any requirements for new publications or amendments to extant publications shall be identified in question 29 of the application form (Annex C).

ANNEX B

TSBMA BATTERY APPLICATION FORM

Security Classification.....

TO: SECRETARY TSBMA  
(Address here)

TSBMA Reference:

From:  
Address:

BATTERY APPLICATION FORM

Tel:  
Facsimile:  
Reference:

SECTION A: APPLICANT DETAILS

1. Project Office responsible for sponsorship:
2. Brief description of requirement:

SECTION B: DEFINITION OF THE REQUIREMENT

4. Operational temperature range (1.2): Max: °C Min:  
°C
5. Storage temperature range (1.3): Max: °C Min:  
°C
6. Storage duration (1.4): Max:  
Years / Months
7. Essential mission time (1.5):
8. Desirable mission time (1.5):
9. Can more than one battery be used to achieve mission time? (1.6): Yes  
/ No

If Yes, what is the maximum permissible quantity of batteries:

Notes for completion:

1. Bold numbers e.g. **(1.4)** refer to Annex A paragraphs where further information may be found.
2. Indicate by applicability by (√) where appropriate.
3. Supporting documentation/additional information may be attached as necessary.

Security Classification.....

Security Classification.....

10. In which environments will the battery will be used? Indicate whether the battery is installed within the platform or carried as loose equipment. **(1.7)**.

Aircraft (fixed wing)	Installed (..)	Carried (..)
Aircraft (rotary wing)	Installed (..)	Carried (..)
Missile/Projectile	Installed (..)	Carried (..)
Surface ship	Installed (..)	Carried (..)
Submarine	Installed (..)	Carried (..)
Vehicle (wheeled)	Installed (..)	Carried (..)
Vehicle (tracked)	Installed (..)	Carried (..)
Portable	Installed (..)	
Static	Installed (..)	
Other (please specify)		

11. Transportation methods. **(1.8)**.

Air	(..)
Sea	(..)
Land (Road & Rail)	(..)

12. Will the battery be transported outside mainland GB? Yes  
/ No

13. Indicate any special requirements.

Sealed	(..)
Non magnetic	(..)
EMC	(..)
State of charge indicator <b>(1.9)</b>	(..)
Other (please specify)	

14. Does the deployment allow for a rechargeable battery? **(1.10)**: Yes  
/ No

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15. Other requirements to be taken into consideration.

Security Classification.....

Security Classification.....

**SECTION C: EQUIPMENT CHARACTERISTICS**

16. Equipment voltage range (2.2): Max: Min:

17. Equipment load or duty cycle (2.3):

18. Maximum permissible space envelope (2.4)

- a. Rectangular: height: width: depth:
- b. Cylindrical: length: diameter:
- c. Other (please specify)

19. Maximum permissible mass (2.4):

20. Mechanical Interface drawing ref. (2.5.1):

21. Other interfaces e.g. SMART battery (2.5.2)

22. Are any interfaces proprietary?  
Yes / No

**SECTION D: BATTERY SELECTION**

23. If selecting an existing in-service battery (3.3.1) enter the battery codification.

NSN.....-.....-.....-.....

Security Classification.....

Security Classification.....

24. If selecting a commercially available battery to a National or International standard (3.3.2) complete the following:

- a. Battery standard/specification reference:
- b. Potential suppliers: Part Nos:

Does the standard/specification fully address the requirements? Yes/No /Unknown

25. If selecting a proprietary battery (3.3.3) complete the following:

- a. Supplier: Part No:
- b. Battery specification reference:
- c. Does the standard/specification fully address the requirements? Yes/No /Unknown
- d. Provide details of any IPR restrictions.

- 26. a. Is the enhancement of an existing battery (3.3.4) required? Yes  
/ No
- b. Is the development of a new battery (3.3.5) required? Yes  
/ No

**SECTION E: ADDITIONAL SUPPORT**

- 27. Initial quantity of batteries required? (4.2):
- 28. Anticipated requirement date?
- 29. Subsequent annual battery requirements:
- 30. Charger requirements (4.3):
- 31. Technical Publications requirements (4.4):

Applicant's Signature:

Appointment:

Date:

Security Classification.....

**DEF STAN 61-17/ 4**

**TO:**  
(Address here)

TSBMA)

**TSBMA Reference:**

From: (Secretary

Address:

Tel:

Facsimile:

ANNEX C

TSBMA APPLICATION ENDORSEMENT FORM

**BATTERY APPLICATION REPLY FORM**

With reference to your application reference:

dated:

The TSMBA require further details and request that you liase with the following office:

The TSBMA request that you consider using the following battery to meet your requirement:

The TSBMA consider that your requirement cannot be met by an existing in-service battery and concur with your decision to proceed with a new battery development.

Signature:

Appointment:

Date:

**TO:**  
(Address here)

TSBMA)

**TSBMA Reference:**

From: (Secretary

Address:

Tel:

Facsimile:

**ANNEX D**

**TSBMA BATTERY APPLICATION REPLY FORM**

**ENDORSEMENT OF BATTERY APPLICATION**

With reference to your application reference:

dated:

- The TSMBA have agreed and noted the selection of the proposed battery to meet your requirement.

Signature:

Appointment:

Date:

## ANNEX E

## TSBMA CONTACT DETAILS

<b>Table 1: Contact Details</b>	
Secretary to TSBMA Field Equipment 3 Combat Support Equipment IPT Building 300/G DLO Andover Hants. SP11 8HT	Air Land Technology Group ADRP3e Defence Procurement Agency Ash 3b # 3310 MOD Abbey Wood Bristol BS34 8JH
NPPO Telford Sapphire House Stafford Park 10 Telford Shrops TF3 3AD	ESPPA Engineering Branch 5 Sapphire House Stafford Park 10 Telford Shrops TF3 3AD
DLO Equipment Support (Air) AvEL Eng Bazalgette Pavilion RAF Wyton Huntingdon Cambs PE28 2EA	DLO Equipment Support (Land) Field Equipment 3 Combat Support Equipment IPT Building 300/G DLO Andover Hants. SP11 8HT
DLO Equipment Support (Sea) NPPO(F)1a Spur 12 Block F MOD Foxhill Bath BA1 5AB	

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**DStan Helpdesk**

Tel 0141 224 2531/2  
Fax 0141 224 2503  
Internet e-mail enquiries@dstan.mod.uk

**File Reference**

The DStan file reference relating to work on this standard is D/DStan/61/17.

**Contract Requirements**

When Defence Standards are incorporated into contracts users are responsible for their correct application and for complying with contractual and statutory requirements. Compliance with a Defence Standard does not in itself confer immunity from legal obligations.

**Revision of Defence Standards**

Defence Standards are revised as necessary by up issue or amendment. It is important that users of Defence Standards should ascertain that they are in possession of the latest issue or amendment. Information on all Defence Standards is contained in Def Stan 00-00 Standards for Defence Part 3 , Index of Standards for Defence Procurement Section 4 'Index of Defence Standards and Defence Specifications' published annually and supplemented regularly by Standards in Defence News (SID News). Any person who, when making use of a Defence Standard encounters an inaccuracy or ambiguity is requested to notify the Directorate of Standardization (DStan) without delay in order that the matter may be investigated and appropriate action taken.