



# SPECIFICATION FOR THE REPAIR OF LIGHTING AND POWER DISTRIBUTION SYSTEM (LAPDS) EQUIPMENT

The contents of this specification must not be communicated to a third party or used for any other work than that for which the specification is issued without the written agreement of the Babcock DSG Repair Manager

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# **Amendment Record**

Issue/ Amdt No	Identification of Change Page & Para No	Date Entered	Date Effective	Authorisation

### 1.0 Introduction

J3

J3

1.1 The equipment covered by this Statement of Work belongs to the Operational Infrastructure Project Team (OI). LAPDS is a flexible mobile distribution system used to distribute electrical power to facilities when Military Units are deployed on operations or training.

DMC	NSN	DESCRIPTION
J3	6115997245224	LAPDS / FEPS GIU
J3	6110996798458	LAPDS / SDU
J3	6115998740134	LAPDS GIU
J3	6110996698817	LAPDS GIU Modified
J3	5975991542707	LAPDS UCU
J3	6110996058480	LAPDS LDU

LAPDS CDU

LAPDS LGIU

Table 1 – Equipment Details

6110997385496

6115996659985

- 1.2 This document is intended as an outline specification detailing the engineering requirement to enable a company to apply their expertise to produce a compliant product that meets the in-service user requirements, which shall be acceptable to the Authority and for which a warranty shall be provided. The performance of completed assemblies shall meet or exceed that of the original equipment manufacturers (OEM) specification and the criteria contained in this specification. Should any differences exist between the OEM and MoD specifications, either in build or test criteria, the MoD will generally take precedence. Clarification should be sought from the Babcock DSG Repair Manager.
- 1.3 The demanding operational role of Armed Service equipment is significantly different to that of equivalent commercial equipment. It is essential to ensure that this equipment proves reliable when used and that the end user has the necessary confidence that it will survive the rigours of Service application.
- 1.4 It is MoD Policy that contractors hold a current recognised third party Quality Accreditation Certification (UKAS or International equivalent). For the work requirement of this specification, the contractor shall be registered in accordance with the requirement of ISO 9001:2015 suitably scoped as a minimum.
- 1.5 There may be circumstances, such as urgent operational requirements (UOR) where it will be to the Authority's benefit to accept delivery of products that do not conform to contract requirements, as detailed in Defence Standard 05-061 (Part 1) (Concessions), but there must be a clear and demonstrable benefit to the Authority and approval must be given by the Babcock DSG Repair Manager, (in writing), before this takes place.

1.6 Any quantities referred to are estimated quantities only. The Authority may order more or less than those referred to. Any figures are for guidance only and no guarantee can be given that any specific quantities of repairable items will become available.

### 2.0 Publications

- 2.1 Contractors are responsible for obtaining the latest OEM publications, parts lists and supersession lists for the equipment.
- 2.2 Publications produced by the MoD for service use are, in general, based upon the commercial publications but the format is specific to the service user. Contractors are responsible for obtaining and maintaining the latest issues of these publications.
- 2.3 Publications applicable to the assemblies within this requirement are covered in Table 2 below:

Table 2 - Support Publications

Publication	Title
JSP 886	Defence Logistics Support Chain Manual
AESP <sup>1</sup> 0200-A-220-013	Preservation, Identification and Packaging of Assemblies
DEF STAN: 05-57	Configuration Management of Defence Material (issue no 7 dated 28/07/18)
DEF STAN: 05-99	Managing Government Furnished Equipment in Industry. Part No1 (Issue no 1 dated 14/07/17)
DEF STAN: 05-61	Quality Assurance Procedural Requirements Part 1 – Concessions (Issue 6 dated 31/03/16 Part 4 – Contractor Working Parties (Issue no 3 dated 25/10/02, amendment No 1 dated 28/01/11
DEF STAN:00-056	Safety Management Requirements for Defence Systems Part 2 – (Issue no 5 dated 28/02/17)
DEF STAN: 05-135	Avoidance of Counterfeit Material (Issue no 1 dated 10/07/14)
DEF STAN: 81-41	Packaging of Defence Material Part 4 – Service Packaging and marking Instruction Sheet (SPIS) (Issue 8 dated 16/10/15) Part 6 – Package Marking (Issue 10 dated 14/02/18)
AESP 6115-G-711	OI Lighting and Power Distribution System (LAPDS)

### 3.0 Documentation

3.1 A Deliverable Quality Plan (QP) which complies with AQAP 2105 Edition C Version 1 January 2019 is required at ITT stage to demonstrate how equipment is to be managed. The QP shall identify all risk areas and detail how they will be mitigated and

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<sup>&</sup>lt;sup>1</sup> Army Equipment Support Publication

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managed throughout the duration of the Contract. The QP shall reference procedures, developed in accordance with the Contractors Quality Registration, which details how control of the repair relating to the Company Quality Assurance processes will be achieved. Validation of requirements, Inspection and test points shall be clearly indicated. Documentation relating to critical or safety related items and assemblies shall be highlighted.

- 3.2 Following the provision of equipment to repair under this contract<sup>2</sup>, the Contractor is required to submit a strip survey report to the Babcock DSG Repair Manager fully identifying the requirement for all work relating to the assembly, including costs. No work of this type is to be undertaken by the Contractor until this strip survey report and the associated costs have been sanctioned by the Babcock DSG Repair Manager as 'fair and reasonable' and authority is given to proceed.
- 3.3 At the commencement of the Contract, and thereafter at reasonable intervals depending upon need arising and priorities, the Babcock DSG Repair Manager and Contractor shall agree a "production plan" for the repair. The Contractor shall provide a monthly report on the progress of the repair work against the plan to the Babcock DSG Repair Manager. This report must include expected delivery dates, financial accrual information and any mitigating factors to support repair and/or delivery variations.
- 3.4 Records, comprising repair, calibration, inspection, spares and test reports as applicable and defined in this specification, shall be maintained by the Contractor. Additionally the Contractor is to keep records of all visits/survey reports, approvals and costs incurred in the repair/manufacture of the Contractor deliverables. Where there is a legislative requirement, documents are to be kept for the period specified in that legal requirement. All records must be made available to the Authority as required.

# 4.0 Repair Policy

- 4.1 **Repair**. Assemblies submitted for repair will have been removed from service for a multitude of reasons<sup>3</sup>. The requirement for the remanufacture of these assemblies is to give an expected life of not less than eighty percent of that of a new assembly. This specification is not to be considered as comprehensive for the work requirement and is not to be used as a reason to limit any work on the assembly. It is the Contractor's responsibility to produce a comprehensive repair specification for each item and to ensure that the quality of the assembly returned after refurbishment shall meet the requirement of "as new" with the stated life requirement and in compliance with the latest IET Regulation, BS7671.
- 4.2 **Beyond Economical repair (BER)**. Fully priced estimates shall be required for any assembly not considered by the repairer as economic to repair. These must be submitted at the survey stage (before work commences) and not be a result of back stripping or cannibalisation. The Authority will only agree Beyond Economic Repair (BER) classification where the Contractor has been able to demonstrate that their cost to

<sup>&</sup>lt;sup>2</sup> For the purposes of DEFCON 611 all contractor deliverables issued under the contract will be issued on as a Contract work Item (formerly Contract Loan) basis.

<sup>&</sup>lt;sup>3</sup> The contractor is advised that no guarantee can be given or responsibilities accepted by the Authority regarding the completeness or correctness of equipment issued for repair, or give any indications of the level of repair required.

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repair is greater than the eighty percent of new cost<sup>4</sup> as supplied to the MoD. Once BER has been agreed the Authority will issue disposal instructions for the scrapped carcass accordingly.

- 4.3 **Remanufacture.** The assembly and its ancillaries shall be to the latest MoD approved OEM specification and modification state, using approved procedures in accordance with the current service/workshop manual for the item. Completed assemblies, including ancillaries, shall be tested to the OEM test specification. The performance and quality standard of the assembly shall meet or exceed the requirement of the OEM specification. Records of performance tests and results as applicable shall be supplied as stated in this specification. All assemblies and ancillaries shall be covered by a warranty as defined in the terms and conditions of the Contract.
- 4.4 **Replacement Parts**. Procurement of all replacement parts used in the repair shall be the responsibility of the Contractor. All parts shall meet or exceed the OEM specification and shall be purchased from approved suppliers. Certificates of conformity (COC) shall be obtained for all parts which have not been sourced through the OEM, and shall be made available to the Babcock DSG Repair Manager or a nominated representative when requested.
- 4.5 The following items are to be considered as mandatory 100% replacement components, regardless of their condition:
  - a. All seals, 'O' rings and gaskets.
  - b. All throw away locking devices, tab washers, nylon nuts, split pins, retaining rings and locking wire.
  - c. All flexible hoses.
  - d. All 'P' clips.
  - e. Screws, nuts, bolts and spacers.
  - f. Any shelf-life items.
- 4.6 **Safety.** The Contractor has an obligation towards safety. Any failures or incidents in relation to the equipment which affects safety shall be reported to the Babcock DSG Repair Manager without delay. The Babcock DSG Repair Manager shall be entitled to require action to be taken to correct the failure and to prevent reoccurrence.
- 4.7 **Modifications**. All modifications approved by the OEM & MoD as defined in the latest technical documentation shall be incorporated as part of the repair. Unauthorised modifications shall not be incorporated.

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<sup>&</sup>lt;sup>4</sup> This is the general guide criteria but can be varied depending upon stock levels, new buy time limits and supply urgency, the Babcock DSG Repair Manager will advise in all BER requests.

## 5.0 Repair Requirement

- 5.1 **Repair Inspection**. Assemblies received for repair are to be checked for correct nomenclature and part number and a report produced detailing the modification status (if applicable), serial number, any significant damage and/or missing items.
- 5.2 **MOD Form 445 (Discrepancy Report)**. Any discrepancies in the items delivered should be reported using MoD Form 445 (Discrepancy Report). These reports shall be completed in accordance with the criteria laid down in JSP 886 and distributed as required by the Contract with two copies to the issuing depot and one to the Babcock DSG Repair Manager.
- 5.3 **Disassembly.** All assemblies and ancillaries must be completely emptied, stripped and thoroughly cleaned and degreased. A detailed inspection of all components shall be carried out, with a full survey report raised to establish the extent of the work requirements. The survey report shall be sent to the Babcock DSG Repair Manager for repair approval as per para 3.2.
- 5.4 **Repair Requirement**. The scope of the repairs to be carried out shall be determined from the survey against OEM specification. At this stage, all those components being replaced are to be disposed of using Contractor's formal quality control procedures. All remaining components shall be inspected to establish their suitability for re-use or reclamation. Those found not suitable are to be disposed of by the Contractor once approval for the repair has been given by the Babcock DSG Repair Manager.
- 5.5 **Rebuild**. Assemblies are to be rebuilt in accordance with the latest OEM specification using reclaimed and new components, incorporating all approved modifications where applicable.
- 5.6 **Identification and Marking**. The Contractor shall permanently fix an identification plate to the assembly indicating that they have been subject to repair. The plate shall record:
  - a. Re-manufactured for MoD.
  - b. Authority's Job Number (e.g. PR100012345).
  - c. Date of re-manufacture.
  - d. Assembly Serial Number (if applicable).
  - e. Warranty period (as per the Contract).

# 6.0 Performance and Test Acceptance

- 6.1 On completion of repair the assembly shall be subjected to suitable static and dynamic testing and acceptance by the Contractor.
- 6.2 Final testing of all assemblies shall be carried out in accordance with OEM/MoD procedures and standards. Where discrepancy exists between the OEM and MoD test

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specification the MoD specification will generally take precedence, but the Contractor shall ultimately seek clarification from the Babcock DSG Repair Manager. It is the responsibility of the Contractor to ensure that all test equipment is maintained and calibrated.

6.3 Inspection/test records shall be retained for all assemblies for a period of four years in accordance with DEFCON 609 and made available for the Babcock DSG Repair Manager or nominated representatives of the Authority upon request.

# 7.0 Preservation & Packing

- 7.1 Relevant assemblies are to be internally & externally preserved, where appropriate, in accordance with AESP 0200-A-220-013, DEF STAN 81-62 and DEF STAN 81-41
- 7.2 Where appropriate, completed assemblies are to be painted to OEM specification.
- 7.3 Completed assemblies are to be packed in accordance with the relevant Service Packaging Instruction Sheet (SPIS) and to the level shown in the contract or order.
- 7.4 Any replacement wood used in packaging must be ISPM 15 compliant and carry the Forestry Commission, Heat Treated, mark (see below) (DEFCON 129 refers).





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