



Ministry  
of Defence

**JSP 886  
DEFENCE LOGISTICS SUPPORT CHAIN MANUAL**

**VOLUME 7  
SUPPORTABILITY ENGINEERING**

**PART 8.17  
CALIBRATION POLICY**

**THE MASTER VERSION OF JSP 886 IS PUBLISHED ON  
THE DEFENCE INTRANET.**

**FOR TECHNICAL REASONS, EXTERNAL LINKS ON THIS  
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**Contents**

Contents .....	2
<b>CHAPTER 1: CALIBRATION POLICY .....</b>	<b>3</b>
CONTEXT .....	3
POLICY.....	3
PROCESS .....	4
ASSOCIATED STANDARDS AND GUIDANCE .....	4
OWNERSHIP AND POINTS OF CONTACT .....	5
ORGANISATION .....	5

## **CHAPTER 1: CALIBRATION POLICY**

### **CONTEXT**

1. This part provides detailed policy and guidance on the Calibration of Test Equipment (TE) and certain Support Equipment (SE) within MOD, required for the effective Through Life Support (TLS) of equipment, in accordance with MOD Integrated Logistic Support (ILS) policy.
2. Within JSP 886 Vol 7 the policy requirements for Support and Test Equipment (S&TE) are covered in two parts, Part 8.06 which relates to TE including Automatic Test Systems (ATS) and Part 8.07 which relates to SE.
3. Acquisition of Support and Test equipment is to consider the likely point of use for said equipment when setting calibration plans. Periodicity and location of calibration can have a negative effect on the operational capability and provide extra load to the Supply Chain in support of operations.

### **POLICY**

4. The following policy applies to the calibration of TE:
  - a. All TE used for measurement, test and calibration shall be calibrated to an agreed specification via an unbroken chain of calibrations establishing traceability to National Measurement Standards. Guidance is to be sought from JSP 509: The Management of Test Equipment, which specifies the relevant Calibration Statement of Requirement (CSOR) to ensure that TE complies with the manufacturer's claimed performance specification and any additional requirements unique to MOD.
  - b. Equipment shall be calibrated at laboratories holding an appropriate system certification provided that the scope of the certification covers the work to be done. For contracts where delivered products include a requirement for testing and/or calibration DEFSTAN 05-55 Part 3 shall be invoked.
  - c. The Defence Community is to maximise the use of MOD internal calibration laboratories, Engineering Support Services within the Warship Support Maintenance Initiative (WSMi) and [Defence Support Group \(DSG\)](#).
  - d. All measurements, whether made for purposes of calibration or product characteristic assessment, are to take into account the expanded uncertainty of measurement of the measurement process for each parameter measured. This will include errors attributable to the standard or measuring equipment, personnel, procedure and environment. The expanded uncertainty of measurement is to be no more than 25% of the tolerance for each specified measurement. Where this cannot be achieved, the equipment sponsor is to be notified to enable a decision to be made regarding selection of a better suited calibration laboratory or acceptance of the level of service offered. For a detailed explanation of Calibration terminology refer to UKAS document M3003.
  - e. All measurements are to have an associated uncertainty at a confidence level of 95% or better.
  - f. TE shall be calibrated at periodic intervals to preserve the integrity of the measurements performed. The responsibility for mandating Calibration Intervals will

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lie with the owner of that TE i.e. all GPTME included in JSP 509 Vol 2 database will have the relevant Calibration Interval mandated by Deployable Infrastructure Project Team (DIPT), and all SPTME will have the Calibration Interval mandated by the PT who owns it.

g. The calibration status and serviceability of all measurement standards and TE shall be identified by means of a suitable calibration label signifying compliance to an agreed specification. All labels shall comply with MOD Form 1775: The Standard System of Colour Coded Calibration Labels used on MOD Test Equipment (Sponsored by DIPT).

h. TE whose calibration date has expired shall not be used. Exceptionally, and to support operations, a specialist engineering officer may grant an extension up to a maximum of 25% of the declared calibration interval, provided that the application is made prior to calibration due date. JSP 509 "Concessions to Use TME Beyond Calibration Validity Dates" refers.

i. Calibration of all Strategic related TE is carried out at Northern Calibration Facility (NCF) Faslane, and is governed by US/UK specific policy outlined in Polaris/Trident II Technical Arrangement Part 29 and other related policy documents. JSP 886 Volume 7 will not therefore be applicable to this specific workload.

j. All calibration/testing activities carried out outside of a calibration facility (previously known as on-site calibration, verification, cross-checking, qualification or unit/user level testing) are now referred to as Unit Level Tests, and are to be conducted in accordance with relevant Unit Level Test Procedures contained in. JSP 509 Volume 5. Policy covering this activity is currently outlined in DEFSTAN 05-55 Part 2.

k. Certain items of SE also require periodic testing or calibration, and are therefore subject to MOD policy as above:

(1) Hand tools such as micrometers, verniers, torque wrenches.

(2) Instrumentation or indicators such as pressure gauges, flow meters, panel meters.

(3) Armament gauges and certain jigs and fixtures.

### PROCESS

5. Refer to JSP 509.

### ASSOCIATED STANDARDS AND GUIDANCE

6. The following documents are associated with Calibration:

a. [UKAS Publication M3003 The expression of uncertainty and confidence in measurement.](#)

b. [Support Solutions Envelope \(SSE\) Key Support Area \(KSA\) 2: Supportability Engineering.](#)

c. [JSP 509: Management of Test Equipment.](#)

d. [DEFSTAN 05-55: Measurement and Calibration System Requirements for Ministry of Defence Test & Measurement Equipment:](#)

- (1) Part 1: MOD Calibration Laboratories Operation and Management.
- (2) Part 2: Unit Level Test.
- (3) Part 3: Sub Contract of Calibration.

e. MOD Form 1775: The Standard System of Colour Coded Calibration Labels used on MOD Test Equipment.

## OWNERSHIP AND POINTS OF CONTACT

7. The owner of the Part is Director Joint Support Chain (D JSC). Head of Supply Chain Management (Hd SCM) is responsible for the management of JSC policy on behalf of D JSC. The policy sponsor for this document is DES JSC SCM-EngTLS-PEngr.

8. Enquiries concerning the content of this instruction should be addressed to:

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- b. General content to the JSP 886 Editorial Team:

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## ORGANISATION

**Figure 1: Organisation of Support Equipment, Test Equipment and Calibration**

