

# Review of Def Stan 00-42 Pt 4 Testability

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# Objective

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- Review from perspective of an MOD IPT contracting for Testability.
- Liaise with MOD R&M for input or requirements.
- Compare with IEC 60706-5 Standard
- Determine if IEC is alternative to Def Stan
- Identify other sources of Testability information

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# Objective

2

- Consider whether ESS introduces testability requirements
- Consider impact of testability on BIT
- Deliverable evidence of testability: data retention and future use
- Validation of testability requirements
- Produce draft revision for review

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# Comparison of 00-42 & 60706

- Not Prescriptive nor Exhaustive
- “... Seek Guidance from Subject Matter Experts”
- Covers Requirements for IPT Contracting for Testability
- Definitions & Terminology - OK
- Provides Testability Measures
- Includes Verification of Testability
- Needs significant general wording improvements

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# Comparison of 00-42 & 60706

- Good Introduction, Description and Objectives of Testability and Diagnostic Testing
- Good Definitions & Terminology
- Provides Verification of Testability
- Good examples – care need time to understand; not the only way

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# Comparison of Definitions

- Review using criteria: not present, adequate, good, good and descriptive, descriptive but improve
- Generally 60706 better than 00-42
- Improve 00-42 using 60706 and other sources

# Definition of Testability

- “A design characteristic which allows the status (operable, inoperable, or degraded) of an item to be determined and the isolation of faults within the item to be performed in a timely manner.” MIL-STD 2165
- design characteristic
- no restriction on technology
- detection and isolation

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# Way Ahead - Improve

- Bring out key points to aid understanding:
  - what it is: **Testability Concepts**
  - why it is carried out: **Testability Objectives**
  - when should it be carried out: **Testability in the Development Process**

# Way Ahead - Improve

- Procurement process:
  - How it should be specified: **Testability Specification**
  - What should be specified: **Testability Criteria**
  - How it should be implemented: **Contracting for Testability**
  - How the implementation should be assessed: **Testability Verification**
- Content, Wording, Terminology, Definitions

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# Summary Final Document

- Objective
  - add in new aspects
  - more precise terminology
  - clearer purpose and structure
  - more prescriptive guidance
  - complete and standalone
- Timescales
  - Draft available to SLGAT for comment - early 2013