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4/24/95	A	Original issue	J. Psioda
7/1/96	B	Changed minor errors	J. Psioda
8/11/98	C	a. Added MES 7000 b. Changed the record keeping section	J. Psioda
6/20/11	D	Remove references to 1020427 ECN 71798	M. Leiterman

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Approved:	Joe Psioda	8/12/98		
Checked:	Jose Sancho	8/12/98		
			Title: Product Acceptance Plan (MES 9000)	
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				No. 1020429

Introduction

This document serves as the Hughes Network Systems Materials Engineering department standard to be followed for new product acceptance, for new supplier approval, and for continuous product surveillance. This plan serves as the top level document in the HNS Materials Engineering Approval Process, the components of which shall be invoked as given in Table 1.

Product Acceptance Plan Implementation Matrix

Product Acceptance Plan MES 9000	Supplier Capability Survey	First Article	Manufacturing Verification Test	Continuing Assessment	Statistical Controls and Reporting
CONDITION	MES 1000	MES 2000	MES 3000	MES 5000	MES 7000
Initial (start-up) production	✓	✓	✓		
Design or process change		✓	✓		
Change in site of manufacture	✓		✓		
Previous results unfavorable (FAIL)	✓	✓	✓	✓	✓
Periodic evaluation	✓			✓	✓

Table 1

Relationship of Product Acceptance Documents

Supplier Capability Survey

- Initial Supplier contact.
- Assess Supplier capability.
- Report findings and make recommendations.

First Article

- Establish compliance to specifications.
- Establish Inspection Correlation.

Manufacturing Verification Tests

- Establish integrity of Supplier’s manufacturing processes.

Continuing Assessment

- Verify critical baseline characteristics. (See first Article, MVT & Test Correlation)

Statistical Controls and Reporting

- Establish statistical control of production lot

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Procedure

The initial supplier contact will be done by Purchasing or Design Engineering. If the product meets the designer's requirements, Materials Engineering will begin the acceptance process for the production use of the product.

The product acceptance process will be implemented in the following sequence:

1. Supplier Capability Survey
2. First Article
3. Manufacturing Verification Tests
4. Supplier Readiness Approval

The **Supplier Readiness** metric MEF9001 is used to document the status of each approval process.

Before a product can be released for HNS production use, the Supplier Readiness metric must have signature approval from the responsible Materials Engineer, Design Engineer and Program Manager.

Document Number Assignment System

The following document number system will be used within the Materials Engineering group:

MESxxxx = Materials Engineering *standard* documents or procedures.

MEDxxxx = Materials Engineering boilerplate *document* (form letters, trip reports, etc.).

MEFxxxx = Materials Engineering boilerplate *forms* (worksheets, reports, summaries, etc.)

The MES standards are commodities based and prescribe procedures and plans to be followed.

The MED documents are used in creating trip reports, letters, etc. They provide the preferred styles to be used by Materials Engineers when communicating with suppliers, trip reports, etc.

The MEF forms are commodity specific and are used to document activities throughout the procedures. These forms will be created as needed by the Materials Engineer in charge of the commodity. (See record keeping below).

Examples: MEF100x documents are Grading Summary & Comparison forms, MEF300x documents are MVT Summaries, etc. See Table 2

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Record Keeping *(not DCCMS Controlled documents)*

The main documents of MES 1000, 2000, 3000, 4000, 5000, 7000, and 9000 are released in the DCCMS. The other working documents used by Materials Engineering are available on the Hughes Network Systems Intranet address: <http://hnsweb/meweb>. File DOCLOG.DOC will have an up-to-date log of the documents created, its latest revision, its title, date of creation and creator's name. Before creating a new document for a commodity, review the DOCLOG.DOC file for documents related to that commodity.

The creator or the person revising a document must make sure this log is kept up-to-date. All files created must be write protected to avoid unintentional modifications.

Definitions

Commodity : A group of products with similar functions and/or applications.

Specific Product : A product with a unique HNS part number.

Supplier : When capitalized, refers to the entity supplying product to HNS.

M E □ X X X X

Materials

Engineering

Type

Family

Type
Modifier

Commodity

Type: D = Document
F = Form
S = Standard

Type Modifier: 0 = None
1 = Purchasing Information
2-9 = Commodity Information

Family: 1 = Supplier Capability Survey
2 = First Article
3 = Manufacturing Verification Tests
...
5 = Continuing Assessment
...
...
...
9 = Top Document

Commodity: 01 = Cables
02 = Bare Boards
03 = Power Supplies
04 = Built-to-Print Assemblies
05 = Built-to-Specification Assemblies
06 = Machined Parts
07 = Molded Parts
08 = Sheet Metal Parts
09 = Castings
10 = Extrusions
11 = Labels & Packaging

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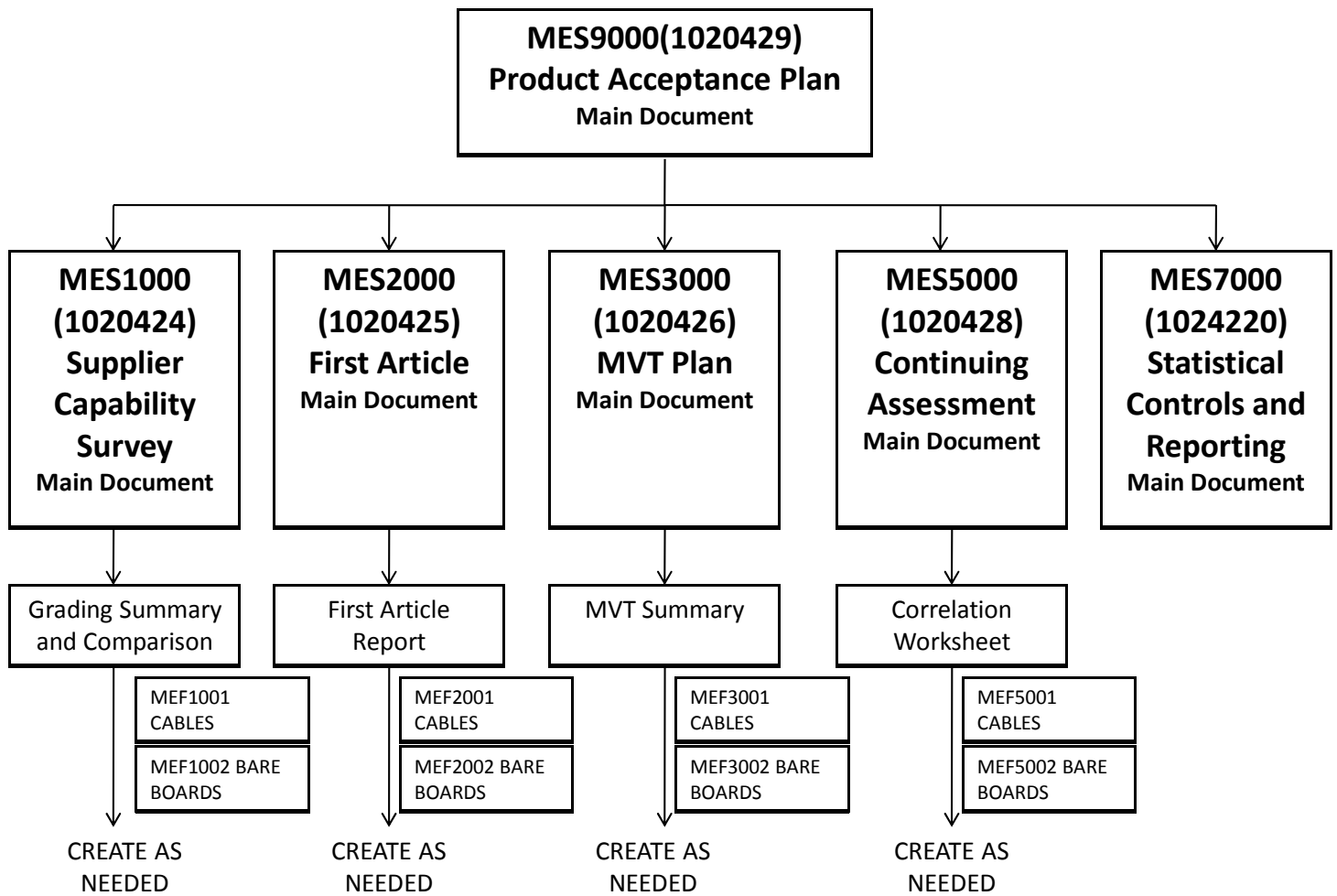


TABLE 2. Document Flow Chart