DATA ITEM DESCRIPTION

Title: MATERIAL AND PROCESSING DIGITAL DATA PACKAGE (MPDDP)

Number: DI-MISC-82020
AMSC Number: F9619
DTIC Applicable: No
Preparing Activity: AF 20 (AFRL/RX)
Applicable Forms: N/A

Approved Date: 20151222
Limitation: N/A
GIDEP Applicable: No
Project Number: MISC-2016-003

Use/Relationship: The Material and Processing Digital Data Package (MPDDP) provides a means for transmitting contractor internal data which has been generated by the contractor in compliance with the work effort described in the Statement of Work (SOW). The MPDDP will be suitable for inclusion in a digital data repository in order to facilitate archiving, re-use, and re-distribution.

This Data Item Description (DID) contains the format, content, and intended use information for the data deliverable resulting from the work task described in the solicitation.

Requirements:

1. Reference documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.

2. Format. The Material and Processing Digital Data Package (MPDDP) shall be encoded in a digital file format that is enduring, commonly accessible, and is both human interpretable and machine actionable.

3. Content. The MPDDP shall convey internally generated research and engineering materials data and their accompanying metadata in a manner that maximizes reusability of the data. Each logical element of the MPDDP shall include the following data and metadata elements:

3.1 Summary metadata:

a. Elements as defined by ANSI/NISO Z39.85, *The Dublin Core Metadata Element Set.*

(Copies of this document are available online at http://www.niso.org/standards/).

b. Contract number.

c. Export control status.

3.2 For data acquired though experiment, characterization, or a manufacturing process:

a. Experimental, characterization, or manufacturing process results.

b. Pedigree and provenance of material.

c. Test apparatus, manufacturing/fabrication equipment, and their calibration including measurement and data collection method(s).

d. Testing standards or processing specifications used including sample preparation and/or manufacturing equipment configuration.

e. Experimental, characterization, or manufacturing processing conditions and procedures.

f. Data reduction and analysis procedures.

g. Uncertainty associated with the data and method used to calculate uncertainty.

3.3 For data created through simulation or design:

a. Simulation results.

b. Description of material state or process simulated.

c. Input variables, boundary conditions, and assumptions.

d. Computational environment.

e. Software name, publisher, and version number.

f. Data reduction and analysis procedures.

g. Uncertainty associated with the data and method used to calculate uncertainty.

h. Sensitivity analysis of results, if performed or appropriate.

i. Verification and validation procedures employed and the results.

End of DI-MISC-82020