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Maintenance, Logistics, & Facilities
Configuration and Data Management, NWSPD 30-12

DATA MANAGEMENT

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SUMMARY OF REVISIONS

This Procedural Directive supercedes National Weather Service (NWS) Procedure Directive 30-1201 dated September 6, 2002, and is revised to clarify data management responsibilities.

Signed by   September 30, 2003

John McNulty, Jr.   Date
Director, Office of Operational Systems

NWS Directives System - Data Management

1   Purpose. NWS Directive 30-12 establishes Data Management policy for NWS systems under CM control. Data Management organizations:

   a.   Operate as a repository and control center for contractor generated configuration data deliverables.

   b.   Provide services to the Contracting Officer, Contracting Officers Technical Representative and Project Manager to assure establishment of data schedule(s) for configuration data.

   c.   Coordinate configuration data deliverables with contractor counter parts to assure timely scheduling, delivery and review of Contract Data Requirements Lists (CDRLs).

   d.   Receive and catalog correspondence for programs under CM control.

2   Scope. Data Management includes processes for managing engineering documents such as drawings, associated lists, accompanying documents, manufacturing specifications and standards; as well as other information prepared by a contractor and relating to the design, manufacturing, procurement, project management, test or inspection of configuration items.

3   Data Management Responsibilities. The following sections list data management responsibilities within the NWS.

3.1   Program Management Organizations.   Program Managers are responsible for the acquisition of new NWS equipment. If a program is under NWS CM control, Program Managers are responsible for submitting all Requests for Proposals, Statements of Work, or other contract documentation to the responsible Office of Operational Systems (OPS) CM organization for review. The review will evaluate configuration data requirements against overall program strategies and project milestones. NWS Instruction 30-1203 Configuration Management for Operational Systems lists responsible CM organizations. The responsible OPS CM organization will ensure related acquisition documents reflect configuration management data requirements for each program. Program Managers are responsible for the acquisition of all CM contract deliverables, and delivery of these items to the responsible OPS CM organization. In addition, Program Managers are also responsible for the following items.

3.1.1   Commercial Data. For non-developmental items acquire commercial data adequate to support maintenance, repair, or modification of acquired items. Prior to acquisition, evaluate commercial data for its ability to logistically support the end item. Program Managers should consider whether existing data is adequate, in conjunction with estimated costs of upgrading existing data, to establish or sustain maintenance support. Program Managers should also consider the restrictions on the unlimited use of configuration data and the cost effectiveness of purchasing unlimited rights to limited rights data.

3.1.2   Validation Controls. Incorporate government or contractor-release validation controls in acquisition documents requiring a contractor to develop government drawings. Contractors prepare

government drawings when control of government design activity is essential to control configuration baselines.

3.1.3   Office of Operational Systems (OPS) CM Guidelines. Use guidelines from OPS CM to incorporate work tasks for configuration data requirements into Requests for Proposal (RFP) or contracts. Acquisition program offices should select or consider statement-of-work tasks for acquisition or modification programs to incorporate into acquisition documents. Those documents should contain:

    a.   Identification, selection, and tailoring of applicable specifications, standards, and Data Item Descriptions (DID).

    b.   Specific Technical Data Package (TDP) requirements. The Program Manager must ensure the contractor preparing the TDP:

        (1)   Incorporates test criteria on TDP documents.

        (2)   Develops wiring data and schematics.

        (3)   Maintains data and documents to develop an Indentured Data List.

        (4)   Converts deliverable data to digital data.

        (5)   Develops an engineering drawing tree.

        (6)   Develops schematic block and functional flow diagrams.

        (7)   Develops engineering drawings and associated lists reflecting the end item.

    c.   Requirements for flow-down relationships of contractors with subcontractors and vendors within the statement of work.

3.1.4   TDP Documents. Establish criteria and work requirements for revisions to TDP documents.

3.1.5   Contractor Participation. Require contractor participation and support in Post-award CM conference meetings. Consider:

    a.   Contractor understanding of CDRL requirements, applicable DIDs, and tailored specifications and standards.

    b.   Contractor commitment to investigating causes of drawing deficiencies that will lead to a process improvement.

    c.   Contractor understanding that identification of drawing deficiencies must lead to process changes and improvements that will generate quality TDPs.

    d.   Requirements, schedules, contractor drafting practices, and TDP document formats.

    e.   Contractor drawing numbering system for documents and part numbers.

f.   Contractor quality-assurance procedures for preparing TDPs and their control relationship with subcontractors.

g.   Contractor rights in data marking procedures.

h.   Role of subcontractors and vendors who deliver TDP documents.

i.   Contractor procedures for TDP revision and change.

j.   Contractor understanding of software drawing checks, validation procedures, and processes for conforming with engineering documents.

k.   Digital data preparation and delivery practices.

l.   Existing contractor TDP documents.

m.   Contractor position concerning unique government-required distribution statements and data-rights statements.

n.   Project schedules and milestones.

3.1.6   Conditions of Review. Establish the roles of participants and conditions for the review of TDP documents. Consider:

a.   Applicable specifications and standards that govern the process.

b.   Provisions for conducting special reviews when TDP deficiencies indicate the need.

c.   Conditions that require contractor correction of TDP document deficiencies.

d.   Conditions that require a contractor to establish process change practices that address causes of drawing deficiencies.

3.1.7   CDRLs. Prepare CDRLs for each selected DID for defined work tasks and tailor CDRLs to provide minimum requirements for each program. Consider:

a.   Specific DID tailoring required.

b.   Appropriate specifications and standard tailoring or clarification.

c.   Specific methods of delivery and the type of configuration data being delivered.

d.   Identification and structure of applicable distribution statements and notices.

e.   Types of configuration data, specific schedules for delivery, government review conditions, and contractor re-submission criteria.

f.   Conditions for provisioning decisions affecting configuration data needs.

g. Delivery addresses for specific types of media delivery and number of data sets required.

3.1.8 Post-Award Conferences. Conduct post-award conferences after contract award. Address the configuration data requirements imposed in contracts and CDRLs.

3.2 OPS CM. The appropriate OPS Configuration Management focal point:

a. Identifies TDP requirements for acquisition groups and helps acquisition Program Managers review CM elements within TDPs.

b. Designates a person of primary responsibility within its organization for configuration program management responsibility for a particular program under CM control.

c. Selects and provides representatives familiar with acquisitions to participate on CM contract reviews.

d. Performs periodic reviews of configuration data to assess contractor efforts to develop quality data that conforms to contractual conditions.

e. Conducts final drawing reviews, in accordance with NWSI 30-1202 Engineering Drawings Instruction, to determine whether legibility, format, and completeness conform to contract requirements. OPS CM specifically must address:

(1) Engineering document maintenance.

(2) Approved limited-rights legend application.

(3) Correct markings, as necessary.

(4) Configuration identification of end item.

f. Ensures the quality of configuration data for delivery to NWS Technical Library repositories.

g. Establish procedures, processes, and resources to maintain configuration data upon receipt from the contractor.

4 Data Requirements. Program Managers for the acquisition of new NWS equipment establish configuration data requirements.   Program Managers will initiate data calls to accumulate configuration data requirements necessary to cover the life cycle of the equipment from responsible NWS organizational areas.

The Program Manager will establish and maintain a Contract Data Activity Record File (CDARF). This file contains all records related to contract data requirements. This includes changes, deviations, and waivers; minutes of contract data reviews, including findings, follow-up actions, persons responsible for

follow-up actions, and completion dates; records of data rights challenges and results; and any other information relevant to contract data acquisition.

5   Data Management Operating Procedures. All NWS new equipment Program Managers will establish a Data Management Focal Point. Data Management Focal Points must establish general procedures for Data Management for their program, including the organization and tracking of CDRLs.

OPS CM develops Data Management strategies by:

   a.   Ensuring that programs define configuration-data acquisition strategies in Program Management Plans (PMP).

   b.   Using selected OPS CM team members to review and then identify data quality conditions.

   c.   Making sure program acquisition strategies for acquiring configuration data satisfy NWS requirements.

   d.   Making sure program strategies incorporate methods to measure the quality of acquired TDPs.

6   Libraries. OPS will establish a Technical Reference Library to retain system technical documentation, including design requirements, specifications engineering drawings, part lists and software documentation. OPS will also retain CM correspondence for systems under CM control in the Technical Reference Library.

Each Data Management Focal Point must establish a Data Library internal to each responsible program organization. The Configuration Branch (OPS13) can provide guidance to Data Management Focal Points establishing a Data Library. Pending available resources, OPS13 may be able to provide Data Library services to Data Management Focal Points.