

ELECTRONIC RECORDS ARCHIVES

CONTRACTOR COORDINATION PLAN (CCP v1.0)

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for the

**NATIONAL ARCHIVES AND
RECORDS ADMINISTRATION**

**ELECTRONIC RECORDS ARCHIVES
PROGRAM MANAGEMENT OFFICE
(NARA ERA PMO)**

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CONTRACTOR COORDINATION PLAN (CCP)

Signature Page

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CONTRACTOR COORDINATION PLAN (CCP)

1.0 Introduction

The Electronic Records Archives (ERA) Program Management Office (PMO) has prepared this *Contractor Coordination Plan (CCP)* to provide coordination guidelines to both the government and the two (2) competing development contractor teams for the duration of the System Analysis and Design Phase.

1.1 Purpose

The purpose of the *CCP* is to help the Government obtain the best solution by:

- Establishing the roles and responsibilities of all involved entities;
- Assuring that competing development contractors are dealt with uniformly and fairly;
- Conveying communication guidelines for handling the System Requirements Review (SRR), System Design Review (SDR), and daily business activities; and
- Establishing a process for communication between the ERA PMO and development contractors.

1.2 Scope

The *CCP* focuses on interactions between the ERA PMO and the development contractors during the System Analysis and Design Phase of ERA. It includes a description of the events that occur during that phase and also the methodology, activities, and guidelines for working with two (2) different contracting teams performing similar system analysis and design efforts. This *CCP* does not modify or amend any guidance in the Federal Acquisition Regulations (FAR), 19.702, or the ERA Development contract. In a conflicting situation, the FAR or contract will take precedence. In addition, the *CCP* does not convey the management process of the ERA PMO or the overall obligations of the development contractor. Those details are included in the contract itself.

IEEE/EIA 12207.1-1997, Guide for Industry Implementation of International Organization for Standardization ISO/IEC 12207, *Standard for information technology—Software life cycle processes—Life cycle data*, Section 5.2, was tailored in its use by this plan. Section 5.2 lists the topics that a plan should include but specific topics identified in this section were deemed not relevant for this purpose and omitted from the *CCP*. Those topics include Estimates, Resources, Cost, Environment, and Training and are dealt with in the *ERA Program Management Plan (PMP)*.

1.3 Risks

Contractor coordination activities involve the following risks:

- Poor communication may result in poor system analysis and design deliverables, and

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- Inequitable treatment of development contractors may lead to unfavorable system and design outcomes or protests.

1.4 ERA Program Overview

ERA will be a comprehensive, systematic, and dynamic means for preserving virtually any kind of electronic record, free from dependence on any specific hardware or software. ERA, when operational, will make it easy for the National Archives and Records Administration (NARA) customers to find records they want and easy for NARA to deliver those records in formats suited to customers' needs.

1.5 Definitions and Acronyms

The technical terms used in this plan are defined in IEEE Std. 610.12-1990, *IEEE Standard Glossary of Software Engineering Terminology*. **Table 1-1, Acronyms List**, contains a list of acronyms used herein.

ACRONYM	DEFINITION
BPR	Business Process Re-engineering
CCB	Configuration Control Board
CCP	Contractor Coordination Plan
CM	Configuration Management
CMP	Configuration Management Plan
COR	Contracting Officer Representative
CR	Change Request
EA	Enterprise Architecture
ERA	Electronic Records Archives
FAR	Federal Acquisition Regulations
GFI	Government Furnished Information
IEEE	Institute of Electrical and Electronics Engineers
IV&V	Independent Verification and Validation
JAD	Joint Application Development
NARA	National Archives and Records Administration
PD	Program Director
PMO	Program Management Office
PMP	Program Management Plan
QMP	Quality Management Plan
RAD	Rapid Application Development
RD	Requirements Document
RFP	Request for Proposal
RQM	Requirements Management Plan
SADD	System Architecture and Design Document
SDR	System Design Review
SME	Subject Matter Expert
SRR	System Requirements Review

ACRONYM	DEFINITION
SyRS	System Requirements Specification
TEP	Technical Review Process
WBS	Work Breakdown Structure

Table 1-1: Acronyms List

2.0 Reference Documents

The documents, industry standards, and references used to develop the CCP are covered in the sections that follow.

2.1 Policy Documents

Policy did not mandate the creation of the CCP.

2.2 ERA PMO Documents

The following ERA PMO documents were used in developing this document.

- Program Management Plan (PMP), Version 1.2
- Configuration Management Plan (CMP), Version 2.0
- Quality Management Plan (QMP), Version 2.2
- Requirements Management Plan (RQM), Version 2.1
- Technical Review Process (TEP), Version 1.0
- Requirements Document (RD), Version 3.0

2.3 Industry Standards and References

The following standards and references were used in the development of this document.

- IEEE/EIA 12207.1-1997, Guide for Industry Implementation of International Standard ISO/IEC 12207, *Standard for information technology—Software life cycle processes—Life cycle data*, Section 5.2.
- IEEE Std 610.12-1990, *IEEE Standard Glossary of Software Engineering Terminology*

3.0 Overview of the Systems Analysis and Design Phase

It is the intent of NARA to make awards to two (2) development contractors who will independently decompose ERA requirements and produce a system requirements specification and a system architecture and design. NARA will evaluate each development contractor's products using the downselect process described in the Request for Proposal (RFP), resulting in the award of the development options contained in each contract to a single development team. Coordination of activities between the ERA PMO and the development contractors during the Systems Analysis and Design competition is a key factor in the success of the Program

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Figure 3-1, Design Downselect Management Process Overview, shows the major steps in the design downselect process. The steps are described in the following subsections.

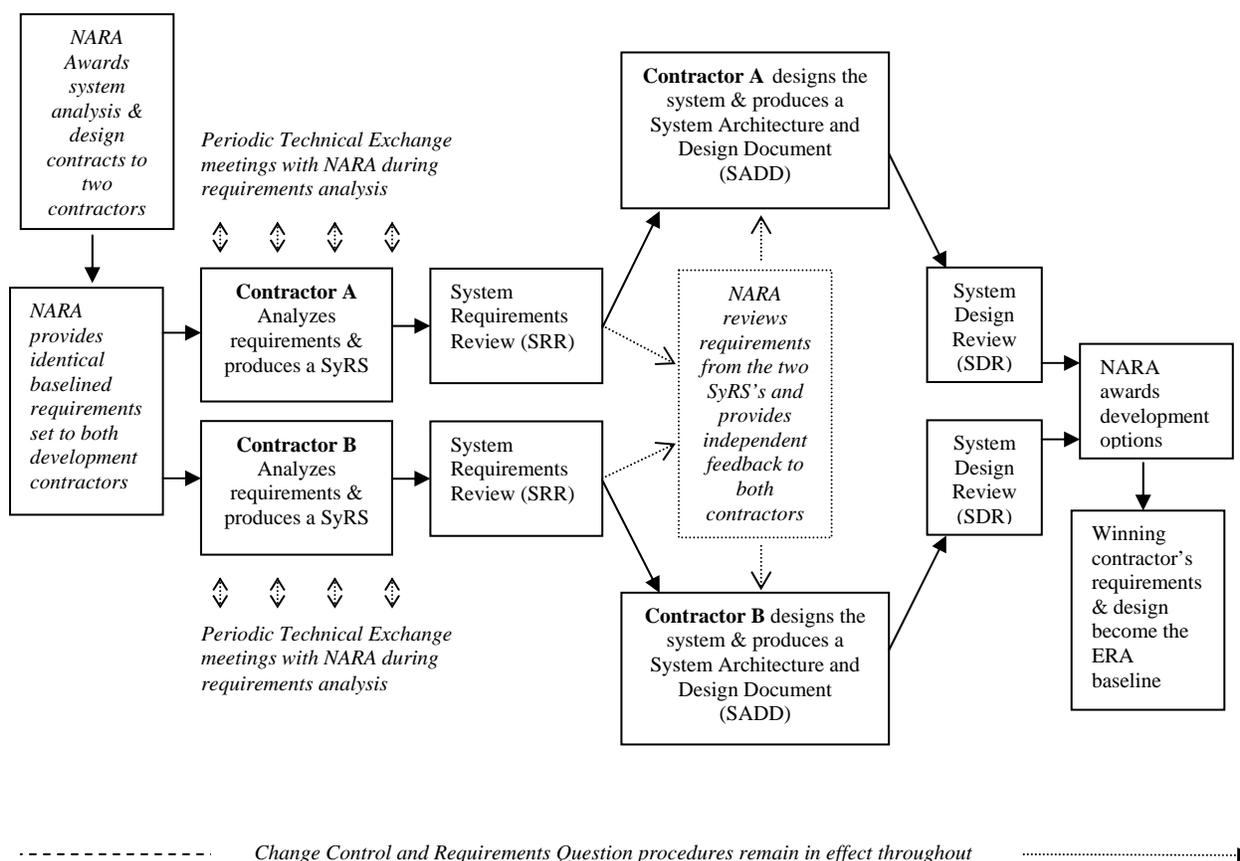


Figure 3-1: Design Downselect Management Process Overview

3.1 ERA PMO Provides Baselined Requirements to Contractors

Contracts to perform system analysis and design are to be awarded to two (2) different development contractors. Each development contractor is provided with an identical set of baselined requirements by the NARA ERA PMO and other information as required.

3.2 Contractor Requirement Analysis

The requirements provided to the development contractors by the ERA PMO are to be further refined by each development contractor independently to the level needed for creation of a system design. Each development contractor determines a methodology to perform this decomposition. Each development contractor is responsible for the following:

- Delivering the results of a requirements analysis in the form of a System Requirements Specification (SyRS) that is traceable to the *ERA Requirements Document (RD)*;

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- Allocating requirements to hardware, software, operations, or some combination thereof and documenting the outcome in a SyRS; and
- Allocating requirements to development increments to the extent possible and documenting decisions in the SyRS.

3.2.1 Requirements Questions

A process to handle questions about the NARA baselined requirements is provided by the ERA PMO throughout the entire System Analysis and Design phase. If there exists a need for clarification of requirements, and/or an assurance that requirements decomposition is valid, questions can be submitted to the Requirements Manager by using the Requirements Question Process described in the *ERA Requirements Management Plan (RQM)*. Requests for changes to requirements are made in the form of a Change Request (CR), via the Configuration Management Specialist, and presented to the ERA PMO Configuration Control Board (CCB) for approval.

3.2.2 Technical Exchange Meetings

Technical exchange meetings are viewed as an important venue for communication between the development contractor(s) and NARA Subject Matter Experts (SMEs). SMEs contribute information on all areas that impact ERA development and represent NARA's major lines of business. SMEs from parallel undertakings such as Enterprise Architecture (EA) development, Business Process Re-engineering (BPR), and NARA Network Support are also included.

3.2.2.1 Separate Meetings

Separate technical exchange meetings are held periodically between each of the development contractors and the ERA PMO. The purpose of these meetings is to provide the development contractor with a forum for asking questions, receiving feedback on product aspects, and gathering information and ideas in a manner that is less formal and more expeditious than that provided by the Requirements Question Process. When warranted, the development contractor may propose a specific format or technique for the meeting (e.g., Joint Application Development (JAD), Rapid Application Development (RAD), etc.).

SMEs are made available in these meetings, to the extent possible, in a fair and equitable manner. The exchange of information between a development contractor and NARA is not shared with the competing development contractor.

3.2.2.2 General Meetings

General meetings involving both development contractors are used for the release of information that contributes to the knowledge base of everyone concerned. Developments in BPR, EA, and the NARA Network are examples of activities that impact design activities.

3.3 System Requirements Reviews

A System Requirements Review (SRR) is conducted in accordance with the processes defined in the ERA *Technical Review Process (TEP)*. Each development contractor creates a SyRS, which is presented to the PMO at an SRR meeting. The Program Director (PD) approves the development contractor's SyRS prior to each development contractor finalizing a design for the system.

Each SyRS is expected to include full requirements traceability-to-source. The source is the baselined requirements (as identified in the *ERA Requirements Document (RD)*) provided to the development contractor by the ERA PMO, as well as any subsequent requirement changes submitted and approved through the change request process as explained in the *ERA Configuration Management Plan (CMP)*, and approved by the CCB. The SyRS must also include allocation of requirements to hardware, software, operations, and/or other system components.

3.4 NARA Reviews Requirements and Provides Feedback

After the SRR, and while the development contractors continue to work towards their respective designs, the ERA PMO reviews and analyzes the requirements presented at the SRRs. The ERA PMO provides feedback to both development contractors during the period when they are carrying out work on their activities. It is not anticipated that major requirements changes will result from NARA's analysis of the development contractors' SyRSs documents, since the requirements presented in the development contractors' SyRSs should primarily comprise further decompositions of the baselined requirements provided to them by the ERA PMO, rather than discovery of additional high-level requirements. If changes to the baselined requirements result from the ERA PMO's analysis of the development contractors' SyRSs, the requirements are re-baselined per the Configuration Management (CM) process, and the new baselined requirements set is provided to both development contractors.

3.5 Contractors Produce System Architecture and Design Documents

The development contractors independently create a system architecture and design from the baselined requirements provided by NARA, their own requirements analysis, and the feedback provided by NARA from the SRR. The result of this effort is a System Architecture and Design Document (SADD) produced by each development contractor.

3.6 System Design Reviews

Each development contractor will present their SADD to NARA at an independent System Design Review (SDR). The SDR constitutes the last step in the downselect process. The SDR, along with the evaluation of total development contractor performance, results in NARA's selection of one of the development contractors to become the development contractor for ERA.

3.7 New Requirements Baseline

After downselect, a new requirements set based upon the winning SyRS becomes the requirements baseline for the remainder of the project. The new baselined requirements set is placed under CM as described in the ERA *CMP*.

4.0 Coordination Components

This section describes the essential coordination areas between the ERA PMO and development contractors. It explains who does what, and provides the rules and guidelines for conducting business.

4.1 Roles and Responsibilities

The ERA PMO and the two (2) development contractors work closely together during the System Analysis and Design Phase, precipitating the need for a clear understanding of roles and responsibilities of the ERA PMO and development contractors. The ERA PMO will enlist the services of a cross-section of NARA SMEs for internal support and to answer development contractor questions.

4.1.1 ERA Program Management Office (PMO) Responsibilities

The ERA PMO is responsible for the following activities and tasks.

- Conducts a kickoff meeting attended by both development contractors at the start of the project
- Arranges and conducts training on development contractor/PMO interface guidelines and procedures
- Establishes communication procedures
 - Sets up standard meeting agendas, and
 - Makes explicit who the development contractor may communicate with, and when and where dialogue can occur
- Participates in the development contractor CCB
- Reviews development contractor metrics procedures
- Provides baselined requirements to the development contractor
- Establishes and implements formal change processes for NARA's review and approval of any proposed changes to the requirements made by the development contractor that could impact cost or schedule
- Conducts independent technical exchange meetings with each development contractor, on a scheduled basis, or upon development contractor request and ERA PMO discretion
- Reviews each development contractor's SyRS and approves it prior to development contractor completing a design for the system, or provides feedback to the development contractor
- Reviews each development contractor's SADD, determines whether the SADD is acceptable and approves it or provides feedback
- Ensures for the confidentiality of each development contractor's design information

ERA Program Management Office (ERA PMO)

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- Conducts joint meetings attended by both development contractors in the event that NARA needs to announce impacts that affect both development contractors
- Approves all development contractor meeting notes and minutes before acceptance

4.1.2 Development Contractor Responsibilities

The development contractor works with or for the ERA PMO on the following activities and tasks.

- Participates in development contractor performance guidelines and procedures training
- Adheres to the terms of any conflict of interest provisions pertaining to incumbent NARA contractors from their same company
- Proposes a CM process that includes a CCB and presents it to the ERA PMO for review and approval before implementation
- Observes strict adherence to the Requirements Question Process to submit written questions to the ERA PMO
- Uses the CM process to request requirements changes that are coordinated with the CCB
- Delivers the results of the system requirements analysis in the form of a SyRS
- Conducts the SRR
- Delivers the SADD
- Conducts the SDR
- If the SyRS or the SADD are not acceptable, revises it as necessary to correct deficiencies
- Provides a scribe to take notes at all meetings between the contractor and the ERA PMO
- Produces minutes of all meetings

4.2 Schedule

Tasks will be performed by the development contractor in close consultation with the ERA PMO. Each task will include a fixed delivery date as well as performance objectives. The development contractor will periodically report problems and progress to the ERA PMO. The development contractor will also regularly provide the status of requirements (e.g., through delivery of current requirements database or report) to the ERA PMO for review according to an agreed upon schedule.

4.3 Measures to Control Quality

The quality of development contractor products, processes, and performance is determined by the ERA PMO's implementation of quality management practices such as:

- Independent Verification and Validation (IV&V),
- Assessment Checklists,
- Providing equitable high quality SME support to both teams
- Consensus that the contractor is following recognized standards in performing system analysis and design activities (e.g., IEEE-Std-1471-2000, Recommended Practice for Architectural Description of Software-Intensive Systems)

4.4 ERA PMO/Contractor Interfaces

Development contractors are provided ERA Government Furnished Information (GFI) and are encouraged to work collaboratively with ERA PMO personnel in developing detailed system requirements. A series of independent technical exchange meetings can be requested between government staff and development contractor personnel to facilitate this interaction. During the technical exchange meetings, development contractor personnel are encouraged to discuss various ideas and concepts with ERA PMO representatives as well as clarify any questions they have regarding the development of the system requirements.

The ERA PMO maintains separate and independent communication with each of the development contractor teams at both formal and informal meetings. Information shared between a development contractor and ERA PMO representatives is considered proprietary and will be handled as such. Interaction between development contractor and Government is conducted according to the following guidelines.

- The development contractor and ERA PMO interact through:
 - Formal Meetings and Reviews,
 - Scheduled and specially requested informal meetings, and
 - Status reporting
- The ERA PMO uses discretion in general information exchanges and does not provide informal, unsolicited opinions and evaluations to the development contractors
- Meetings between the development contractor and ERA PMO are documented by the development contractor
- Each development contractor's documentation and correspondence is stored separately and protected (securely kept on separate shared drives on the network)
- Meeting schedules are arranged so that a development contractor receives the full, unbiased time and attention of the ERA PMO without the risk of distraction due to the presence of the competing development contractor.
- The development contractor addresses all ERA related comments, questions, issues, etc. to designated ERA PMO staff members. The development contractor does not directly contact NARA personnel, ERA users or stakeholders, or others involved with the ERA project (e.g., NARA SMEs, outside of the ERA PMO) without the express permission of the ERA PMO or ERA's Contracting Officer Representative (COR). However, certain SMEs who are specially trained to ensure unbiased handling of both teams can be contacted directly.

4.5 Work Environment and Infrastructure

Development contractor activities, including formal reviews, take place at the location agreed upon by the involved parties.

4.6 Documentation Available to the Contractor

ERA GFI is available upon request with the exception of the following:

- Proprietary Information provided by another contractor;
- Procurement or Contract Administration Sensitive Information (to include but not be limited to Government Cost Estimates, Source Selection Plans, etc.); and
- NARA Budget Information (to include but not limited to predecisional budget information not in the public domain, such as business case analyses, economic analyses, exhibits 300, etc.).

5.0 Contractor Coordination Document Maintenance

The PD maintains the *ERA CCP* in support of the PMO. As a part of the process improvement (e.g., IV&V assessments, lessons learned, QM assessment), the *ERA Quality Management Plan (QMP)* and the overall quality management approach will continue to evolve. The *CCP* is reviewed and updated as required to maintain current and sufficient CCP activities. Specific review dates are tracked in the ERA integrated program schedule. The plan will be placed under CM control following its initial approval by the ERA PMO. Updates to the CCP will be controlled by the CCB.