



**NOAA NESDIS
CENTER for SATELLITE APPLICATIONS
and RESEARCH**

DOCUMENT GUIDELINE

**DG-11.5
SYSTEM READINESS DOCUMENT
GUIDELINE
Version 3.0**

NOAA NESDIS STAR

DOCUMENT GUIDELINE

DG-11.5

Version: 3.0

Date: October 1, 2009

TITLE: System Readiness Document Guideline

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TITLE: DG-11.5: SYSTEM READINESS DOCUMENT GUIDELINE VERSION 3.0

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SYSTEM READINESS DOCUMENT GUIDELINE VERSION HISTORY SUMMARY

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LIST OF ACRONYMS

ATBD	Algorithm Theoretical Basis Document
CDD	Critical Design Document
CDR	Critical Design Review
CICS	Cooperative Institute for Climate Studies
CIMSS	Cooperative Institute for Meteorological Satellite Studies
CIOSS	Cooperative Institute for Oceanographic Satellite Studies
CIRA	Cooperative Institute for Research in the Atmosphere
CL	Check List
CLI	Check List Item
CM/DM	Configuration Management/Data Management
CREST	Cooperative Remote Sensing and Technology Center
CTD	Code Test Document
CTR	Code Test Review
CTRR	Code Test Review Report
DDD	Detailed Design Document
DG	Document Guideline
DPP	Development Project Plan
EPL	Enterprise Product Lifecycle
EUM	External Users Manual
IPT	Integrated Product Team
IUM	Internal Users Manual
MDD	Metadata Document
NESDIS	National Environmental Satellite, Data, and Information Service
NOAA	National Oceanic and Atmospheric Administration
OCD	Operations Concept Document

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PAR	Process Asset Repository
PBR	Project Baseline Report
PG	Process Guideline
PPS	Product Processing System
PRG	Peer Review Guideline
RAD	Requirements Allocation Document
SG	Stakeholder Guideline
SOW	Statement Of Work
SRD	System Readiness Document
SRR	System Readiness Review
STAR	Center for Satellite Applications and Research
STP	System Test Plan
SWA	Software Architecture Document
TBD	To Be Determined
TD	Training Document
TG	Task Guideline
VVP	Verification and Validation Plan
VVR	Verification and Validation Report

1. INTRODUCTION

The NOAA/NESDIS Center for Satellite Applications and Research (STAR) develops a diverse spectrum of complex, often interrelated, environmental algorithms and software systems. These systems are developed through extensive research programs, and transitioned from research to operations when a sufficient level of maturity and end-user acceptance is achieved. Progress is often iterative, with subsequent deliveries providing additional robustness and functionality. Development and deployment is distributed, involving STAR, the Cooperative Institutes (CICS, CIMSS, CIOSS, CIRA, CREST) distributed throughout the US, multiple support contractors, and NESDIS Operations.

NESDIS/STAR is implementing an increased level of process maturity to support the exchange of these software systems from one location or platform to another. The System Readiness Document (SRD), a Microsoft PowerPoint file, is one component of this process, known as the STAR Enterprise Product Lifecycle (EPL)¹.

1.1. Objective

The objective of this Document Guideline (DG) is to provide STAR standards for the SRD. The intended users of this DG are the personnel assigned by the Development Lead to the task of creating an SRD for the project.

1.2. The System Readiness Document

The SRD is the presentation document for a project's System Readiness Review (SRR)². The SRR is an important milestone of each project's product lifecycle. It reviews the project's product processing system (PPS) readiness for installation in the operations environment.

The SRD should accomplish the following objectives:

- » Identify relevant stakeholders and document their involvement according to the project plan.
- » Identify the PPS requirements
- » Demonstrate the PPS readiness for operations

¹ A description of the STAR EPL can be found in STAR EPL Process Guidelines PG-1 (c.f. Section 2 of this document).

² Refer to the STAR EPL Process Guidelines (PG-1 and PG-1.A) for a description of the STAR EPL gates and reviews.

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- Validation of user needs
 - Validation of operations needs
 - » Identify and evaluate risks. Provide risk mitigation plans and associated actions.
 - » Document the closing of all actions since Code Test Review (CTR). Make recommendations for open actions and new actions.

The intended target audience is the SRR reviewers. Typically, the SRD is prepared by the project's development team under the direction of the Development Lead.

The SRD should be developed as a Microsoft PowerPoint document. Upon approval, the approved version of the OCD may be converted to an Adobe pdf file for storage in the project artifact repository.

1.3. Background

This DG defines standards and guidelines for producing an SRD. It contains all information needed for a project's development team to produce an SRD that enables the SRR reviewers to confirm that the project is in compliance with all SRR requirements.

1.4. Benefits

An SRD developed in accordance with the standards in this DG enables the SRR reviewers to confirm that the project is in compliance with all SRR requirements. It is therefore a requirement that an SRD be developed in accordance with the guidelines in this document before obtaining SRR approval.

1.5. Overview

This DG contains the following sections:

Section 1.0 -	Introduction
Section 2.0 -	References
Section 3.0 -	Standard Sections
Section 4.0 -	Section Guidelines
Appendix A -	Template File

2. REFERENCE DOCUMENTS

CTD: Code Test Document is an artifact for the Code Test Review (CTR). It is a Microsoft PowerPoint file that contains the CTR presentation slides. It is often convenient for the SRD developers to adopt or adapt these slides for inclusion in the SRD. This document will be available to approved users in a project artifact repository.

DPP: Development Project Plan is an artifact for the SRR. It should include the project plan, schedule, and resources, identify stakeholders, identify SRR entry and exit criteria, provide the SRR Check List Items (CLI), and include the project objectives, tasks, milestones, stakeholders, and schedule. This information will be useful for the SRD developers in completing Section 1 of the SRD. This document should be made available to the approved users in a project artifact repository. The SRD developers should check with the Development Lead and STAR CM/DM to determine the latest approved version of the DPP. If a DPP update is being developed concurrently with the SRD, the SRD developers should consult with the DPP developers to ensure consistency of information in the SRD and the DPP.

CTRR: Code Test Review Report, a project artifact for the SRR, is the reviewer's report from the CTR. This information will be useful for the SRD developers in completing Section 2 of the SRD. This document will be available to approved users in a project artifact repository.

OCD: Operations Concept Document contains the timeline scenarios for product operation and user interaction for the project algorithm. This information will be useful for the SRD developers in completing Section 3 of the SRD. This document will be available to approved users in a project artifact repository. If an OCD update is being developed concurrently with the SRD, the SRD developers should be in contact with the OCD developers to ensure that OCD changes are captured in the SRD.

RAD: Requirements Allocation Document contains the basic and derived requirements for the work products and the allocation of the requirements to system components and product components. This information will be useful for the SRD developers in completing Section 3 of the SRD. The project RAD will be available to approved users in the project artifact repository. If a RAD update is being developed concurrently with the SRD, the SRD developers should consult with the RAD developers to ensure consistency of information in the SRD and the RAD.

VVP: Verification and Validation Plan describes the work products to be verified and validated, the requirements for each selected work product and the verification and validation methods for each selected work product. This information will be useful for the SRD developers in completing Section 4 of the SRD. This document will be available to approved users in a project artifact repository.

STP: System Test Plan provides a complete description of the plan for verification of the integrated product processing system and the validation of user needs and operator needs. This information will be useful for the SRD developers in completing Section 4 of the SRD. The STP will be available to approved users in the project artifact repository. If an STP update is being developed concurrently with the SRD, the SRD developers should consult with the STP developers to ensure consistency of information in the SRD and the STP.

VVR: Verification and Validation Plan Report, a project artifact for the SRR, documents the results of testing to ensure that the requirements specified for the product processing system are satisfied by the completed system and that the final developed system will satisfy the needs and expectations of customers, users, and operators (i.e., the system test). This information will be useful for the SRD developers in completing Section 4 of the SRD. The VVR will be available to approved users in the project artifact repository. The project VVR is usually developed concurrently with the SRD. The SRD developers should consult with the VVR developers to ensure consistency of information in the SRD and the VVR.

MDD: Metadata Document, a project artifact for the SRR, describes the metadata generated by the PPS. This information will be useful for the SRD developers in completing Section 4 of the SRD. The project MDD is usually developed concurrently with the SRD. The SRD developers should consult with the MDD developers to ensure consistency of information in the SRD and the MDD.

EUM: External Users Manual, a project artifact for the SRR, provides external product users with the information needed to acquire and use the product. This information will be useful for the SRD developers in completing Section 4 of the SRD. The project EUM is usually developed concurrently with the SRD. The SRD developers should consult with the EUM developers to ensure consistency of information in the SRD and the EUM.

IUM: Internal Users Manual, a project artifact for the SRR, provides internal analysts with the information needed to acquire and use the product. This information will be useful for the SRD developers in completing Section 4 of the SRD. The project IUM is usually

developed concurrently with the SRD. The SRD developers should consult with the IUM developers to ensure consistency of information in the SRD and the IUM.

ATBD: Algorithm Theoretical Basis Document is an artifact for the SRR. It contains the requirements and theoretical basis for the project algorithm. This information will be useful for the SRD developers in completing Section 4 of the SRD. This document will be available to approved users in a project artifact repository. This version of the ATBD may be developed concurrently with the SRD. In that case, the SRD developers should be in contact with the ATBD developers to ensure consistency of information in the SRD and the ATBD.

SWA: Software Architecture Document contains the software architecture and data flows for the PPS. This information will be useful for the SRD developers in completing Section 4 of the SRD. This document will be available to approved users in a project artifact repository.

DDD: Detailed Design Document describes the software design at a level of detail that is sufficient for the development programmers to write fully functional pre-operational code. This information will be useful for the SRD developers in completing Section 4 of the SRD. A separate Detailed Design Document (DDD) is produced for each software unit that is part of the product processing system. The software units are the Layer-2 elements that are defined in the system level product software architecture, as described in the SWA. These documents will be available to approved users in a project artifact repository.

PBR: Project Baseline Report, a project artifact for the SRR, provides a listing of all items in the project's baseline. This information will be useful for the SRD developers in providing pointers to the project artifacts and in completing Section 4 of the SRD. The PBR will be available to approved users in the project artifact repository. The PBR will be updated to version 3.4 for the SRR. The SRD developers should consult with the PBR developers to ensure consistency of information in the SRD and the PBR.

All of the following references are STAR EPL process assets that are accessible in a STAR EPL Process Asset Repository (PAR) on the STAR web site:

http://www.star.nesdis.noaa.gov/star/EPL_index.php.

DG-11.5.A: System Readiness Document Guideline Appendix v2r0 is an Appendix to DG-11.5 (this document). It contains Microsoft PowerPoint slide templates for the SRR presentation that is described in DG-11.5.

PG-1: STAR EPL Process Guideline provides the definitive description of the standard set of processes of the STAR EPL.

PG-1.A: STAR EPL Process Guideline Appendix, an appendix to PG-1, is a Microsoft Excel file that contains the STAR EPL process matrix (Stakeholder/Process Step matrix), listings of the process assets and standard artifacts, descriptions of process gates and reviews, and descriptions of stakeholder roles and functions.

PRG-11.1: System Readiness Review Guidelines is the Peer Review Guideline (PRG) for the SRR. It is useful for the developer of the SRD to understand what the reviewers will expect when reviewing the SRD.

SG-13: STAR EPL Development Lead Guidelines provides a description of standard tasks for Development Leads, including development of the SRD.

SG-14: STAR EPL Development Scientist Guidelines provides a description of standard tasks for Development Scientists, including development of the SRD.

SG-15: STAR EPL Development Tester Guidelines provides a description of standard tasks for Development Testers, including development of the SRD.

SG-16: STAR EPL Development Programmer Guidelines provides a description of standard tasks for Development Programmers, including development of the SRD.

TG-11: STAR EPL System Integration and Test Task Guidelines provides a description of standard tasks for process step 11, during which the SRD is developed.

3. STANDARD SECTIONS

The SRD slides are organized into sections. The standards sections are:

- 1.0 INTRODUCTION
 - 1.1 Development Project Plan
 - 1.2 Project Objectives
 - 1.3 Project Stakeholders
 - 1.4 Project Timeline
 - 1.5 Project Plan Changes
 - 1.6 Stakeholder Involvement
 - 1.7 SRR Guidelines and Checklist
 - 1.8 SRR Report
 - 1.9 Review Objectives
- 2.0 CODE TEST REVIEW REPORT
 - 2.1 Code Test Review Report
 - 2.2 CTR Check List Items
 - 2.3 CTR Exit Criteria
 - 2.4 CTR Risks and Actions
 - 2.5 SRR Entry Criteria
 - 2.6 SRR Exit Criteria
- 3.0 SYSTEM REQUIREMENTS
 - 3.1 System Requirements Overview
 - 3.2 Operations Concept
 - 3.3 Requirements Allocation Overview
 - 3.4 Requirements Allocation Changes
- 4.0 SYSTEM READINESS
 - 4.1 System Test

- 4.1.1 Verification and Validation Overview
- 4.1.2 System Test Changes
- 4.1.3 Verification and Validation Report
- 4.2 Readiness for Users
 - 4.2.1 Product Users
 - 4.2.2 User Needs
 - 4.2.3 Validation of User Needs
 - 4.2.4 Documentation
- 4.3 Readiness for Operations and Maintenance
 - 4.3.1 Operations
 - 4.3.2 Operator Needs
 - 4.3.3 Validation of Operator Needs
 - 4.3.4 Documentation
- 4.4 System Configuration
- 5.0 RISKS AND ACTIONS
 - 5.1 CTR Risks and Actions
 - 5.2 New Risks and Actions
 - 5.3 Risk Summary
- 6.0 SUMMARY AND CONCLUSIONS
 - 6.1 Review Objectives Status
 - 6.2 Issues, Actions and Risks
 - 6.3 Next Steps
 - 6.4 Open Discussion

4. SECTION GUIDELINES

This section contains the STAR guidelines for each section of the SRD. SRD developers will benefit greatly from using the slide templates contained in the “STAR_DG-11.5.A_SRD_v3r0.ppt” file, hereafter referred to as DG-11.5.A. DG-11.5.A is considered to be an Appendix to this document.

Note that the slides in DG-11.5.A include figures, tables, and bulleted text. All figures, tables and bulleted text should be adopted as they appear in these slides, except for text between delimiters, like this:

<Text>

Text between delimiters consists of guidelines. The SRD developers should replace this text with appropriate text, as suggested by the guidelines.

4.1. Slide Master

It is recommended, but not required, that SRD developers use the Slide Master from DG-11.5.A as the Slide Master for the SRD. A development team may wish to tailor its Slide Master. For example, a different slide background color that has been established as a “team color” may be used. Whether or not the Slide Master is tailored, the slide master shall include the STAR logo in the upper left corner of the slide, following the Slide Master in DG-11.5.A. The STAR logo should be identical to the Picture on the cover page of this document. Another example of tailoring is to add organization logos to the upper right corner of the slide, if the development team is non-STAR (e.g. a Cooperative Institute or Contractor). The Slide Master for DG-11.5.A includes the Raytheon logo as an example. This should be replaced by the appropriate logos, or no logo if the development team consists of STAR personnel.

4.2. Title Slide

The first slide shall be a Title Slide, labeled “Title Slide”³ in DG-11.5.A. The Title Slide shall include the Project and/or Product Name⁴ and the Preparer’s Names and Organizations.

³ The slide templates in DG-11.5.A are labeled in text boxes located in one of the lower corners of each slide.

⁴ In the slide templates, unspecified (generic) fields are indicated by the <generic name> convention. The SRD developers should fill these in with the appropriate information specific to the project’s SRR.

4.3. Review Outline Slide

The second slide shall be a *Review Outline* Slide, labeled “Review Outline Slide” in DG-11.5.A. The Review Outline Slide shall be a numbered list of each section of the presentation.

4.4. Review Agenda Slide

The second slide shall be a *Review Agenda* Slide, labeled “Review Agenda Slide” in DG-11.5.A. The Review Agenda Slide shall list each section of the presentation, the scheduled time interval for the presentation of the section, and the name of the presenter(s) for that section. It is not required that the locations of the Break and Lunch periods be exactly where they are indicated in this slide. The development team should tailor its schedule to fit the contents of each section.

4.5. Section 1 – Introduction

The SRD shall include an Introduction Section. This section shall include:

- A setup slide, labeled 7 “Section 1 Setup Slide” in DG-11.5.A. This slide is a numbered list of all sections, with Section 1 highlighted, as shown.
- A Section Title slide, labeled “Slide 1.0” in DG-11.5.A.
- Section 1.1: *Development Project Plan*, labeled “Section 1.1” in DG-11.5.A, introduces the Development Project Plan (DPP), a standard STAR EPL artifact for the SRR. Provide a pointer to the project’s DPP and to the DPP Document Guideline (DG-5.1).
- Section 1.2: *Project Objectives*, labeled “Section 1.2” in DG-11.5.A. These should be derived from customer needs and expectations and should have been captured in the project’s Statement of Work (SOW). Match the main bullets of this slide to the main sections of the SOW. One level of sub-bullets can be used at the discretion of the development team. These would add some high-level information typically derived from the explanatory text in each section of the SOW.

- Section 1.3: *Project Stakeholders*, labeled “Section 1.3”) in DG-11.5.A. Identify relevant stakeholder roles and personnel. Each distinct stakeholder role should be listed as a main bullet. Stakeholder roles are identified in the “Stakeholders” sheet of STAR EPL process asset PG-1.A. Stakeholders should be named when known. There may be more than one name for a stakeholder role. Unspecified stakeholders should be identified by role with a TBD. The ensemble of roles and named personnel constitutes the Integrated Product Team (IPT). Sub-bullets can be used to add a high-level description of the tasks expected for a given stakeholder. The level of detail of these descriptions is at the discretion of the development team, but should be sufficient to give the reviewers a good sense of the IPT. See slide 11 for a template. The development team may prefer to present the stakeholder information as a table. See “Section 1.3 – Table Alternative” in DG-11.5.A for an example. A project organization chart is recommended. This chart should include all stakeholders that have been identified in this section. See “Section 1.3 – Option” in DG-11.5.A as an example.
- Section 1.4: *Project Timeline*, labeled “Section 1.4” in DG-11.5.A., should include tasks (taken from the SOW), resources and schedule of milestones. Milestones should include the project reviews (with the SRR highlighted) and associated review dates. The STAR EPL standard reviews are shown in Section 1.4 of DG-11.5.A. Refer to the DPP for the project-specific reviews. Milestones may also include key deliveries (e.g. pre-operational code). See Section 1.4 of DG-11.5.A for an example. Show the project plan as an object or objects taken from a Microsoft Project file of the project plan. Use superimposed text boxes to highlight notable accomplishments leading up to SRR. Note the SRR milestone. See Section 1.4 of DG-11.5.A for an example. Use more than one slide if necessary to make the objects visually presentable. For example, the project timeline could be partitioned into the STAR EPL phase and step leading to the SRR. See “Section 1.4 – Phase Partition” and “Section 1.4 – Step Partition” in DG-11.5.A for examples.
- Section 1.5: *Project Plan Changes*, labeled “Section 1.5” in DG-11.5.A. Describe any changes to the project plan – objectives, stakeholders, tasks, schedule and milestones – that have occurred since the CTR. Use multiple slides as necessary for clarity. If there have been no changes, state this.
- Section 1.6: *Stakeholder Involvement*, labeled “Section 1.6” in DG-11.5.A. Document the involvement of the stakeholders according to the project plan. Use a bullet for each type of stakeholder. Sub-bullets should describe the involvement in a way that shows the project plan is being followed.

- Section 1.7: *SRR Guidelines and Check List*, labeled “Section 1.7 Alternative 1” and “Section 1.7 Alternative 2” in DG-11.5.A. This section provides the reviewers with pointers to the SRR Peer Review Guideline (PRG-11.1) and SRR Check List that they will need to prepare for and dispose of the review. Use Alternative 1 or Alternative 2, depending on whether the standard SRR Check List (CL-11.1) is to be used (Alternative 1) or a tailored Check List has been documented in the DPP (Alternative 2).
- Section 1.8: *SRR Report*, labeled “Section 1.8” in DG-11.5.A. This section provides the reviewers with pointers to the SRR Report Document Guidelines (DG-11.6) that they will need to produce the SRR Report.
- Section 1.9: *Review Objectives*, labeled “Section 1.9” in DG-11.5.A) to provide a clear presentation of the Review Objectives. These should include STAR EPL standard objectives for an SRR, and may include project-unique objectives at the discretion of the development team. Refer to the DPP to determine this. The review objectives should correspond to the major sections of the review (c.f. Section 3 of this DG). Match the main bullets of this slide to the main sections. One level of sub-bullets can be used at the discretion of the development team. These would add some high-level descriptive information.

4.6. Section 2 – Code Test Review Report

The SRD shall include a Code Test Review Report Section. This section shall include:

- A setup slide, labeled “Section 2 Setup Slide” in DG-11.5.A. This slide is a numbered list of all sections, with Section 2 highlighted, as shown.
- A Section Title slide, labeled “Slide 2.0” in DG-11.5.A.
- Section 2.1: *Code Test Review Report*, labeled “Section 2.1” in DG-11.5.A. The first bullet should include a pointer to the Code Test Review Report (CTRR), so that reviewers can obtain access to it. Explain the purposes of the CTRR. The remainder of the slide should be as shown in Section 2.1 of DG-11.5.A.
- Section 2.2: *CTR Check List Items*, labeled “Section 2.2”) in DG-11.5.A. This section provides a summary of the disposition status of the CTR CLI.

- All CTR check list items that received a “Waive” disposition should be addressed here. List “Waive” items that are judged to carry no significant risk, providing a rationale for there being no risk. List “Waive” items that are judged to carry a significant risk. For each of these, provide a risk number and risk statement, a risk assessment (HIGH, MEDIUM, or LOW), and an explanation of why this risk item was waived at CTR.
- Section 2.3: *CTR Exit Criteria*, labeled “Section 2.3” in DG-11.5.A. This section provides a summary of the disposition status of the CTR exit criteria items. Provide the status of the CTR exit criteria items, following the instructions in Section 2.3 of DG-11.5.A. If an item’s disposition is “N/A”, explain why. This should be rare, and permitted only if it is demonstrated why the item does not apply. If an item’s disposition is “Defer”, provide a list of actions that have been identified to pass the item.
- Section 2.4: *CTR Risks and Actions*, labeled “Section 2.4” in DG-11.5.A. This section provides a summary of the risks and actions documented in the CTRR. Follow the instructions in Section 2.4 of DG-11.5.A.
- Section 2.5: *SRR Entry Criteria*, labeled “Section 2.5” in DG-11.5.A. This section lists the SRR entry criteria. Present as bullets. Use multiple slides as necessary for clarity. The SRR entry criteria should have been established at the CTR and documented in the CTRR.
 - Section 2.5 of DG-11.5.A shows the standard STAR EPL entry criteria for the SRR. These should be used if the standard SRR entry criteria, documented in STAR EPL Check List CL-11.1, are used. If the entry criteria for a particular project have been tailored, revise these slides as necessary to capture the tailored entry criteria. Refer to the DPP Appendix C to determine this.
 - If applicable, list SRR entry criteria that are non-standard (added or revised from the standard set of entry criteria in STAR EPL Check List CL-11.1), explain the deviation, provide a rationale, and assess the risk, usually by reference to a risk # to be discussed in Section 5. Follow the instructions in Section 2.5 of DG-11.5.A.
 - If applicable, list any standard entry criteria that have been waived for this SRR, provide a rationale, and assess the risk, usually by reference to a risk # to be discussed in Section 5. Follow the instructions in Section 2.5 of DG-11.5.A.

- Section 2.6: *SRR Exit Criteria*, labeled “Section 2.6” in DG-11.5.A. This section lists the SRR exit criteria. Present as bullets. Use multiple slides as necessary for clarity. The SRR exit criteria should have been established at the CTR and documented in the CTRR.
 - Section 2.6 of DG-11.5.A shows the standard STAR EPL exit criteria for the SRR. These should be used if the standard SRR exit criteria, documented in STAR EPL Check List CL-11.1, are used. If the exit criteria for a particular project have been tailored, revise these slides as necessary to capture the tailored exit criteria. Refer to the DPP Appendix C to determine this.
 - If applicable, list SRR exit criteria that are non-standard (added or revised from the standard set of exit criteria in STAR EPL Check List CL-11.1), explain the deviation, provide a rationale, and assess the risk, usually by reference to a risk # to be discussed in Section 5. Follow the instructions in Section 2.6 of DG-11.5.A.
 - If applicable, list any standard exit criteria that have been waived for this SRR, provide a rationale, and assess the risk, usually by reference to a risk # to be discussed in Section 5. Follow the instructions in Section 2.6 of DG-11.5.A.

4.7. Section 3 – System Requirements

The SRD shall include a System Requirements Section. Most of the content for this section should be obtained directly from the RAD. This section shall include:

- A setup slide, labeled “Section 3 Setup Slide” in DG-11.5.A. This slide is a numbered list of all sections, with Section 3 highlighted, as shown.
- A Section Title slide, labeled “Slide 3.0” in DG-11.5.A.
- Section 3.1: *System Requirements Overview*, labeled “Section 3.1” in DG-11.5.A. This section provides an overview of the requirements identification process.
- Section 3.2: *Operations Concept*, labeled “Section 3.2” in DG-11.5.A. This section described the operations concept that drives the requirements. Most of this information was presented at the CDR. Adopt slides from Section 3 of the CDR

presentation, the Critical Design Document (CDD). Revise the slides as needed to capture changes to the operations concept since the CDR.

- Explain why the products are being produced. Itemize customer/user needs. Refer to the latest versions of the OCD, ATBD and RAD.
 - Explain how the products will be used. Itemize customer/user expectations. Refer to the latest versions of the OCD, ATBD and RAD.
 - Explain how the products should be produced. Provide a timeline scenario for operations. Include functionality, performance, maintenance, support, and disposal as appropriate. Refer to the latest versions of the OCD, ATBD and RAD.
 - Provide an overview of the OCD, and a pointer to the project OCD.
- Section 3.3: *Requirements Allocation*, labeled “Section 3.3” in DG-11.5.A. This section explains the purpose of requirements allocation, introduces the RAD, provides pointers to the project RAD and the STAR EPL Document Guidelines for a RAD, and provides a RAD version history. Follow the instructions in Section 3.3 of DG-11.5.A.
 - Section 3.4: *Requirements Allocation Changes*, labeled “Section 3.4” in DG-11.5.A.
 - If there have been new requirements added since CTR, list them here, following the instructions in Section 3.3 of DG-11.5.A.
 - If requirements have changed since CTR, list each change here, following the instructions in Section 3.3 of DG-11.5.A.
 - If there are changes to the requirements allocation since CTR, list each change here, following the instructions in Section 3.3 of DG-11.5.A.

4.8. Section 4 – System Readiness

The SRD shall include a System Readiness section that demonstrates the readiness of the product processing system for delivery to operations. This section shall include:

- A setup slide, labeled “Section 4 Setup Slide” in DG-11.5.A. This slide is a numbered list of all sections, with Section 4 highlighted, as shown.
- A Section Title slide, labeled “Slide 4.0” in DG-11.5.A.

- Section 4.1: *System Test*, labeled “Section 4.1.1”, “Section 4.1.2”, and “Section 4.1.3” in DG-11.5.A. This section provides an overview of how system readiness will be demonstrated by system testing. The section consists of three subsections:
 - Section 4.1.1: *Verification and Validation Overview*, labeled “Section 4.1.1” in DG-11.5.A, explains the concepts of verification and validation (V & V), notes that the system test is designed to accomplish the necessary V&V, and notes that the plan for the system test was presented at the CTR and documented in the STP. Provide a pointer to the project STP. Adopt the “Section 4.1.1” slide as is.
 - Section 4.1.2: *System Test Changes*, labeled “Section 4.1.2” in DG-11.5.A, lists changes to the system test since the STP was presented at the CTR. Follow the instructions in Section 4.1.2 of DG-11.5.A. If there were no changes, omit this subsection.
 - Changes can be additions, revisions, and/or deletions of test data, test sequences, success criteria.
 - Note whether the changes were approved at a delta CTR. If changes have not been approved, provide a rationale for each change. Usually, changes are made because of changed requirements (c.f. Section 3) or test constraints that were discovered during the system test.
 - Section 4.1.3: *Verification and Validation Report*, labeled “Section 4.1.3” in DG-11.5.A, introduces the VVR, and provides a pointer to the VVR. Adopt the “Section 4.1.2” slide as is.
- Section 4.2: *Readiness for Users*. This section demonstrates the system’s ability to satisfy the customer/user needs and expectations. The section consists of a Section Title slide, labeled “Section 4.2” in DG-11.5.A, and four subsections:
 - Section 4.2.1: *Product Users* labeled “Section 4.2.1” in DG-11.5.A. List the identified product users and the product components to be delivered to each user, as documented in the RAD and the VVP. This material should have been presented at the CTR. Adopt slides from Section 5.2 of the Code Test Document (CTD) and revise as needed to capture changes since CTR.
 - Section 4.2.2: *User Needs*, labeled “Section 4.2.2” in DG-11.5.A. State the identified needs for each user, as documented in the OCD, VVP, ATBD, and RAD. Use separate slides for each user. This material should have been presented at the CTR. Adopt slides from Section 5.2 of the CTD and revise as

needed to capture changes since CTR. Follow the instructions in Section 4.2.2 of DG-11.5.A.

- Section 4.2.3: *Validation of User Needs*, labeled “Section 4.2.3” in DG-11.5.A. Provide the system test results that validate each user need, as documented in the VVR. Follow the instructions in Section 4.2.3 of DG-11.5.A.
- Section 4.2.4: *User Documentation*, labeled “Section 4.2.4” in DG-11.5.A, demonstrates that the user documentation needs are satisfied. Follow the instructions in Section 4.2.4 of DG-11.5.A.
 - Provide an overview of the Metadata Document (MDD) and provide a pointer to the project MDD.
 - Provide an overview of the External Users Manual (EUM) and provide a pointer to the project EUM.
 - Provide an overview of the Internal Users Manual (IUM) and provide a pointer to the project IUM.
 - Provide an overview of the Algorithm Theoretical Basis Document (ATBD) and provide a pointer to the project ATBD.
- Section 4.3: *Readiness for Operations and Maintenance*. This section demonstrates the system’s ability to satisfy the operations and maintenance needs and expectations. The section consists of a Section Title slide, labeled “Section 4.3” in DG-11.5.A, and four subsections:
 - Section 4.3.1: *Operations*, labeled “Section 4.3.1” in DG-11.5.A. Identify the organization that will operate and maintain the operational product processing system. Identify specific personnel who will perform operations and maintenance (O&M) for this project. Adopt slides from Section 5.3 of the CTD. Follow the instructions in Section 4.3.1 of DG-11.5.A.
 - Section 4.3.2: *Operator Needs*, labeled “Section 4.3.2” in DG-11.5.A. State the identified needs of O&M personnel, as documented in the OCD, VVP, and RAD. Adopt slides from CTD Section 5.3 and revise as needed. Follow the instructions in Section 4.3.2 of DG-11.5.A.
 - Section 4.3.3: *Validation of Operator Needs*, labeled “Section 4.3.3” in DG-11.5.A. Provide the system test results that validate each operator need, as documented in the VVR. Follow the instructions in Section 4.3.3 of DG-11.5.A.

- Section 4.3.4: *Operations Documentation*, labeled “Section 4.3.4” in DG-11.5.A, demonstrates that the operator documentation needs are satisfied. Follow the instructions in Section 4.3.4 of DG-11.5.A.
 - Provide a pointer to the project Software Architecture Document (SWA).
 - Provide a pointer to the project Detailed Design Documents (DDD).
- Section 4.4: *System Configuration*, labeled “Section 4.4” in DG-11.5.A.
 - Note that the project’s baseline and change history are maintained in the PBR. Provide an overview of the PBR and a pointer to the latest version of the project PBR.
 - List the configuration items that comprise the pre-operational system that will be delivered to operations. This list should be consistent with the PBR.

4.9. Section 5 – Risks and Actions

The SRD shall include a Risks and Actions Section. This section shall include:

- A setup slide, labeled “Section 5 Setup Slide” in DG-11.5.A. This slide is a numbered list of all sections, with Section 5 highlighted, as shown.
- A Section Title slide, labeled “Slide 5.0” in DG-11.5.A.
- Section 5.1: *CTR Risks and Actions*, labeled “Section 5.1” in DG-11.5.A.
 - A section introduction slide should note the number of risks that were identified at the CTR and that were identified after the CTR, as shown in Section 5.1 of DG-11.5.A.
 - Report the status of the first risk identified at the CTR, as shown in Section 5.1 of DG-11.5.A. Use as many slides as necessary for a clear presentation of the status of each risk.
 - Report the status of each completed action that is associated with the risk, as shown in Section 5.1 of DG-11.5.A.
 - Report the status of each open action that is associated with the risk, as shown in Section 5.1 of DG-11.5.A.

- Repeat for each additional risk, as shown in Section 5.1 of DG-11.5.A.
- Section 5.2: *New Risks and Actions*, labeled “Section 5.2” in DG-11.5.A.
 - Report the status of each risk that has been identified since the CTR, as shown in Section 5.2 of DG-11.5.A. Use as many slides as necessary for a clear presentation of the status of each risk.
 - Report the status of each completed action that is associated with the risk, as shown in Section 5.2 of DG-11.5.A.
 - Report the status of each open action that is associated with the risk, as shown in Section 5.2 of DG-11.5.A.
 - Repeat for each new risk, as shown in Section 5.2 of DG-11.5.A.
- Section 5.3: *Risk Summary*, labeled “Section 5.3” in DG-11.5.A.
 - Present a bulleted list of the risk statements for the risks that can be closed. Risks can be closed when all associated actions are closed or withdrawn. For each risk, list the associated actions that can be closed or withdrawn. Each of these should have been presented in Sections 5.1 or 5.2 as a completed or withdrawn action. Use multiple slides as necessary for clarity.
 - Present a bulleted list of the risk statements for the risks that are still open. For each risk, list the actions that must be closed to reduce the risk to an acceptable level, with closure plans and estimated closure dates.

4.10. Section 6 – Summary and Conclusions

The SRD shall include a Summary and Conclusions Section. This section shall include:

- A setup slide, labeled “Section 6 Setup Slide” in DG-11.5.A. This slide is a numbered list of all sections, with Section 6 highlighted, as shown.
- A Section Title slide, labeled “Slide 6.0” in DG-11.5.A.
- Section 6.1: *Review Objectives Status*, labeled “Section 6.1” in DG-11.5.A. This section explains how each review objective has been addressed. Follow the instructions in Section 6.1 of DG-11.5.A.

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- Section 6.2: *Issues, Actions and Risks*, labeled “Section 6.2” in DG-11.5.A. List important issues, actions and risks that require attention. Use multiple slides as necessary for clarity. Use a major bullet for each item, with sub-bullets to note conclusions for that item.
- Section 6.3: *Next Steps*, labeled “Section 6.3” in DG-11.5.A. List recommendations for next steps after the SRR. Follow the instructions in Section 6.3 of DG-11.5.A.
- Section 6.4: *Open Discussion*, labeled “Section 6.4” in DG-11.5.A. Announce that the review is open for free discussion. Note: If you have prepared and conducted the review in accordance with standards and if the reviewers have prepared for the review in accordance with standards, there should be no need for additional discussion.

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APPENDIX A – TEMPLATE FILE

The slide templates that are referenced in this DG are available in the Microsoft PowerPoint file “STAR_DG-11.5.A _SRD_v3r0.ppt”. This file will be available to authorized users in the STAR EPL PAR.

END OF DOCUMENT