



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE
Silver Spring, Maryland 20910

May 23, 2013

MEMORANDUM FOR: OSPO and STAR Personnel

FROM: Vanessa L. Griffin
SPSRB Co-Chair

Alfred Powell
SPSRB Co-Chair

SUBJECT: Review Standards for SPSRB Satellite Product Development Projects

Vanessa L. Griffin 6/20/2013

Alfred M. Powell 6/20/2013

This memo describes the Satellite Product and Services Review Board (SPSRB) guidelines for review standards for SPSRB satellite product development (SPD) projects. The guidelines outline the reviews within the SPSRB lifecycle Project Plan. Attachment 1 describes the review standards for a SPSRB "Complex" SPD project and Attachment 2 describes a "Simple" SPD project. Attachment 3 provides guidance regarding the attendees for each review process and Attachment 4 is a Operational Readiness Review checklist for small projects/enhancements.

During the SPSRB process, NESDIS management will provide guidance on whether a project plan should follow the complex or simple process. This guidance will be given by the SPSRB Process Improvement Working Group (SPIWG) following the technical assessment step of the SPSRB process.

As directed by the SPIWG, the project leads will follow the "Complex" or "Simple" project guidelines as they develop draft project plans. The SPSRB process improvement working group (SPIWG) determines the classification of each project plan as complex or simple. If there is agreement among the Integrated Product Team (IPT) members, individual reviews may be waived, with concurrence from appropriate STAR/OSPO Division Chiefs and the SPIWG either in advance as part of the initial project plan approval and/or during the execution phase. Project leads will update their draft plans to show the appropriate tasks within their product development milestones and identify the required resources to accomplish these tasks. The project leads will present their draft plans at a Government only SPSRB meeting. SPSRB principals will either endorse their proposal or identify changes in their approach. Once the SPSRB endorses the proposed project plan, the project leads will seek funding as identified by the SPSRB.

Many SPSRB projects have difficulty with documenting end-to-end requirements for the development and implementation of product systems. The SPSRB SPD project plan template will be updated to reflect a high level Requirements Review (RR) which describes end-to-end execution requirements to be captured in the proposed SPD project plan. Additional requirements documentation will be generated during the product system lifecycle process as shown in the attachments.



Existing SPSRB SPD should follow this guidance. If additional resources are needed, identify these resource requirements at the next Annual Review for Satellite Product Development.

If you have any questions, contact the appropriate SPIWG member: OSPO (Dave Benner, Thomas Renkevans, or Antonio Irving) or STAR (Ingrid Guch, Eileen Maturi or Laurie Rokke).

Attachment 1

SPSRB Satellite Product Development (SPD) Complex Project Plan Guidance

SPSRB Complex SPD projects will follow the lifecycle reviews listed below and described within the next section:

- Requirements Allocation Document Review (Optional)
- Preliminary Design Review (PDR)
- Critical Design Review (CDR)
- Unit Test Readiness Review (UTRR)
- Software Review (SR)
- System Readiness Review (SRR)
- Operational Readiness Review (ORR)

The additional documents required for SPSRB projects are:

- Requirements Allocation Document (RAD)
- Review Item Disposition Spreadsheet (RID) or equivalent document

Note that this lifecycle review may be tailored according to the size and duration of the project. If there is agreement among the Integrated Product Team (IPT) members, reviews may be waived and the information within the waived review would be included within the next review in the process lifecycle as appropriate.

1.0 Project Reviews

1.1 (Optional) Requirements Allocation Document Review (RADR)

RADR is a Management Review whose purpose is to establish the requirements for the "Complex" or "Simple" project. The RADR is an offline review by the stakeholders and the users where the RAD document is reviewed. The document review is to ensure that the project requirements have been accurately captured and that the project will create products that the customer needs.

Entry Criteria: SPSRB SPD Project Plan, User Request, and RAD document

Exit Criteria: Updated RAD document

1.2 Preliminary Design Review

PDR is the initial Design Phase Technical Review. Its purpose is to capture project requirements, describe the algorithm theoretical basis, validation plans, and the preliminary system design. The algorithm and its validation plans need to be established. The preliminary system design has to be reviewed and all the interfaces need to be identified.

The users will need to be identified and linked to the products. This review will be presented to the full review team as well as the development team. The objective is to evaluate and review the preliminary system for the project to be approved to proceed through the design phase.

Entry Criteria: RAD, Identify users and products required, and RID

Exit Criteria: PDR Report (Updated PDR slides), Updated RAD, Users linked to products, and Updated RID

PDR sections to present:

- Introduction (includes project plan and background)
- RR Risks and Actions
- Requirements (includes new requirements and any existing current requirements)
- Quality Assurance
- Algorithm Description (Why was the algorithm chosen, validation, flowcharts)
- Preliminary Software Architecture and Interfaces
- Operational Concept
- Risks and Actions Summary (only open risks and mitigation)
- Summary

1.3 Critical Design Review

CDR is the final Design Phase Technical Review. Its purpose is to finalize project requirements, describe the algorithm theoretical basis, test plans, and the system design. The algorithm and its test plans need to be established. The system design has to be finalized and all the interfaces need to be described. The users will need to be identified and linked to the products. This review will be presented to the full review team as well as the development team. The objective is to evaluate and review the algorithm system for the project to be approved to proceed to the development phase.

Entry Criteria: PDR Report, RAD, Identify users and products required, and RID

Exit Criteria: CDR Report (Updated CDR slides), Updated RAD, Users linked to products, and Updated RID

CDR sections to present:

- Introduction (includes project plan and background)
- PDR Risks and Actions
- Requirements (includes new requirements and any existing current requirements)
- Operational Concept
- Algorithm Theoretical Basis (including algorithm validation)
- Software Architecture and Interfaces
- Quality Assurance

Risks and Actions Summary (only open risks and mitigation) Summary

1.4 Unit Test Readiness Review (UTRR)

UTRR is a Build Phase Technical Review. Its purpose is to determine whether the system units have been implemented and adequately tested within the development environment. The review includes unit test descriptions and testing results in accordance with test plans described within the CDR. The review will show that the details of the product are what the user requires. The objective is to have the units that correctly produce the outputs required by the users ready to go to system testing.

Note that the UTRR may be a development team only review. This review would be conducted by STAR and reviewed by OSPO. It would be a working review where STAR identifies the Units that were tested and the results of the tests. Slides would be developed by STAR and reviewed by the PAL and the OSPO team members. These slides will be posted before the review and are also entry criteria for the SRR.

Entry Criteria: CDR Report, RAD, RID, Products requested by the users, and draft SPSRB Documents

Exit Criteria: UTRR Report (Updated UTRR slides), Updated RAD, Details verifying that the products produced are what the users requested, and Updated RID

UTRR sections to present:

- Introduction (includes project plan and background)
- CDR Risks and Actions
- Requirements
- Quality Assurance
- Software Architecture (including interfaces and design)
- Unit Tests and Testing Results
- Algorithm Validation
- Delivered Algorithm Package
- Risks and Actions Summary (only open risks and mitigation)
- Summary and Conclusions

1.5 Software Review (SR)

SR is a Build Phase Technical Review. Its purpose is to determine whether the pre-operational software meets the SPSRB software and security standards. The STAR and OSPO software teams will be provided 2 weeks to review the software. The teams will meet and discuss with the development team where the software does not meet the standards. No formal presentation is required for this review. It is a working review where spreadsheets are used to track and document any software deficiencies.

Entry Criteria: Development software runs at the UTRR, RID, SPSRB software review checklist, and the SPSRB software security checklist

Exit Criteria: Updated RID containing a new tab with any identified software deficiencies

1.6 System Readiness Review (SRR)

SRR is a Build Phase Technical Review. Its purpose is to present system test plans and test results demonstrating that the configured units operate together as a functional system within the development environment. The review may also include any additional unit testing (since UTRR). The objective is to show that the system correctly produces the products required by the users and that it is ready to be transitioned to the test machine at OSPO.

Entry Criteria: UTRR Report, RAD, Final product details, RID, and draft SPSRB Documents

Exit Criteria: SRR Report (Updated SRR slides), Updated RAD, Final product meets the users' needs, and Updated RID

SRR sections to present:

- Introduction (includes project plan and background)
- UTRR Risks and Actions
- Requirements
- Quality Assurance
- Software architecture (including interfaces and design)
- Unit and System Tests
- Algorithm Validation
- Delivered Algorithm Package
- Risks and Actions Summary (only open risks and mitigation)
- Summary and Conclusions

1.7 Operational Readiness Review (ORR)

ORR is the pre-operational Phase Technical Review. Its purpose is to determine whether the pre-operational product system satisfies its functional and performance requirements, and is ready for promotion to the operational environment. The objective is to ensure that the system is ready for operations.

Entry Criteria:

- Entry #1 - The ORR reviewers have access to the review version of the following artifacts:
 - System Readiness Review Report
 - Requirements Allocation Document (RAD)
 - Review Item Disposition Spreadsheet (RID)

- Operational Readiness Review Document (ORRD)
- Entry #2 - The ORR reviewers have access to the review version of SPSRB Documents:
 - Users Manuals
 - ATBD
 - System Maintenance Manual
- Entry# 3 - The ORR reviewers have access to the review version of the Test Plan.
- Entry #4 - Pre-operational code units, external interfaces, ancillary data, and system test data have been integrated into a product processing system in the ESPC development and test Environment.

Exit Criteria:

- Exit # 1 – All open items in RID have been satisfactorily disposed of.
- Exit # 2 - The updated RAD is satisfactory. Requirements changes since SRR are approved.
- Exit # 3 - The SPSRB documents (EUM, IUM, SMM and ATBD) have been reviewed and are deemed to be satisfactory.
- Exit # 4 - Changes to external interfaces, software architecture, and design since SRR are approved.
- Exit # 5 - The test plan, test data, and system test results are satisfactory.
- Exit # 6 - The security impact assessment (SIA) has been completed.

ORR sections to present:

Introduction (includes project plan and background)

Risks and Actions

- Open risks from previous reviews
- New risks that will be carried to Operations and associated mitigation plan

Requirements

System Description

System Tests

Operational Readiness

- Products Generation and Distribution Readiness
- Product Quality Readiness
- Product Maintenance Readiness
- User Readiness

Summary and Conclusions

2.0 Summary

The document describes the recommended product system reviews for a SPSRB Complex SPD project. This process includes an offline RAD Review, a Preliminary Design Review, a Critical

Design Review, a Unit Test Readiness Review, a Software Review, a System Readiness Review, and an Operational Readiness Review. This process will enable a faster and more efficient transition of the product system to operations. For smaller and less complex projects, the process may be tailored. A tailored review process is used for SPSRB Simple Projects.

Attachment 2

SPSRB Satellite Product Development (SPD) Simple Project Plan Guidance

The lifecycle review may be tailored according to the complexity and duration of the project. If there is agreement among the Integrated Product Team (IPT) members, reviews may be waived and the information within the waived review would be included as appropriate within the next review in the process lifecycle as described in the cover letter. Simple projects should follow the lifecycle reviews listed below, tailored from the more comprehensive Complex Project Plan guidance described above.

Requirements Allocation Document Review (RADR)
Critical Design Review (CDR)
Software Review (SR)
System Readiness Review (SRR)
Operational Readiness Review (ORR)

The additional documents required for fast track projects are:

Requirements Allocation Document (RAD)
Review Item Disposition Spreadsheet (RID) or equivalent document

1.0 Project Reviews

1.1 Requirements Allocation Document Review (RADR)

RADR is a Management Review whose purpose is to establish the requirements for the "Complex" or "Simple" project. The RADR is an offline review by the stakeholders and the users where the RAD document is reviewed. The document review is to ensure that the project requirements have been accurately captured and that the project will create products that the customer needs.

Entry Criteria: SPSRB SPD Project Plan, User Request, and RAD document

Exit Criteria: Updated RAD document

1.2 Critical Design Review (CDR)

CDR is the final Design Phase Technical Review. Its purpose is to describe the algorithm theoretical basis, test plans, and the system design. The algorithm and its test plans need to be established. The system design has to be finalized and all the interfaces need to be described. The users will need to be identified and linked to the products. This review will be presented to the full review team as well as the development team. The objective is to evaluate and review the algorithm system for the project to be approved to proceed to the development phase.

Entry Criteria: IRR Report, RAD, Identify users and products required, and RID

Exit Criteria: CDR Report (Updated CDR slides), Updated RAD, Users linked to products, and Updated RID

CDR sections to present:

- Introduction (includes project plan and background)
- RADR Risks and Actions
- Requirements (includes new requirements and any existing current requirements)
- Operational Concept
- Algorithm Theoretical Basis (including algorithm validation)
- Software Architecture and Interfaces
- Quality Assurance (including test plans)
- Risks and Actions Summary (only open risks and mitigation)
- Summary

1.3 Software Review (SR)

SR is a Build Phase Technical Review. Its purpose is to determine whether the pre-operational software meets the SPSRB software and security standards. The STAR and OSPO software teams will be provided 2 weeks to review the software. The teams will meet and discuss with the development team where the software does not meet the standards. No formal presentation is required for this review. It is a working review where spreadsheets are used to track and document the software deficiencies.

Entry Criteria: Development software run at the SRR, RID, SPSRB software review checklist, and the SPSRB software security checklist

Exit Criteria: Updated RID containing a new tab with the identified software deficiencies

1.4 System Readiness Review (SRR)

SRR is a Build Phase Technical Review. Its purpose is to determine whether the system has been implemented and adequately tested within the development environment. The review includes unit testing and system testing results in accordance with test plans described within the CDR. The objective is to have a system that correctly produces the products required by the users that is ready to be transitioned to the test machine at OSPO.

Entry Criteria: CDR Report, RAD, Final product details, RID, and draft SPSRB Documents

Exit Criteria: SRR Report (Updated SRR slides), Updated RAD, Final product meets the user's needs, and Updated RID

SRR sections to present:

Introduction (includes project plan and background)
CDR Risks and Actions
Requirements
Quality Assurance
Software architecture (including interfaces and design)
Unit Tests
Algorithm Validation (including System Test)
Delivered Algorithm Package
Risks and Actions Summary (only open risks and mitigation)
Summary and Conclusions

1.5 Operational Readiness Review (ORR)

ORR is the pre-operational Phase Technical Review. Its purpose is to determine whether the pre-operational product system satisfies its functional and performance requirements, and is ready for promotion to the operational environment. The objective is to ensure that the system is ready for operations. For small projects/enhancements and/or concurrence by the IPT the ORR does not have to be a formal presentation but the project leads can complete a simple spreadsheet (see Attachment 4) and present that information for review before the following personnel: (1) SPB Branch Chief, (2) QA lead, (3) Developer/Programmer, (4) Project lead, (5) ESPC Security Personnel, and (6) User. Other interested parties may participate as required. The information covered in the spreadsheet covers for the most part all the necessary items that would be covered in the formal ORR.

Entry Criteria:

- Entry #1 - The ORR reviewers have access to the review version of the following artifacts:
 - System Readiness Review Report
 - Requirements Allocation Document (RAD)
 - Review Item Disposition Spreadsheet (RID)
 - Operational Readiness Review Document (ORRD)
- Entry #2 - The ORR reviewers have access to the review version of SPSRB Documents:
 - Users Manuals
 - ATBD
 - System Maintenance Manual
- Entry# 3 - The ORR reviewers have access to the review version of the Test Plan.
- Entry #4 - Pre-operational code units, external interfaces, ancillary data, and system test data have been integrated into a product processing system in the ESPC development and test Environment.

Exit Criteria:

- Exit # 1 – All open items in RID have been satisfactorily disposed of.
- Exit # 2 - The updated RAD is satisfactory. Requirements changes since SRR are approved.
- Exit # 3 - The SPSRB documents (EUM, IUM, SMM and ATBD) have been reviewed and are deemed to be satisfactory.
- Exit # 4 - Changes to external interfaces, software architecture, and design since SRR are approved.
- Exit # 5 - The test plan, test data, and system test results are satisfactory.
- Exit # 6 - The security impact assessment (SIA) has been completed.

ORR sections to present:

Introduction (includes project plan and background)

Risks and Actions

- Open risks from previous reviews
- New risks that will carry to operation and associate mitigation plan

Requirements

System Description

System Tests

Operational Readiness

- Products Generation and Distribution Readiness
- Product Quality Readiness
- Product Maintenance Readiness
- User Readiness

Summary and Conclusions

2.0 Summary

The document describes a tailoring of the product system lifecycle reviews for a SPSRB Simple SPD project. The simple project executes a process that contains a reduced number of reviews. This process includes a RAD document review, a Critical Design Review, a Software Review, a System Readiness Review, and an Operational Readiness Review. This process will enable the product system to be transitioned to operations in less time than complex projects.

Attachment 3

SPSRB Satellite Product Development (SPD) Process Review Attendees Guidance

This table provides guidance regarding attendees for each of the reviews outlined in Attachments 1 and 2, as well as benefits derived to the project and attendees thereof.

Preliminary Design Review			
Attendees Description	Attendees Required?	Benefits to the Project	Benefits to the Attendee
Managers STAR	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
Managers OSPO	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
OSD/Project Office Representative	Mandatory (Review Board)	Traceability to SPSRB and Requirements	Ensure the project will meet the requirements within the budget
Users	Yes	To make sure that users agree that the project meets user requirements and the users are aware of the product limitations.	To ensure product quality
Algorithm Developers	Yes	Ensure successful review	Ensure successful review
PAL	Yes	Ensure successful review	Ensure successful review
STAR Project lead	Yes	Ensure successful review	Ensure successful review
Independent Science person	Yes	Bring outside perspective to the project	Ensure that the algorithm will meet the product requirements
Independent Software Person	Optional		
Algorithm Integrators	Optional		
OSPO Maintenance person	Yes	Ensures that the product and system are maintainable in operations	Reduces the risk of future issues with maintenance
OSPO System Architecture	Yes	Ensure that the OSPO IT and security will be	Ensure that the OSPO IT and security will be met

and Security		met	
OSPO MOD System Team	Yes	Ensure that the system to be built has a functional design Ensure the distribution requirements	Ensure that the system to be built has a functional design Ensure the distribution requirements
Systems Expert (OSD/OSPO/S TAR)	Yes	Ensure that the system to be built has a functional design and adheres to the TRMs	Ensure that the system to be built has a functional design and adheres to the TRMs
POP chairs	Yes	Traceability to SPSRB	Traceability to SPSRB
STAR QC Personnel	Yes	Ensure that the QC plans reduce the risk of the project	Ensure that the QC plans reduce the risk of the project
OSPO QA Lead	Yes	Ensure that the QC plans reduce the risk of the project Ensure product monitoring meet OSPO requirement	Ensure that the QC plans reduce the risk of the project Ensure product monitoring meet OSPO requirement
STAR Team Leader level person	Yes	Ensure that the project is on track to meet the requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget	Ensure that the project is on track to meet the requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget
Critical Design Review			
Attendees Description	Attendees Required?	Benefits to the Project	Benefits to the Attendee
Managers STAR	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
Managers OSPO	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
OSD/Project Office Representative	Mandatory (Review Board)	Traceability to SPSRB and Requirements	Ensure the project will meet the requirements within the budget
Users	Yes	To make sure that users agree that the project meets user requirements and the	To ensure product quality

		users are aware of the product limitations.	
Algorithm Developers	Yes	Ensure successful review	Ensure successful review
PAL	Yes	Ensure successful review	Ensure successful review
STAR Project lead	Yes	Ensure successful review	Ensure successful review
Independent Science person	Yes	Bring outside perspective to the project	Ensure that the algorithm will meet the product requirements
Independent Software Person	Yes	Bring outside perspective to the project	Ensures that the software will meet the requirements
Algorithm Integrators	Yes	Ensures that accurate and complete transition to operations plans are in place	Ensures that accurate and complete transition to operations plans are in place
OSPO Maintenance person	Yes	Ensures that the product and system are maintainable in operations	Reduces the risk of future issues with maintenance
OSPO System Architecture and Security	Yes	Ensure that the OSPO IT and security will be met	Ensure that the OSPO IT and security will be met
OSPO MOD System Team	Yes	Ensure that the system to be built has a functional design Ensure the distribution requirements	Ensure that the system to be built has a functional design Ensure the distribution requirements
Systems Expert (OSD/OSPO/STAR)	Yes	Ensure that the system to be built has a functional design and adheres to the TRMs	Ensure that the system to be built has a functional design and adheres to the TRMs
POP chairs	Yes (Review Board)	Traceability to SPSRB	Traceability to SPSRB
STAR QC Personnel	Yes	Ensure that the QC plans reduce the risk of the project	Ensure that the QC plans reduce the risk of the project
OSPO QA Lead	Yes	Ensure that the QC plans reduce the risk of the project Ensure product monitoring meet OSPO requirement	Ensure that the QC plans reduce the risk of the project Ensure product monitoring meet OSPO requirement
STAR Team Leader level	Yes	Ensure that the project is on track to meet the	Ensure that the project is on track to meet the

person		requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget	requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget
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Unit Test Readiness Review

Attendees Description	Attendees Required?	Benefits to the Project	Benefits to the Attendee
Managers STAR	Mandatory (Review Board) - Presentation No - Working Meeting		
Managers OSPO	Mandatory (Review Board) - Presentation No - Working Meeting		
OSD/Project Office Representative	Mandatory (Review Board) - Presentation No - Working Meeting	Traceability to SPSRB and Requirements	Ensure the project will meet the requirements within the budget
Users	No		
Algorithm Developers	Yes Mandatory - Working Meeting	Ensure successful review	Ensure successful review
PAL	Yes Mandatory - Working Meeting	Ensure successful review	Ensure successful review
STAR Project lead	Yes	Ensure successful review	Ensure successful review
Independent Science person	No		
Independent Software Person	Yes	Bring outside perspective to the project	Ensures that the software will meet the requirements
Algorithm Integrators	Yes	Ensures that accurate and complete unit testing has been done	Ensures that accurate and complete unit testing has been done
OSPO Maintenance person	Yes	Ensures that the product and system are maintainable in operations	Reduces the risk of future issues with maintenance
OSPO System Architecture and Security	Yes - Presentation No - Working Meeting	Ensure that the OSPO IT and security will be met	Ensure that the OSPO IT and security will be met
OSPO MOD System Team	Yes	Ensure system meets OSPO Best Practices Ensure the distribution	Ensure system meets OSPO Best Practices Ensure the distribution

		requirements	requirements
Systems Expert (OSD/OSPO/S TAR)	Yes - Presentation No - Working Meeting	Ensure that the system being built has a functional design and adheres to the TRMs	Ensure that the system being built has a functional design and adheres to the TRMs
POP chairs	Yes - Presentation No - Working Meeting	Traceability to SPSRB	Traceability to SPSRB
STAR QC Personnel	Yes		Reduces the risk of the project
OSPO QA Lead	Yes	Ensure that complete QC plans and tests have been implemented Ensure product monitoring meet OSPO requirement	Ensure that complete QC plans and tests have been implemented Ensure product monitoring meet OSPO requirement
STAR Team Leader level person	Yes - Presentation No - Working Meeting	Ensure that the project is on track to meet the requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget	Ensure that the project is on track to meet the requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget
Software Code Review			
Attendees Description	Attendees Required?	Benefits to the Project	Benefits to the Attendee
OSPO Internal			
System Readiness Review			
Attendees Description	Attendees Required?	Benefits to the Project	Benefits to the Attendee
Managers STAR	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
Managers OSPO	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
OSD/Project Office Representative	Mandatory (Review Board)	Traceability to SPSRB and Requirements	Ensure the project will meet the requirements within the budget
Users	Yes	To make sure that users agree that the project meets user requirements and the	To ensure product quality

		users are aware of the product limitations.	
Algorithm Developers	Yes	Ensure successful review	Ensure successful review
PAL	Yes	Ensure successful review	Ensure successful review
STAR Project lead	Yes	Ensure successful review	Ensure successful review
Independent Science person	Optional		
Independent Software Person	Optional		
Algorithm Integrators	Yes	Ensures that accurate and complete system testing has been done	Ensures that accurate and complete system testing has been done
OSPO Maintenance person	Yes	Ensure that complete QC plans and tests have been implemented	Reduces the risk of future issues with maintenance
OSPO System Architecture and Security	Yes	Ensure that the OSPO IT and security will be met	Ensure that the OSPO IT and security will be met
OSPO MOD System Team	Yes	Ensure system meets OSPO Best Practices Ensure the distribution requirements	Ensure system meets OSPO Best Practices Ensure the distribution requirements
Systems Expert (OSD/OSPO/STAR)	Yes	Ensure that the system is functional design and adheres to the TRMs	Ensure that the system is functional design and adheres to the TRMs
POP chairs	Yes	Traceability to SPSRB	Traceability to SPSRB
STAR QC Personnel	Yes	Ensure that complete QC plans and tests have been implemented	Reduces the risk of the project
OSPO QA Lead	Yes	Ensure that complete QC plans and tests have been implemented Ensure product monitoring is in place	Ensure that complete QC plans and tests have been implemented Ensure product monitoring is in place
STAR Team Leader level person	Yes	Ensure that the project is on track to meet the requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget	Ensure that the project is on track to meet the requirements, creates the products requested by the customers, is an efficient processing system, and stays within the budget

Operational Readiness Review			
Attendees Description	Attendees Required?	Benefits to the Project	Benefits to the Attendee
Managers STAR	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
Managers OSPO (Ricky Irving, Linda Stathoplos)	Mandatory (Review Board)	Traceability to SPSRB	Informative for ease of resource management stewardship
OSD/Project Office Representative	Mandatory (Review Board)	Traceability to SPSRB and Requirements	Ensure the project will meet the requirements within the budget
Users	Mandatory	To make sure that users agree that the project meets user requirements and the users are aware of the product limitations.	To ensure product quality
Algorithm Developers	Yes	Ensure successful review	Ensure successful review
PAL	Mandatory	Ensure successful review	Ensure successful review
STAR Project lead	Yes	Ensure successful review	Ensure successful review
Independent Science person	No		
Independent Software Person	No		
Algorithm Integrators	Optional		
OSPO Maintenance person	Yes	Ensures that the product and system are maintainable in operations	Reduces the risk of future issues with maintenance
OSPO System Architecture and Security	Yes	Ensure that the OSPO IT and security has been met	Ensure that the OSPO IT and security has been met
OSPO MOD System Team	Yes	Ensure system meets OSPO Best Practices Ensure the distribution requirements	Ensure system meets OSPO Best Practices Ensure the distribution requirements
POP chairs	Yes	Traceability to SPSRB	Traceability to SPSRB
STAR QC	No		

Personnel			
OSPO QA Lead	Mandatory	Ensure ORR entry and exit criteria are met, the product is ready to go operation	Ensure ORR entry and exit criteria are met, the product is ready to go operation
STAR Team Leader level person	Optional		

Attachment 4

SPSRB Satellite Product Development (SPD) Operational Readiness Checklist

Operational Readiness Check List

CLI #	Check List Item (CLI)	Disposition					Risk	Action (Y/N)	Comments
		Pass	Condi tional Pass	Defer	Waive	N/A			
1	All open risks have been satisfactorily disposed of								
2	The updated Requirement Document (RAD) is satisfactory.								
3	Code Review has been done, all open items has been closed								
4	Directory Structure is satisfactory								
5	Flow chart (IT Architecture and Network Connection) is satisfactory								
6	The test plan, test data, and system test results are satisfactory								
7	The SPSRB documents have been reviewed and are deemed to be satisfactory								
8	The security check has been completed								
9	Product Generation and Distribution is ready (meet latency requirement)								
10	Product Quality is ready (meet accuracy requirement)								
11	Product Monitoring including help desk monitoring procedure is ready								
12	Product Maintenance is ready (maintenance support and emergency recovery)								
13	Are contract staff trained and ready for maintaining the codes (primary and back up resource are identified?)								
14	The software package has been checked in CM repository								
15	Archive								
16	User is ready (Product Acceptance and User Training)								

	Yes	No
Recommend go operation		