

**SCIENCE MISSION DIRECTORATE (SMD)
Category 3/Class D Projects Implementation Policy**

SMD Policy Document SPD-48

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Responsible SMD Official: Deputy Associate Administrator for Programs (DAA/P)

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I. Background

The SMD portfolio of space flight investigations is composed of projects of different risk classifications, from Class A (highest priority/high cost/lowest risk tolerance) through Class D (lower priority/lower cost/higher risk tolerance) as defined by NASA Procedural Requirement (NPR) 8705.4, Risk Classification for NASA Payloads. SMD seeks to increase its investment in new principal investigators (PIs) and experiments with innovative engineering and project management approaches for Category 3/Class D (Cat 3/Class D) projects by enabling streamlined development, heavier reliance on proven commercial technology development, and focused science implementation strategies.

Increased streamlining of the formulation and development approach for SMD Cat 3/Class D projects is necessary for realizing the benefits of the strategy, and SMD accepts there may be lower confidence in project success. The goal of the streamlined approach to formulating and developing Cat 3/Class D projects is to reduce the management overhead costs, encourage innovation, and to allow for the appropriate risk relaxation of the formal NASA program management, engineering, and mission assurance requirements for this classification of projects within NASA's framework of standard processes and best practices.

Since September 2014, the Agency has documented guidance and expectations for managing Cat 3/Class D spaceflight projects with an adjusted lifecycle cost under \$150M. The previous Agency- and SMD-level documents are as follows:

1. "Guidance and Expectations for Small Category 3, Risk Classification D (Cat 3/Class D) Space Flight Projects with Life-Cycle Cost Under \$150M", dated September 26, 2014, and signed by the NASA Associate Administrator.
2. "NASA Science Mission Directorate (SMD) Class-D Tailoring/Streamlining Decision Memorandum", dated December 7, 2017, and signed by the NASA SMD Associate Administrator.
3. "NASA Science Mission Directorate (SMD) Class D Tailoring/Streamlining Implementation Plan", dated July 29, 2021 (unsigned).
4. Approval of "Request for a Deviation from the Federal Acquisition Regulations (FAR) and the NASA FAR Supplement (NFS) 1834.201 Earned Value Management System Policy for SMD Class-D Tailored/Streamlined Missions \$150M or less" signed on June 27, 2018 by the NASA Assistant Administrator for Procurement.

These documents are provided for reference purposes only. This SMD Cat 3/Class D Projects Implementation Policy, including attachment, takes precedence over and supersedes all previous versions of SMD Class D documentation, including any points of discrepancy.

The purpose of this SMD Cat 3/Class D Projects Implementation Policy is to document how SMD manages this classification of projects. This policy is based on previous guidance provided in the above referenced documents, inputs from the SMD Program Manager's Forum in the summer of 2019 that detailed expectations for both the developers and the stakeholders of Cat 3/Class D projects, and reviews within SMD of Cat 3/Class D policy implementation in 2022.

II. Definitions

In this implementation policy, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms: "may" or "can" denote discretionary privilege or permission, "should" denoted a good practice, and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.

III. Applicability

This document establishes the SMD approach to managing Cat 3/Class D space flight projects and describes the principles that will guide the implementation of Cat 3/Class D projects. This approach is a tailoring of how SMD executes per NPR 8705.4, Risk Classification for NASA Payloads; NPR 7120.5, NASA Space Flight Program and Project Management Requirements; and the SMD Management Handbook.

This document applies to all SMD Cat 3/Class D projects with an adjusted Life Cycle Cost (LCC) in real year (RY) dollars less than \$150M. For this policy, the adjusted LCC includes all aspects of the project in Phases A thru F, excluding the following:

- Access to Space (launch vehicle; associated commercially provided launch systems)

The SPD-39, Standard Mission Assurance Requirements for Payload Classification D document (SMD Class D MAR) is applicable and an attachment to this SMD Class D Projects Implementation Policy. The SMD Class D Compliance Matrix, in accordance with NPR 7120.5, is applicable to this policy and is provided in Appendix A.

The guidelines in this document shall be applied to both competitively selected and directed SMD Cat 3/Class D projects, including all solicitations and contracts.

NOTE: Application of this policy and the \$150M adjusted LCC threshold to a Cat 3/Class D project shall be determined prior to release of any solicitation or the issuance of the Formulation Authorization Document (FAD). Compliance with the \$150M adjusted LCC threshold will be directed at Key Decision Point-A (KDP-A). If, at KDP-C, the applicable project costs exceed or are expected to exceed the \$150M adjusted LCC threshold, the SMD Associate Administrator, advised by the convened SMD Program Management Council (PMC), shall determine if all or part of this SMD Cat 3/Class D policy will continue to be applicable and document such determination in the KDP-C Decision Memorandum (DM). In the event a SMD Cat 3/Class D project exceeds the \$150M threshold during its lifecycle, then the project shall engage the DAA/P regarding EVM compliance.

All documents cited as applicable or as reference are assumed to be the latest version unless otherwise noted. Except as noted herein, this policy does not alter, modify, amend, or supersede any other applicable agency- or federal-level policies and regulations (internal or external to NASA).

A. Applicable Documents

- [1] - NPR 7120.5 NASA Space Flight Program and Project Management Requirements
- [2] - NPR 7123.1 NASA Systems Engineering Processes and Requirements
- [3] - NPR 8705.4, Risk Classification for NASA Payloads
- [4] - SPD-39 Standard Mission Assurance Requirements for Payload Classification D
- [5] - SPD-43 SMD SRB Implementation Guide

B. Reference Documents

- [1] - SMD PMC Charter
- [2] - SMD DPMC Operations Directive
- [3] - NASA Standing Review Board (SRB) Handbook
- [4] - SMD Management Handbook

IV. Responsibility

The SMD Deputy Associate Administrator for Programs (DAA/P), as delegated by the SMD Associate Administrator, shall ensure compliance with this policy document.

V. Solicitation, Evaluation, and Contract Award for Competed Cat 3/Class D Projects

All applicable Announcements of Opportunity (AOs) and other acquisition approaches/solicitations shall include proper documentation to guide the proposers to the expectations for SMD Cat 3/Class D projects, and any resultant contract shall be aligned with the principles contained herein.

All proposed/planned tailoring beyond that outlined within this SMD Cat 3/Class D Projects Implementation Plan shall include cost, schedule, and other benefits of the proposed tailoring. Further tailoring after selection is allowed if properly justified and shall be approved by the Program Office prior to implementation and formally documented in the latest version of the NPR 7120.5 compliance matrix that accompanies the Project Plan and within any applicable contracts (as necessary).

VI. Mission Assurance and Risk

SMD has developed SPD-39, Standard Mission Assurance Requirements for Payload Classification D (SMD Class D MAR), which is applicable to all SMD Cat 3/Class D projects under this Cat 3/Class D implementation policy and establishes the level of accepted risks. Compliance with SMD Class D MAR is mandatory and requirements cannot be tailored downward to add or increase risks. Modifications that meet the intent of SMD Class D MAR by a separate approach is acceptable. Key themes within this document as applicable to SMDs overall management of Cat 3/Class D projects include the following:

- Emphasis is placed on implementing developer practices that have been proven successful, using teamwork between NASA and the developer to assure mission success, and driving efforts based on characterization and management of risk, rather than the enforcement of broad, but prescriptive, requirements. This approach by no means encourages the adoption of unacceptable risks, but on the contrary, emphasizes a rigorous and comprehensive understanding of risks to guide development and testing efforts.
- Mission assurance requirements emphasize insight (NASA knowledge of development activities and team participation) as opposed to oversight (NASA approval and extensive process control of development activities) and maintaining sound risk management principles, which become more important when the levels of process control are reduced.

The SPD-39 SMD Class D MAR document shall be utilized and referenced in all applicable SMD Class D solicitations (e.g., AOs) and resultant contracts, and applied to Cat 3/Class D directed projects. For competed projects, any additional guidelines addressing deviations to the requirements shall be included in the solicitation or negotiated during finalization of the contract.

For directed and selected space flight projects, this SMD Class D MAR shall be adopted and used for forming a project's Safety and Mission Assurance Plan (SMAP) and the NPR 8705.4 Appendix E compliance matrix. If the project uses the Class D MAR without any tailoring, the Assurance Implementation Matrix (AIM) is not required per NPR 8705.4. If the SMD Class D MAR is tailored in any way, then an AIM is required. The appropriate level of Technical Authority oversight will be agreed to by all required stakeholders per NPR 8705.4 once the project is selected or directed. Any modification and/or tailoring of the implementation approach and documentation that meets requirements will be the responsibility of the implementing Center's technical authority in coordination with the Program Office. When waivers to the SMD Class D MAR or the AIM are requested by projects, the authority for waiving any requirements is delegated to the implementing Center's technical authority for safety and mission assurance.

SMD acknowledges that there is a risk that a Cat 3/Class D project may not be successfully developed within its allocated resources. If a Cat 3/Class D project incurs cost and/or schedule overruns, SMD will consider whether the portfolio's science return is better served by:

1. Increasing the LCC required for the Cat 3/Class-D project at the expense of future projects in that portfolio (typically delays or eliminates a future project in the portfolio), OR
2. Terminating the Cat 3/Class-D project so there is no impact on other projects in that portfolio.

The SMD Associate Administrator retains final decision authority for increasing the LCC and for project termination. Thus, an increased risk of failure and the potential for termination are accepted as part of this implementation.

VII. Documentation

The SMD Cat 3/Class D guidelines seek to reduce the total overall documentation requirements, including the number of separate document submittals, contract deliverables, number of reviewers and approvers, and configuration management burden. SMD aims to have documentation approved at the lowest level possible for decision authority. Unless tailored in the NPR 7120.5 Compliance Matrix (see Appendix A), all documentation shall be under configuration control in advance of Life Cycle Reviews (LCRs). SMD project documentation approval (as required by all applicable Government requirements documents, including NPRs and contract documents) is delegated to the Division Director, as outlined in Table 1. Required signatures other than the SMD signatures listed in Table 1 remain as required, unless delegated by the responsible organization (for example, Center Director delegates to Director of Flight Programs at a Center). The status of required documentation (e.g., submission dates, approval dates) will be reported monthly to the DAA/P at Flight Program Reviews (FPRs) beginning at least 4 months in advance of an upcoming KDP.

Table 1 also outlines the documentation requirements and the timelines required for communication and approval with SMD and other NASA HQ offices. Per NPR 7120.5, the Project Compliance Matrix shall be included in the Formulation Agreement for directed projects, in the Step 2 Concept Study Report for competed projects, and in the Project Plan for both competed and directed projects. The SMD Cat 3/Class D Compliance Matrix for NPR 7120.5 contained in Appendix A includes a pre-populated compliance matrix for Class D projects that may be further tailored by the Project and the Program Office.

The SMD Program Executive is responsible for uploading all documents detailed in Table 1 to the appropriate SMD flight mission programmatic information system/repository.

Table 1. Documentation Required for HQ Signature/Approval

Document	Highest SMD Signature Required	Configuration Control by	Signature by
Formulation Authorization*	Division Director	SRR/MDR	KDP B
Formulation Agreement*	Division Director – may be delegated to Program Office	SRR/MDR	KDP B
Level 1 Requirements (PLRA)	SMD Associate Administrator	PDR (baseline)	KDP C
Project Plan	Division Director (TA review at HQ)	PDR (baseline)	KDP C
SRB Terms of Reference	Division Director/Implementing Center Representative	SRR/MDR (or first LCR for two-step competed mission)	First required LCR
NEPA Documentation	As identified in the guiding NPR	PDR (baseline)	KDP C
Project Protection Plan	SMD Deputy Associate Administrator for Programs	PDR (baseline)	KDP C
Mishap Preparedness and Contingency Plan (MPCP) Appendix to the SMD MPCP	As identified in the SMD MPCP and in NPR 8621.1, NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping	PDR (preliminary)	KDP C
Orbital Debris Assessment (not required for ISS projects or hosted instruments/payloads)	As identified in Section 3.2.9 of the SMD Class D MAR and in NPR 8715.6/NASA-STD 8719.14.	MCR (assessment) PDR (preliminary)	KDP C
Planetary Protection Certification (if required)	As identified NPR 8715.24, Planetary Protection Provisions for Robotic Extraterrestrial Missions	SRR/MDR	KDP B
Nuclear Safety	As identified in NPR 8715.26, Nuclear Flight Safety	As defined in NPR 8715.26	As defined in NPR 8715.26

*FAD and FA are not required for projects selected through AOs.

VIII. Life Cycle and Key Decision Point Reviews

NPR 7120.5 requires the traditional development lifecycle reviews (LCRs) and associated Key Decision Point (KDP) reviews for all projects, regardless of risk class. The objective of this SMD Cat 3/Class D tailoring/streamlining process is to execute the necessary reviews at the appropriate levels, while not reducing the lifecycle rigor for SMD Cat 3/Class D projects. Reviews for Cat 3/Class D projects shall be conducted as follows:

1. Standing Review Board (SRBs):
 - a. The SMD Divisions and the SRB shall follow the processes documented in the NASA SRB Handbook and the SPD-43 SMD SRB Implementation Guide.

- b. The SMD Division shall have a meeting of the Convening Authorities (CA) prior to the Mission Concept Review (MCR) and KDP-B to identify the SRB Chair, or after Step 2 down-selection for completed projects. If possible, the SRB Deputy Chair should also be identified during this meeting. The meeting to identify the SRB Chair and Deputy Chair must include the SMD DAA/P.
 - c. The SRB shall be as small as practical in size, with a goal of 6 members, not including the SRB Review Manager, Chair, and Deputy Chair. The goal of 6 members also does not include technical consultants, who may be added as needed for review of specialized areas.
2. Delegation of Authority: The SMD AA has delegated decision authority and convening authority to the SMD Division Directors, with the exception of Cat 3/Class D project award, KDP-C milestones, and all decisions associated with the exceedance of the Agency Baseline Commitment (ABC) or Current Agency Total. The SMD AA maintains decision authority of KDP-E, unless otherwise delegated. SMD Division Directors may request delegation of decision authority for KDP-E. The SMD AA maintains convening authority for the selection of SRB Chair and Deputy Chair. The SMD AA reserves the authority to add KDPs (e.g., Continuation/Termination Reviews) and to retain DA for other KDPs normally assigned to SMD Division Directors. The SMD AA maintains DA for Continuation/Termination Reviews; however, DA may be delegated to SMD Division Directors and will be determined on a case-by-case basis.
 3. Key Decision Points (KDPs): There shall be two (2) Headquarters-level KDPs convened during the Project development lifecycle: KDP-C and KDP-E. Table 2 identifies the SMD-specific Convening Authorities (CAs) and Decision Authority (DA) for each SRB-led review. All other reviews and the convening of all other KDPs are at the discretion of the SMD Division Director; the Division Director may delegate this discretionary authority to the Program Office Manager. If a KDP is not convened, all decisions associated with out of board action must be documented in a DM. The SMD DAA/P, for awareness purposes, must be included in all Class D LCR snapshot outbriefs and receive notification or copies of Division-level program management council (dPMC) decision memoranda. DAA/P representative (e.g., Programmatic Portfolio Management Lead and Portfolio Strategic Manager) and SMD Independent/Technical Authority representative (e.g., OCFO, OCE, OSMA) must be in attendance for all convened Class D dPMCs.

Table 2. Decision Authority and Convening Authority Assignments by SRB-Led LCR.

Life Cycle Review	Review Panel	Decision Authority	Convening Authority (SMD Designee)*	Post-Review Event
SRR/MDR**	SRB	Division Director	Division Director	Snapshot Outbrief
PDR	SRB	SMD AA	Division Director	KDP-C
CDR	SRB	Division Director	Division Director	Snapshot Outbrief
ORR	SRB	SMD AA***	Division Director	KDP-E

*CAs at the Implementing Centers and Technical Authorities are the same as specified in 7120.5.

**SRR/MDR are not required for projects selected through the two-step AO process.

***Division Directors can request delegation of decision authority for KDP-E.

IX. Reporting

It is essential to the success of Cat 3/Class D projects that the PI (when the project is PI-led) and project manager maintain close communications with the Program Office throughout the life of the project (i.e.,

Phases A thru F). It is acknowledged that preparing formal status presentations requires resources that may strain the project workforce at times. Therefore, formal reporting for Cat 3/Class D projects should be minimized, in deference to more informal regular interaction with Program Office Mission Managers (MMs) and SMD Program Executives (PEs). At a minimum, the Project Manager shall engage the MM and PE in weekly conversations and should discuss status monthly using information in a format that is normally produced by the project; no formal presentation is required. Additional reporting may be required by the SMD Division.

X. Performance Management

In the spirit of streamlining the SMD management oversight of these Cat 3/Class D projects, performance management shall be conducted as follows:

1. In preparation for KDP-C, SMD shall develop a single Independent Cost Estimate (ICE) and Independent Schedule Estimate (ISE), which will be part of the responsibility of the SRB. The Center Director retains the authority to develop an additional ICE/ISE as deemed necessary for a project implemented at their Center. Program Offices may also develop an ICE/ISE, as appropriate for their overall program management needs.
 - a. The KDP-C decision for an Agency Baseline Commitment (ABC) will be made based on individual cost and schedule dependent on the circumstances of the project. Adopting a confidence below 70% explicitly accepts increased programmatic risks for this project class.
 - b. Generally, projects should be funded at a minimum 50% LCC confidence at confirmation, including project held reserves. However, in leaning forward with the acceptance of increased risks, 50% confidence level is a guideline not a mandatory minimum value.
 - c. Headquarters and Program Office reserves (i.e., MD-UFE) will be recommended by the Program Manager, Program Director, and Division Director for each project and approved by the SMD AA at KDP-C. After KDP-C, release of MD-UFE has been delegated by the SMD AA to SMD Division Directors.
2. Earned Value Management (EVM) is not applicable to SMD Cat 3/Class D projects with an adjusted LCC less than \$150M, per the deviation approved by the NASA Assistant Administrator for Procurement.
3. Cost Analysis Data Requirement (CADRe) reporting is required for Cat 3/Class D projects with a LCC above \$50M.
4. Program Offices shall track development costs and schedule performance with the purpose of measuring the impact of the programmatic aspect of these guidelines on the project. Data collected by Program Offices shall be submitted to the DAA/P after Life Cycle Reviews and KDPs post-KDP-C.

XI. Attachments

The following documents are applicable as noted herein and must be used in conjunction with this policy:

1. SMD Standard Mission Assurance Requirements for Payload Classification D (SPD-39), dated April 2021.
2. Deviation from the Federal Acquisition Regulations (FAR) and the NASA FAR Supplement (NFS) 1834.201 Earned Value Management System Policy for SMD Class- D Tailored/Streamlined Missions \$150M or less”, approved by the NASA Assistant Administrator for Procurement on June 28, 2018.

APPENDIX-A
SMD Class D Compliance Matrix

NPR 7120.5 Compliance Matrix for SMD Category 3/Class D Projects

Background:

The Science Mission Directorate (SMD) has created a Cat 3/Class D project Policy and Implementation Guidance document set to address the 24 Sept 2014 Letter from the Associate Administrator. These documents lay out the tailoring of requirements supported by SMD. Not all the requirements that SMD has identified as tailorable are owned by SMD. This tailored 7120.5 compliance matrix is intended to show concurrence from the stakeholder organization for the SMD Class D implementation tailoring. Tailoring does not mean elimination or waiving of requirements; tailoring refers to streamlining processes to minimize the number of documents that are reviewed and require configuration control.

Update Cycle:

This tailored matrix will be reviewed for update every three years or upon the issuance on a new version of NPR 7120.5, whichever is sooner.

Instructions for Use:

This compliance matrix should be interpreted as guidance and authorization for SMD Cat 3/Class D projects only, not direction. This document identifies areas where SMD will support the project's proposed tailoring for Cat 3/Class D projects. Each SMD Cat 3/Class D project should evaluate and submit the tailoring appropriate for its project implementation. Items in this SMD Class D implementation matrix are identified as Tailored in the "Comply" column and items where there is a HQ stakeholder signature associated with the specific tailoring will be considered approved by the requirement owner if the PI (or Project Manager for a directed project) chooses to tailor the item. Additional tailoring is acceptable and will follow the standard process of requirement owner concurrence in the project's 7120.5 compliance matrix. PIs/PMs shall include tailoring details from both the preapproved requirements and newly requested in the Project's 7120.5 compliance matrix with tailoring rationale. After selection, the implementing or oversight center will issue the final concurrence for the matrix that will be included in the Project Plan.

After Project initiation by proposal selection or initiation of directed projects, the project must:

- Complete and submit a project-specific NPR 7120.5 compliance matrix.
- Follow any Implementing Center Guidelines for obtaining Center concurrence with the project-specific tailoring, including tailoring authorized in the SMD Class D Compliance matrix. If there is no Implementing Center, the responsible Program Office will help the project meet this requirement.

- Provide the Program Executive (PE) rationale for any tailoring of additional items not covered in the SMD Class-D Matrix. The PE shall obtain any HQ-level requirement owner’s signature prior to the project submitting the Formulation Agreement (for one-step AOs) and/or the Project Plan.
- Include all content required for all documentation, whether completed separately or as part of a combined document.

About the NPR 7120.5 Compliance Matrix

This Cat 3/Class D Compliance Matrix documents the program or project’s compliance with the requirements of NPR 7120.5 or how the program or project is tailoring the requirements in accordance with Section 3.5. It is submitted as part of the Formulation Agreement, Program Plan, or Project Plan. The Cat 3/Class D Compliance Matrix is provided to streamline the tailoring (waiver and deviation) process described in Section 3.5 and may be used to document approval for designating requirements as non-applicable (*see Section 3.5.3. of NPR 7120.5*). If the Cat 3/Class D Compliance Matrix is completed in accordance with these instructions, it meets the requirements for requesting tailoring and for designating requirements as non-applicable and serves as a group submittal for waivers to NPR 7120.5. Once the Formulation Agreement or Program or Project Plan is signed, tailoring and non-applicable designations are approved. A copy is forwarded to OCE. If the Cat 3/Class D Compliance Matrix changes or if compliance is phased for existing programs or projects, updated versions of the Cat 3/Class D Compliance Matrix are incorporated into an approved Formulation Agreement or Program Plan or Project Plan revision.

The Cat 3/Class D Compliance Matrix lists:

- The paragraph reference,
- the NPR 7120.5 requirement statement
- the requirement owner (the organization or individual responsible for the requirement)
- whether tailoring authority is held at Headquarters for the requirement,
- the organization or individual to whom the requirement applies (MDAA, CD, PM),
- a “Comply?” column to describe applicability or intent to tailor,
- the “Justification” column to justify how tailoring is to be applied, and
- the “Approval” column when signatures are required to approve tailoring.

The “Requirement Owner” column designates which organization is responsible for maintaining the requirement for the Agency. The head of the requirement owner’s organization has the authority for approving tailoring unless this authority has been formally delegated. The “Delegated” column indicates whether the HQ’s requirement owner has delegated or retained approval authority for tailoring of the requirement. The next three columns (“MDAA,” “CD,” and “PM”) designate to whom the requirement applies. An “A” in the column indicates

applicability. Programs and projects do not need to address requirements that are not applicable to “PM.” The “Comply?” column is filled in by the program or project to identify the program or project’s approach to the requirement. The project inserts an “FC” for “fully compliant,” “T” for “tailored,” or “NA” for a requirement that is “non-applicable,” per Section 3.5.3 of NPR 7120.5. For the SMD Cat 3/Class D matrix, SMD has pre-populated these columns with the tailored compliance discussed with the relevant requirement owners. The project still needs to identify the items applicable to their plans. The column titled “Justification” documents the rationale for tailoring, documents how the requirement will be tailored, or justifies why the requirement is not applicable. The “Approval” column is used to indicate approval for tailored requirements. The name, title, and signature of the responsible authority (requirement owner or delegate) in this column indicates that approval and any required concurrences have been obtained. The requirement owner consults with the other organizations that were involved in the establishment of the specific requirement and obtains the concurrence of those organizations having a substantive interest.

- The name, title, and signature of the responsible authority indicating approval of tailoring is required only for tailored requirements, i.e., those requirements with a “T” in the “Comply” column. This is not required for requirements with “NA” in the “Comply” column.
- For requirements for which tailoring authority has been retained, program and project managers should work with the HQ requirement owners’ POCs to obtain the names of individuals with tailoring approval authority.
- For requirements that have been delegated, program and project managers should work with the delegated representative or with the HQ requirement owners’ POCs to obtain information specific to the delegated authorities.

Approver Acronyms:

EMD	Environmental Management Division
FRED	Facilities Real Estate Division
LMD	Logistics Management Division
OCE	Office of the Chief Engineer
OCFO	Office of the Chief Financial Officer
OCIO	Office of the Chief Information Officer
Ocomm	Office of Communications
OCT	Office of the Chief Technologist
OGC	Office of General Counsel
OIIR	Office of International and Interagency Relations
OPS	Office of Protective Services
OSMA	Office of Safety and Mission Assurance
SID	Strategic Investments Division
SMD	Science Mission Directorate

Additional Acronyms:

ABC	Agency Baseline Commitment
AO	Announcements of Opportunity
CD	Center Director
CA	Convening Authorities
CADRe	Cost Analysis Data Requirement
CDR	Critical Design Review
Cat 3/Class D	Small Category 3, Risk Classification D
Class D MAR	The SPD-39, Standard Mission Assurance Requirements for Payload Classification D document
DA	Decision Authority
DAA/P	Deputy Associate Administrator for Programs
DM	Decision Memorandum
dPMC	Division-level Program Management Council
EVM	Earned Value Management
FAD	Formulation Authorization Document
FAR	Federal Acquisition Regulations
FPR	Flight Program Reviews
ICE	Independent Cost Estimate
ISE	Independent Schedule Estimate
KDP	Key Decision Point
KDP-A	Key Decision Point-A
LCC	Life Cycle Cost
LCR	Life Cycle Reviews
MCR	Mission Concept Review
MDAA	Mission Directorate Associate Administrator
MD-UFE	Mission Directorate-Unallocated Future Expenditures
MDR	Mission Division Review
MM	Mission Managers
MPCP	Mishap Preparedness and Contingency Plan
NFS	NASA FAR Supplement
NPR	NASA Procedural Requirement
ORR	Operational Readiness Review
PDR	Preliminary Design Review
PI	Principal Investigators
PE	Program Executives
PLRA	Program Level 1 Requirements Appendix
pM	Project Manager
PM	Program Manager
PMC	Program Management Council
RY	Real Year
SMAP	Safety and Mission Assurance Plan
SRB	Standing Review Board
SRR	System Requirements Review

SMD tailored 7120.5F Compliance Matrix for Class D Projects

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
2.1.1.2	Regardless of the structure of a program or project meeting the criteria of Section P.2, this NPR shall apply to the full scope of the program or project and all the activities under it.	NASA AA	No			A	FC		
2.1.3.1	Projects are Category 1, 2, or 3 and shall be assigned to a category based initially on: (1) the project life-cycle cost (LCC) estimate, the inclusion of significant radioactive material, and whether or not the system being developed is for human space flight; and (2) the priority level, which is related to the importance of the activity to NASA, the extent of international participation (or joint effort with other government agencies), the degree of uncertainty surrounding the application of new or untested technologies, and spacecraft/payload development risk classification.	NASA AA	No	A			FC	Only Category III projects will use the streamlined Class D Processes or Tailoring	
2.1.3.2	For Category 1 projects, the assignment of a project to a Center or implementing organization shall be with the concurrence of the NASA AA.	NASA AA	No	A			FC	No Category I projects will use the Streamlined Class D Processes or Tailoring	
2.1.4.1	Programs and projects with a LCC or initial capability cost (see Section 2.4.1.3.b) greater than \$250M shall be managed by program and project managers who have been certified in compliance with Office of Management and Budget (OMB)'s promulgated Federal acquisition program/project management certification requirements.	NASA AA	No	A			FC		
2.2.1	Program and project managers shall follow their appropriate life cycle, which includes life-cycle phases; life-cycle gates and major events, including KDPs; major life-cycle reviews (LCRs); principal documents that govern the conduct of each phase; and the process of recycling through Formulation when program changes warrant such action.	NASA AA	No			A	FC	The SMD Cat 3/Class D Compliance Matrix does not address LCR Tailoring which is Project-specific and needs to be coordinated with the Program Executive and Mission Manager for additional tailoring concurrence during phase A	
2.2.2	Program and project managers shall organize the work required for each phase using a product-based WBS developed in accordance with the Program and Project Plan templates (appendices G and H).	OCFO	Yes			A	FC		
2.2.3	The documents shown on the life-cycle figures and described below shall be prepared in accordance with the templates in appendices D, E, F, G, and H.	NASA AA	No			A	T	For Cat 3/Class D projects: Projects may combine documentation provided all key document requirements are	NASA AA Signature

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
								<p>met. Final document combinations will be provided to NASA during phase A and approved by the Mission Manager (MM), Program Executive (PE).</p> <p>All combinations are expected to be supported by the Center POCs prior to submittal to MM and PE.</p>	
2.2.4	Each program and project shall perform the LCRs and KDPs identified in its respective life-cycle figure in accordance with NPR 7123.1, applicable Center practices, and the requirements of this document.	OCE	Yes			A	T	<p>For Cat 3/Class D projects: SRR CDR and SIR results will not be reviewed by the SMD AA level, however the SRB quick look will be held, and if desired, the Division and Program Office may hold a KDP review and issue a decision memorandum. Specific tailoring is project specific and must be coordinated with the Program Executive and Mission Manager for additional tailoring concurrence during phase A.</p> <p>Once this SMD Cat 3/Class D compliance Matrix is approved, then the PE will NOT have to obtain OCE Concurrence but reference this document. The project must be aware that previously waived reviews may be re-instated or additional reviews held if project performance warrants the oversight.</p>	OCE Signature
2.2.5	Program or project managers and an independent Standing Review Board (SRB) shall conduct the System Requirements Review (SRR), System Definition Review (SDR)/ Mission Definition Review (MDR), Preliminary Design Review (PDR), Critical Design Review (CDR), System Integration Review (SIR), Operational Readiness Review (ORR), and PIR LCRs in figures 2-2, 2-3, 2-4, and 2-5.	NASA AA	No			A	FC	For Cat 3/Class D projects: SRB or the implementing Center independent review board shall conduct these reviews. The SRB shall conduct all review that is a prerequisite to a Key Decision Point (KDP).	
2.2.5.1	The Conflict of Interest (COI) procedures detailed in the NASA Standing Review Board Handbook shall be strictly adhered to.	OGC	No	A	A	A	FC		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
2.2.5.2	The portion of the LCRs conducted by the SRB shall be convened by the Convening Authorities in accordance with Table 2-2.	NASA AA	No	A	A	A	FC	The convening authority is SMD AA for PDR and the SMD Division for all other reviews	
2.2.5.3	The program or project manager, the SRB chair, and the Center Director (or designated Engineering Technical Authority (ETA) representative) shall mutually assess the program's or project's expected readiness for the LCR and report any disagreements to the Decision Authority for final decision.	NASA AA	No		A	A	FC	Disagreements will be brought to the Division Director through the Program Executive for resolution, who will be included in all readiness discussions.	
2.2.6	In preparation for these LCRs, the program or project manager shall generate the appropriate documentation per the Appendix I tables of this document, NPR 7123.1, and Center practices, as necessary, to demonstrate that the program's or project's definition and associated plans are sufficiently mature to execute the follow-on phase(s) with acceptable technical, safety, and programmatic risk.	NASA AA	No			A	T	All documentation adjustments shall be proposed during phase A and approved by the Mission Manager and the Program Executive. PE will be required to obtain OCE concurrence	NASA AA Signature
	Table I-1 Uncoupled and Loosely Coupled Program Milestone Products and Control Plans Maturity Matrix								
Table I-1	1. FAD [Baseline at SRR] [Required per NPR 7120.5]	NASA AA	No	A		A	N/A		
Table I-1	2. PCA [Baseline at KDP I] [Required per NPR 7120.5]	NASA AA	No	A			N/A		
Table I-1	3. Program Plan [Baseline at SDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	N/A		
Table I-1	3.a. Mission Directorate requirements and constraints [Baseline at SRR] [Required per NPR 7123.1]	OCE	Yes	A		A	N/A		
Table I-1	3.b. Traceability of program-level requirements on projects to the Agency strategic goals and Mission Directorate requirements and constraints [Baseline at SDR] [Required per NPR 7123.1]	OCE	Yes	A		A	N/A		
Table I-1	3.c. Documentation of driving ground rules and assumptions on the program [Baseline at SDR] [Required per NPR 7120.5]	NASA AA	No	A		A	N/A		
Table I-1	4. Interagency and international agreements [Baseline at SDR]	NASA AA	No	A		A	N/A		
Table I-1	5. ASM Decision Memorandum or ASM meeting summary [additional information in NPD 1000.5]	NASA AA	No	A		A	N/A		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-1	6. Risk mitigation plans and resources for significant risks [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-1	7. Documented Cost and Schedule Baselines [Baseline at SDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-1	8. Documentation of Basis of Estimate (cost and schedule) [Baseline at SDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-1	9. Documentation of performance against plan/baseline, including status/closure of formal actions from previous KDP [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-1	10. Industrial Base and Supply Chain Risk Management (SCRM) Strategy and Status [Baseline at SDR] [Required per NPR 8735.2]	OSMA	No			A	N/A		
	Program Plan Control Plans						N/A		
Table I-1	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR] [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-1	2. Safety and Mission Assurance Plan [Baseline at SDR] [Required per NPRs 8705.2 and 8705.4]	OSMA	Yes			A	N/A		
Table I-1	3. Risk Management Plan [Baseline at SDR] [Required per NPR 8000.4]	OSMA	Yes			A	N/A		
Table I-1	4. Acquisition Strategy [Baseline at SDR] [Required per NPD 1000.5]	NASA AA	No			A	N/A		
Table I-1	6. Systems Engineering Management Plan [Baseline at SDR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-1	7. System Security Plan [Baseline at SDR] [Required per NPR 2810.1]	OCIO	No			A	N/A		
Table I-1	8. Review Plan [Baseline at SRR] [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-1	9. NEPA Compliance Documentation [Baseline at SDR] [Required per NPR 8580.1]	OSI-EMD	No			A	N/A		
Table I-1	10. Configuration Management Plan [Baseline at SDR] [Required per NPR 7120.5; additional information in NPR 7123.1 and SAE/EIA 649]	OCE	Yes			A	N/A		
Table I-1	11. Security Plan [Baseline at SDR] [Required per NPR 1040.1 and NPR 1600.1]	OPS	No			A	N/A		
Table I-1	12. Technology Transfer (formerly Export) Control Plan [Baseline at SDR] [Required per NPR 2190.1]	OIIR	No			A	N/A		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-1	15. Quality Assurance Surveillance Plan [Baseline at SDR] [Required per NPR 8735.2 and NASA FAR Supplement part 1837.604]	OSMA	Yes			A	N/A		
	Table I-2 Tightly Coupled Program Milestone Products Maturity Matrix								
Table I-2	1. FAD [Baseline at SRR] [Required per NPR 7120.5]	NASA AA	No	A		A	N/A		
Table I-2	2. PCA [Baseline at PDR] [Required per NPR 7120.5]	NASA AA	No	A			N/A		
Table I-2	3. Program Plan [Baseline at SDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	N/A		
Table I-2	3.a. Mission Directorate requirements and constraints [Baseline at SRR] [Required per NPR 7123.1]	OCE	Yes	A		A	N/A		
Table I-2	3.b. Traceability of program-level requirements on projects to the Agency strategic goals and Mission Directorate requirements and constraints [Baseline at SDR] [Required per NPR 7123.1]	OCE	Yes	A		A	N/A		
Table I-2	3.c. Documentation of driving ground rules and assumptions on the program [Baseline at SDR] [Required per NPR 7120.5]	NASA AA	No	A		A	N/A		
Table I-2	4. Interagency and international agreements [Baseline at SDR]	NASA AA	No	A		A	N/A		
Table I-2	5. ASM Decision Memorandum or ASM meeting summary [additional information in NPD 1000.5]	NASA AA	No	A		A	N/A		
Table I-2	6. Risk mitigation plans and resources for significant risks [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-2	7. Documented Cost and Schedule Baselines [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-2	8. Documentation of Basis of Estimate (cost and schedule) [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-2	9. CADRe [Baseline at SRR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-2	10. Shared Infrastructure, Staffing, and Scarce Material Requirements and Plans	NASA AA	No			A	N/A		
Table I-2	11. Documentation of performance against plan/baseline, including status/closure of formal actions from previous KDP [Required per NPR 7120.5]	NASA AA	No			A	N/A		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-2	12. Industrial Base and Supply Chain Risk Management (SCRM) Strategy and Status [Baseline at SDR] [Required per NPR 8735.2]	OSMA	No			A	N/A		
	Table I-3 Tightly Coupled Program Plan Control Plans Maturity Matrix								
Table I-3	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR] [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-3	2. Safety and Mission Assurance Plan [Baseline at SDR] [Required per NPRs 8705.2 and 8705.4]	OSMA	Yes			A	N/A		
Table I-3	3. Risk Management Plan [Baseline at SDR] [Required NPR 8000.4]	OSMA	Yes			A	N/A		
Table I-3	4. Acquisition Strategy [Baseline at SDR] [Required per NPD 1000.5]	NASA AA	No			A	N/A		
Table I-3	6. Systems Engineering Management Plan [Baseline at SDR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-3	7. Verification and Validation Plan [Baseline at PDR] [Required per NPR 7120.5, additional information in NPR 7123.1]	OCE	Yes			A	N/A		
Table I-3	8. System Security Plan [Baseline at CDR] [Required per NPR 2810.1]	OCIO	No			A	N/A		
Table I-3	9. Review Plan [Baseline at SRR] [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-3	10. Missions Operations Plan [Baseline at ORR] [Required per NPR 7120.5]	OCE	Yes			A	N/A		
Table I-3	11. NEPA Compliance Documentation [Baseline at PDR] [Required per NPR 8580.1]	OSI-EMD	No			A	N/A		
Table I-3	12. Integrated Logistics Support Plan [Baseline at PDR] [Required per NPD 7500.1]	OSI-LMD	No			A	N/A		
Table I-3	14. Configuration Management Plan [Baseline at SDR] [Required per NPR 7120.5; additional information in NPR 7123.1 and SAE/EIA 649]	OCE	Yes			A	N/A		
Table I-3	15. Security Plan [Baseline at PDR] [Required per NPR 1040.1 and NPR 1600.1]	OPS	No			A	N/A		
Table I-3	16. Technology Transfer (formerly Export) Control Plan [Baseline at PDR] [Required per NPR 2190.1]	OIIR	No			A	N/A		
Table I-3	19. Human Rating Certification Package [Initial at SRR; certified at MRR/FRR] [Required per NPR 8705.2]	OSMA	No			A	N/A		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-3	20. Quality Assurance Surveillance Plan [Baseline at SDR] [Required per NPR 8735.2 and NASA FAR Supplement part 1837.604]	OSMA	Yes			A	N/A		
Table I-3	21. Orbital Collision Avoidance Plan [Baseline at PDR] [Required per NID 7120.132]	OCE	No			A	N/A		
Table I-3	22. Human Systems Integration Plan [Baseline at SRR] [additional information in NASA/SP-20210010952 NASA HSI Handbook and NPR 7123.1]	OCE-OSMA-OCHMO ¹	No			A	N/A		
	Table I-4 Project Milestone Products Maturity Matrix								
	Headquarters and Program Products								
Table I-4	1. FAD [Baseline at MCR] [Required per NPR 7120.5]	NASA AA	No	A		A	FC	If the project is selected from a one-step AO then the FAD will be produced to capture the proposal content and baselined by the division within 90 days of selection. If the project is selected from a two-step AO then the FAD is not required.	NASA AA Signature
Table I-4	2. Program Plan [Baseline at MCR] [Required per NPR 7120.5]	NASA AA	No	A		A	FC		
Table I-4	2.a. Applicable Agency strategic goals [Baseline at MCR] [Required per NPR 7123.1]	NASA AA	No	A		A	FC		
Table I-4	2.b. Documentation of program-level requirements and constraints on the project (from the Program Plan) and stakeholder expectations, including mission objectives/goals and mission success criteria [Baseline at SRR] [Required per NPR 7123.1]	OCE	Yes	A		A	FC		
Table I-4	2.c. Documentation of driving mission, technical, and programmatic ground rules and assumptions [Baseline at SDR/MDR] [Required per NPR 7120.5]	NASA AA	No	A		A	FC		
Table I-4	3. Partnerships and interagency and international agreements [Baseline U.S. partnerships and agreements at SDR/MDR; Baseline International agreements at PDR]	NASA AA	No	A		A	FC		
Table I-4	4. ASM Decision Memorandum or ASM meeting summary [additional information in NPD 1000.5]	NASA AA	No	A		A	FC	Cat 3/Class D projects are low \$ value and are normally competed. ASM's are typically not held for these projects.	

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-4	5. Mishap Preparedness and Contingency Plan [Baseline at SMSR] [Required per NPR 8621.1]	OSMA	Yes	A		A	FC	Performing organization format is acceptable. NPR 8621.1 content should be included. The project MPCP should be routed for HQ review.	
	Project Technical Products						T	For Cat 3/Class D projects with an LLC less than \$150M (excluding access to space funding) may be combined with the Project Plan upon identification in Phase A and concurrence of the Mission Manager and the Program Executive <i>(See note for item 2.2.3)</i>	
Table I-4	1. Concept Documentation [Approve at MCR] [Required per NPR 7123.1]	OCE	Yes			A	FC	If it is an AO selection, the proposal meets this requirement.	OCE Signature
Table I-4	2. Mission, Spacecraft, Ground, and Payload Architectures [Baseline mission and spacecraft architecture at SRR; Baseline ground and payload architectures at SDR/MDR] [Required per NPR 7123.1]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	3. Project-Level, System, and Subsystem Requirements [Baseline project-level and system-level requirements at SRR; Baseline subsystem requirements at PDR] [Required per NPR 7123.1]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	4. Design Documentation [Baseline at CDR] [Required per NPR 7123.1]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	5. Operations Concept Documentation [Baseline at PDR] [Required per NPR 7120.5]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	6. Technology Readiness Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	7. Engineering Development Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	8. Heritage Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-4	9. Systems Safety Analyses (e.g., safety data packages) [Baseline at CDR] [Required per NPR 8715.3]	OSMA	Yes			A	FC		
Table I-4	10. Payload Safety Process Deliverables [Baseline at SIR] [Required per NPR 8715.7]	OSMA	Yes			A	FC		
Table I-4	11. Verification and Validation Report [Baseline at MRR/FRR] [Required per NPR 7123.1]	OCE	Yes			A	FC	Performing organization format is acceptable	OCE Signature
Table I-4	12. Operations Handbook [Baseline at ORR] [additional information in NPR 7120.5 Appendix A]	OCE	Yes			A	FC	Performing Organization format is acceptable	OSMA Signature
Table I-4	13. Orbital Debris Assessment Report [Final at SMSR] [Required per NPR 8715.6]	OSMA	No	A		A	FC	The final SMSR submission of the Orbital Debris Assessment Report can be combined with the End of Mission Plan.	
Table I-4	14. End of Mission Plans [Baseline at SMSR] [Required per NPR 8715.6; additional information in NASA-STD-8719.14, App B]	OSMA	Yes	A		A	T	May be combined with the final ODAR submission.	OSMA Signature
Table I-4	16. Decommissioning/Disposal Plan [Baseline at DR] [Required per NPR 7123.1]	OCE	Yes			A	T	May be combined with 1. End of Mission Plan and with 2. ODAR	OCE Signature
Table I-4	17. Industrial Base and Supply Chain Risk Management (SCRM) Strategy and Status [Baseline at PDR] [Required per NPR 8735.2]	OSMA	No			A	FC		
Table I-4	18. Criticality Identification Method for Hardware [Baseline at PDR] [Required per NPR 8735.2]	OSMA	No			A	FC		
	Project Management, Planning, and Control Products								
Table I-4	1. Formulation Agreement [Baseline for Phase A at MCR; Baseline for Phase B at SDR/MDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	T	May be combined with Project Plan, but the initial due date of the combined document will be that for the Formulation Agreement (FA)	NASA AA Signature
Table I-4	2. Project Plan [Baseline at PDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	T	May be combined with Project Plan, but the initial due date of the combined document will be that for the FA	NASA AA Signature
Table I-4	3. Documentation of performance against Formulation Agreement (see #1 above) or against plans for work to be accomplished during Implementation life-cycle phase, including performance against baselines and	NASA AA	No			A	FC		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
	status/closure of formal actions from previous KDP [Required per NPR 7120.5]								
Table I-4	4. Project Baselines [Baseline at PDR]	N/A	N/A			A	FC	The baseline can be against the combined Formulation Agreement (FA) /Project Plan	
Table I-4	4.a. Top technical, cost, schedule and safety risks, risk mitigation plans, and associated resources [Required per NPR 7120.5]	NASA AA	No			A	FC		
Table I-4	4.b. Staffing requirements and plans [Required per NPR 7120.5]	NASA AA	No			A	FC		
Table I-4	4c.i. Infrastructure requirements and plans [Required per NPR 9250.1, NPD 8800.14, and NPR 8820.2] Business case analysis for infrastructure [Required per NPR 8800.15.]	OSI-FRED	No			A	FC		
Table I-4	4.c.ii. Capitalization Determination Form (CDF) (NASA Form 1739) [Required per NPR 9250.1]	OCFO	No			A	FC		
Table I-4	4.d. Schedule [Baseline Integrated Master Schedule at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	FC		
Table I-4	4.e. Cost Estimate [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	FC		
Table I-4	4.f. Basis of Estimate (cost and schedule) [Required per NPR 7120.5]	OCFO-SID	No			A	FC		
Table I-4	4.g. Confidence Level(s) and supporting documentation [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	FC		OCFO-SID Signature
Table I-4	4.h. External Cost and Schedule Commitments [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No	A		A	FC		OCFO-SID Signature
Table I-4	4.i. CADRe [Baseline at SRR] [Required per NPR 7120.5]	OCFO-SID	No			A	FC	Applies to projects with LCC >\$50M	OCFO-SID Signature
Table I-4	4.j. PMB [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	FC		
	Table I-5 Project Plan Control Plans Maturity Matrix								
Table I-5	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR/MDR] [Required per NPR 7120.5]	NASA AA	No			A	T	Project is authorized to combine with Project Plan	NASA AA Signature

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-5	2. Safety and Mission Assurance Plan [Baseline at SRR] [Required per NPRs 8705.2 and 8705.4]	OSMA	Yes			A	FC		
Table I-5	3. Risk Management Plan [Baseline at SRR] [Required per NPR 8000.4]	OSMA	Yes			A	T	Project is authorized to combine with Project Plan	OSMA Signature
Table I-5	4. Acquisition Strategy [Baseline at SRR] [Required per NPD 1000.5]	NASA AA	Yes			A	T	Project is authorized to combine with Project Plan	NASA AA Signature
Table I-5	6. Systems Engineering Management Plan [Baseline at SRR] [Required per NPR 7123.1]	OCE	Yes			A	T	Project is authorized to combine with Project Plan	OCE Signature
Table I-5	7. System Security Plan [Baseline at CDR] [Required per NPR 2810.1]	OCIO	No			A	FC		
Table I-5	8. Software Management Plan(s) [Baseline at SDR/MDR] [Required per NPR 7150.2; additional information in NASA-STD-8739.8]	OCE	No			A	T	Project is authorized to combine with Project Plan <i>See direction in item 2.2.3</i>	OCE Signature
Table I-5	9. Verification and Validation Plan [Baseline at PDR] [Required per NPR 7120.5, additional information in NPR 7123.1]	OCE	Yes			A	T	Project is authorized to combine with Project Plan <i>See direction in item 2.2.3</i>	OCE Signature
Table I-5	10. Review Plan [Baseline at SRR] [Required per NPR 7120.5]	NASA AA	Yes			A	FC		
Table I-5	11. Mission Operations Plan [Baseline at ORR] [Required per NPR 7120.5]	OCE	Yes			A	FC		
Table I-5	12. NEPA Compliance Documentation [Baseline at SDR/MDR] [Required per NPR 8580.1]	OSI-EMD	No			A	FC		
Table I-5	13. Integrated Logistics Support Plan [Baseline at PDR] [Required per NPD 7500.1]	OSI-LMD	No			A	T	Project is authorized to combine with Project Plan <i>See direction in item 2.2.3... PE is required to obtain LMD concurrence</i>	OCE Signature
Table I-5	15. Integration Plan [Baseline at PDR] [Required per NPR 7120.5]	OCE	Yes			A	T	Project is authorized to combine with Project Plan <i>See direction in item 2.2.3</i>	OCE Signature
Table I-5	16. Configuration Management Plan [Baseline at SRR] [Required per NPR 7120.5; additional information in NPR 7123.1 and SAE/EIA 649]	OCE	Yes			A	T	Project is authorized to combine with Project Plan <i>See direction in item 2.2.3</i>	OCE Signature

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-5	17. Security Plan [Baseline at PDR] [Required per NPR 1040.1 and NPR 1600.1]	OPS	No			A	FC		
Table I-5	18. Project Protection Plan [Baseline at PDR] [Required per NPR 1058.1; additional information in NASA-STD-1006]	OCE	No			A	FC		
Table I-5	19. Technology Transfer (formerly Export) Control Plan [Baseline at PDR] [Required per NPR 2190.1]	OIIR	No			A	FC		
Table I-5	21. Human Rating Certification Package [Initial at SRR; certified at MRR/FRR] [Required per NPR 8705.2]	OSMA	No			A	FC		
Table I-5	22. Planetary Protection Plan [Baseline at PDR] [Required per NPD 8020.7 and NPR 8020.12]	OSMA	No			A	FC		
Table I-5	23. Nuclear Launch Authorization Plan [Baseline at SDR/MDR] [additional information in NPR 8715.26]	OSMA	No			A	FC	Significant radioactive material (subject to NSPM-20) is disallowed for Cat 3/Class D missions (7120.5F) Quantities of radioactive material that fall below NSPM-20 tiering require notification either early-in-life-cycle-notification at SDR/MDR or 3 months prior to scheduled launch or reentry as defined in NPR 8715.26: Req. 3.2.2 and Req. 4.4.2.5 or per NPR 8715.3	
Table I-5	24. Range Safety Risk Management Process Documentation [Baseline at SIR] [Required per NPR 8715.5]	OSMA	Yes			A	FC		
Table I-5	26. Quality Assurance Surveillance Plan [Baseline at SDR] [Required per NPR 8735.2 and NASA FAR Supplement part 1837.604]	OSMA	Yes			A	FC		
Table I-5	27. Orbital Collision Avoidance Plan [Baseline at PDR] [Required per NID 7120.132]	OCE	No			A	FC		
Table I-5	28. Human Systems Integration Plan [Baseline at SRR] [additional information in NASA/SP-20210010952 NASA HSI Handbook and NPR 7123.1]	OCE-OSMA-OCHMO ¹	No			A	FC		
	Table I-6 Single-Project Program Milestone Products Maturity Matrix								
Table I-6	1. FAD [Baseline at MCR] [Required per NPR 7120.5]	NASA AA	No	A		A	N/A		
Table I-6	2. PCA [Baseline at PDR] [Required per NPR 7120.5]	NASA AA	No	A			N/A		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-6	3. Traceability of Agency strategic goals and Mission Directorate requirements and constraints to program/project-level requirements and constraints [Baseline at SRR] [Required per NPR 7123.1]	OCE	Yes	A		A	N/A		
Table I-6	4. Documentation of driving mission, technical, and programmatic ground rules and assumptions [Baseline at SDR/MDR] [Required per NPR 7120.5]	NASA AA	No	A		A	N/A		
Table I-6	5. Partnerships and inter-agency and international agreements [Baseline U.S. partnerships and agreements at SDR/MDR; Baseline international agreements at PDR]	NASA AA	No	A		A	N/A		
Table I-6	6. ASM Decision Memorandum or ASM meeting summary [additional information in NPD 1000.5]	NASA AA	No	A		A	N/A		
Table I-6	7. Mishap Preparedness and Contingency Plan [Baseline at SMSR] [Required per NPR 8621.1]	OSMA	Yes	A		A	N/A		
Single-Project Program Technical Products									
Table I-6	1. Concept Documentation [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-6	2. Mission, Spacecraft, Ground, and Payload Architectures [Baseline mission and spacecraft architecture at SRR; baseline ground and payload architectures at SDR/MDR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-6	3. Project-Level, System, and Subsystem Requirements [Baseline project-level and system-level requirements at SRR; baseline subsystem requirements at PDR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-6	4. Design Documentation [Baseline at CDR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-6	5. Operations Concept Documentation [Baseline at PDR] [Required per NPR 7120.5]	OCE	Yes			A	N/A		
Table I-6	6. Technology Readiness Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template]	OCE	Yes			A	N/A		
Table I-6	7. Engineering Development Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template]	OCE	Yes			A	N/A		
Table I-6	8. Heritage Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template]	OCE	Yes			A	N/A		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
Table I-6	9. Systems Safety Analyses (e.g., safety data packages) [Baseline at CDR] [Required per NPR 8715.3]	OSMA	Yes			A	N/A		
Table I-6	10. Payload Safety Process Deliverables [Baseline at SIR] [Required per NPR 8715.7]	OSMA	Yes			A	N/A		
Table I-6	11. Verification and Validation Report [Baseline at MRR/FRR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-6	12. Operations Handbook [Baseline at ORR] [additional information in NPR 7120.5 Appendix A]	OCE	Yes			A	N/A		
Table I-6	13. Orbital Debris Assessment Report [Final at SMSR] [Required per NPR 8715.6]	OSMA	No	A		A	N/A		
Table I-6	14. End of Mission Plans [Baseline at SMSR] [Required per NPR 8715.6; additional information in NASA-STD-8719.14, App B]	OSMA	Yes	A		A	N/A		
Table I-6	16. Decommissioning/Disposal Plan [Baseline at DR] [Required per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-6	17. Industrial Base and Supply Chain Risk Management (SCRM) Strategy and Status [Baseline at PDR] [Required per NPR 8735.2]	OSMA	No			A	N/A		
Table I-6	18. Criticality Identification Method for Hardware [Baseline at PDR] [Required per NPR 8735.2]	OSMA	No			A	N/A		
	Single-Project Program Management, Planning, and Control Products								
Table I-6	1. Formulation Agreement [Baseline for Phase A at MCR; baseline for Phase B at SDR/MDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	N/A		
Table I-6	2. Program Plan [Baseline at PDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	N/A		
Table I-6	3. Project Plan [Baseline at PDR] [Required per NPR 7120.5]	NASA AA	No	A	A	A	N/A		
Table I-6	4. Documentation of performance against Formulation Agreement (see #1 above) or against plans for work to be accomplished during Implementation life-cycle phase, including performance against baselines and status/closure of formal actions from previous KDP [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-6	5. Project Baselines [Baseline at PDR]	N/A	N/A				N/A		

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Table I-6	5.a. Top technical, cost, schedule and safety risks, risk mitigation plans, and associated resources [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-6	5.b. Staffing requirements and plans [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-6	5.c.i. Infrastructure requirements and plans [Required per NPR 9250.1, NPD 8800.14, and NPR 8820.2] Business case analysis for infrastructure [Required per NPR 8800.15.]	OSI-FRED	No			A	N/A		
Table I-6	5.c.ii. Capitalization Determination Form (CDF) (NASA Form 1739) [Required per NPR 9250.1]	OCFO	No			A	N/A		
Table I-6	5.d. Schedule [Baseline Integrated Master Schedule at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-6	5.e. Cost Estimate (Risk-Informed or Schedule-Adjusted Depending on Phase) [Risk-informed and schedule-adjusted baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-6	5.f. Basis of Estimate (cost and schedule) [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-6	5.g. Confidence Level(s) and supporting documentation [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-6	5.h. External Cost and Schedule Commitments [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No	A		A	N/A		
Table I-6	5.i. CADRe [Baseline at SRR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
Table I-6	5.j. PMB [Baseline at PDR] [Required per NPR 7120.5]	OCFO-SID	No			A	N/A		
	Table I-7 Single-Project Program Plan Control Plans Maturity Matrix								
Table I-7	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR/MDR] [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-7	2. Safety and Mission Assurance Plan [Baseline at SRR] [Required per NPRs 8705.2 and 8705.4]	OSMA	Yes			A	N/A		
Table I-7	3. Risk Management Plan [Baseline at SRR] [Required per NPR 8000.4]	OSMA	Yes			A	N/A		
Table I-7	4. Acquisition Strategy [Baseline at SRR] [Required per NPD 1000.5]	NASA AA	No			A	N/A		

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Table I-7	6. Systems Engineering Management Plan [Baseline at SRR] [per NPR 7123.1]	OCE	Yes			A	N/A		
Table I-7	7. System Security Plan [Baseline at CDR] [Required per NPR 2810.1]	OCIO	No			A	N/A		
Table I-7	8. Software Management Plan(s) [Baseline at SDR/MDR] [Required per NPR 7150.2; additional information in NASA-STD-8739.8]	OCE	No			A	N/A		
Table I-7	9. Verification and Validation Plan [Baseline at PDR] [Required per NPR 7120.5, additional information in NPR 7123.1]	OCE	Yes			A	N/A		
Table I-7	10. Review Plan [Baseline at SRR] [Required per NPR 7120.5]	NASA AA	No			A	N/A		
Table I-7	11. Mission Operations Plan [Baseline at ORR] [Required per NPR 7120.5]	OCE	Yes			A	N/A		
Table I-7	12. NEPA Compliance Documentation [Baseline at SDR/MDR] [Required per NPR 8580.1]	OSI-EMD	No			A	N/A		
Table I-7	13. Integrated Logistics Support Plan [Baseline at PDR] [Required per NPD 7500.1]	OSI-LMD	No			A	N/A		
Table I-7	15. Integration Plan [Baseline at PDR] [Required per NPR 7120.5]	OCE	Yes			A	N/A		
Table I-7	16. Configuration Management Plan [Baseline at SRR] [Required per NPR 7120.5; additional information in NPR 7123.1 and SAE/EIA 649]	OCE	Yes			A	N/A		
Table I-7	17. Security Plan [Baseline at PDR] [Required per NPR 1040.1 and NPR 1600.1]	OPS	No			A	N/A		
Table I-7	18. Project Protection Plan [Baseline at PDR] [Required per NPR 1058.1; additional information in NASA-STD-1006]	OCE	No			A	N/A		
Table I-7	19. Technology Transfer (formerly Export) Control Plan [Baseline at PDR] [Required per NPR 2190.1]	OIIR	No			A	N/A		
Table I-7	21. Human Rating Certification Package [Initial at SRR; certified at MRR/FRR] [Required per NPR 8705.2]	OSMA	No			A	N/A		
Table I-7	22. Planetary Protection Plan [Baseline at PDR] [Required per NPD 8020.7 and NPR 8020.12]	OSMA	No			A	N/A		
Table I-7	23. Nuclear Launch Authorization Plan [Baseline at SDR/MDR] [Required per NPR 8715.26]	OSMA	No			A	N/A		
Table I-7	24. Range Safety Risk Management Process Documentation [Baseline at SIR] [Required per NPR 8715.5]	OSMA	Yes			A	N/A		

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Table I-7	26. Quality Assurance Surveillance Plan [Baseline at SDR] [Required per NPR 8735.2 and NASA FAR Supplement part 1837.604]	OSMA	Yes			A	N/A		
Table I-7	27. Orbital Collision Avoidance Plan [Baseline at PDR] [Required per NID 7120.132]	OCE	No			A	N/A		
Table I-7	28. Human Systems Integration Plan [Baseline at SRR] [additional information in NASA/SP-20210010952 NASA HSI Handbook and NPR 7123.1]	OCE-OSMA-OCHMO ¹	No			A	N/A		
2.2.8	Projects, single-project programs (and other programs at the discretion of the MDAA) with a life-cycle cost (LCC) or initial capability cost (see Section 2.4.1.3.b) estimated to be greater than \$250M shall perform earned value management (EVM) and comply with EIA-748, Standard for Earned Value Management Systems for all portions of work including in-house and contracted portions of the project.	OCFO-SID	No	A		A	FC	EVM is not required on contract work ONLY when Cat 3/Class D Project adjusted LCC is less than \$150M, per the request for deviation approved by the NASA Assistant Administrator for Procurement.	
2.2.8.1	Program and project managers with programs and projects subject to EVM shall utilize the NASA EVM Capability Process for in-house work.	OCFO-SID	No			A	FC		
2.2.8.2	EVM system requirements for contracted work shall be applied to suppliers in accordance with the NASA Federal Acquisition Regulation (FAR) Supplement, independent of phase and the \$250M threshold (https://www.hq.nasa.gov/office/procurement/regs/NFS.pdf).	OCFO-SID	No	A		A	FC	EVM is not required on contract work ONLY when Cat 3/Class D Project adjusted LCC is less than \$150M, per the request for deviation approved by the NASA Assistant Administrator for Procurement.	
2.2.8.3	Mission Directorates shall conduct an IBR in preparation for KDP C and for major changes that significantly impact the cost and schedule baseline.	OCFO-SID	No	A		A	FC		
2.2.8.4	EVMS surveillance shall be conducted on contracts and programs and projects with in-house work to ensure continued compliance with EIA-748, Standard for Earned Value Management Systems.	OCFO-SID	No	A		A	FC	EVM is not required on contract work ONLY when Cat 3/Class D Project adjusted LCC is less than \$150M, per the request for deviation approved by the NASA Assistant Administrator for Procurement.	
2.2.10	Program and project managers shall complete and maintain a Compliance Matrix (see Appendix C) for this NPR and attach it to the Formulation Agreement for projects in Formulation and/or the Program or Project Plan.	OCE	No			A	FC		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
2.2.11	Single-project programs and projects shall develop a Project Protection Plan that addresses NASA-STD-1006, Space System Protection Standard in accordance with NPR 1058.1, Enterprise Protection Program.	OCE	No			A	FC	Single-Project Programs and Projects will not be eligible to use this Cat 3/Class D compliance matrix.	
2.3.1	Each program and project shall have a Decision Authority the Agency's responsible individual who determines whether and how the program or project proceeds through the life cycle and the key program or project cost, schedule, and content parameters that govern the remaining life-cycle activities.	NASA AA	No	A			FC		
2.3.1.1	The MDAA shall inform the NASA AA and Administrator via email on all Agency Baseline Commitments (ABCs) per the following: inform the NASA AA on ABCs for single-project programs and projects with a LCC or initial capability cost (see Section 2.4.1.3.b) greater than \$250M; and inform the NASA Administrator on ABCs for all single-project programs and projects with a LCC or initial capability cost greater than \$1B and all Category 1 projects. (See Section 2.4.1.5 for more information on ABCs.)	NASA AA	No	A			FC		
2.3.2	Each program and project shall have a governing PMC.	NASA AA	No	A			FC		
2.3.4	The Center Director (or designee) shall oversee programs and projects usually through the CMC, which monitors and evaluates all program and project work (regardless of category) executed at that Center.	NASA AA	No		A		FC		
2.3.5	Following each LCR, the independent SRB chair and the program or project manager shall brief the applicable management councils on the results of the LCR to support the councils' assessments.	NASA AA	No	A	A	A	FC		
2.4.1	The decisions by the Decision Authority on whether and how the program or project proceeds into the next phase shall be summarized and recorded in the Decision Memorandum signed at the conclusion of the governing PMC by all parties with supporting responsibilities, accepting their respective roles.	NASA AA	No	A			FC		
2.4.1.1	The Decision Memorandum shall describe the constraints and parameters within which the Agency, the program manager, and the project manager will operate; the extent to which changes in plans may be made without additional approval; any additional actions that came out of the KDP; and the supporting	NASA AA	No	A		A	FC		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
	data (i.e., the cost and schedule datasheet) that provide further details.								
2.4.1.2	A divergence from the Management Agreement that any party identifies as significant shall be accompanied by an amendment to the Decision Memorandum.	NASA AA	No	A		A	FC		
2.4.1.3	During Formulation, the Decision Memorandum shall establish a target LCC or initial capability cost range (and schedule range, if applicable) as well as the Management Agreement addressing the schedule and resources required to complete Formulation.	OCFO-SID	No	A		A	FC		
2.4.1.3 a	For single-project programs and projects with a LCC or initial capability cost greater than or equal to \$1B, the Decision Memorandum shall establish a high and low value for cost and schedule with the corresponding JCL value at KDP B.	OCFO-SID	No	A		A	FC		
2.4.1.5	All single-project program managers and project managers shall document the Agency's LCC estimate or initial capability cost estimate and other parameters in the Decision Memorandum for Implementation (KDP C), and this becomes the ABC.	NASA AA	No	A		A	FC		
2.4.1.5.a	For all single-project programs and projects with a definite Phase E end point, the Agency's LCC estimate and other parameters shall become the ABC.	NASA AA	No	A		A	FC		
2.4.1.5.b	For single-project programs and projects that plan continuing operations and production, including integration of capability upgrades, with an unspecified Phase E end point, the initial capability cost estimate and other parameters shall become the ABC.	NASA AA	No	A		A	FC		
2.4.1.7	Tightly coupled programs shall document their LCC estimate in accordance with the scope defined in the FAD or PCA, and other parameters in their Decision Memorandum at KDP I and update it at subsequent KDPs.	OCFO-SID	No	A		A	FC		
2.4.1.8	Programs or projects shall be rebaselined when: (1) the estimated development cost exceeds the ABC development cost by 30 percent or more (for projects over \$250M, also that Congress has reauthorized the project); (2) the NASA AA judges that events external to the Agency make a rebaseline appropriate; or (3) the NASA AA judges that the program or project scope defined in the ABC has been changed or the project has been interrupted.	OCFO-SID	No	A		A	FC	For a Cat 3/Class D projects: rebaselined assessments will include consideration of project cancellation	

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2.4.2	The program or project shall document the basis of estimate (BOE) for cost estimates and planned schedules in retrievable program or project records.	OCFO-SID	No			A	FC		
2.4.3.1 a.	Single-project programs with an estimated LCC under \$1B and projects with an estimated LCC greater than \$250M and under \$1B shall provide a range of cost and a range for schedule, each range (with confidence levels identified for the low and high values of the range) established by a probabilistic analysis and based on identified resources and associated uncertainties by fiscal year.	OCFO-SID	No			A	FC		
2.4.3.1 b.	Single-project programs and projects with an estimated LCC greater than or equal to \$1B shall develop a JCL and provide a high and low value for cost and schedule with the corresponding JCL value (e.g., 50 percent, 70 percent).	OCFO-SID	No			A	FC		
2.4.3.2	At KDP C, single-project programs (regardless of LCC) and projects with an estimated LCC greater than \$250M shall develop a cost-loaded schedule and perform a risk-informed probabilistic analysis that produces a JCL.	OCFO-SID	No			A	FC		
2.4.3.3	At CDR, single-project programs and projects with an estimated LCC greater than or equal to \$1B shall update their KDP C JCL and communicate the updated JCL values for the ABC and Management Agreement to the APMC for informational purposes.	OCFO-SID	No			A	FC		
2.4.3.4	At KDP D, single-project programs and projects with an estimated LCC greater than or equal to \$1B shall update their JCL if current reported development costs have exceeded the development ABC cost by 5 percent or more and document the updated JCL values for the ABC and Management Agreement in the KDP D Decision Memorandum.	OCFO-SID	No			A	FC		
2.4.3.5	When a single-project program (regardless of LCC) or project with an estimated LCC greater than \$250M is rebaselined, a JCL shall be calculated and evaluated as a part of the rebaselining approval process.	OCFO-SID	No	A		A	FC		
2.4.4.1	At KDP B, Mission Directorates shall plan and budget single-project programs and projects with an estimated LCC greater than or equal to \$1B based on a 70 percent JCL or as approved by the Decision Authority.	OCFO-SID	No	A			FC		

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Delegated	MD AA	CD	PM	Comply ?	Justification	Approval
2.4.4.2	At KDP C, Mission Directorates shall plan and budget single-project programs (regardless of LCC) and projects with an estimated LCC greater than \$250M based on a 70 percent JCL or as approved by the Decision Authority.	OCFO-SID	No	A			FC		
2.4.4.3	At KDP B and KDP C, any JCL approved by the Decision Authority at less than 70 percent shall be justified and documented in a Decision Memorandum.	OCFO-SID	No	A			FC		
2.4.4.4	At KDP C, Mission Directorates shall ensure funding for single-project programs (regardless of LCC) and projects with an estimated LCC greater than \$250M is consistent with the Management Agreement and in no case less than the equivalent of a 50 percent JCL or as approved by the Decision Authority.	OCFO-SID	No	A			FC		
2.4.4.5	At KDP C, any funding approved by the Decision Authority that is inconsistent with the Management Agreement or less than 50 percent JCL shall be justified and documented in a Decision Memorandum.	OCFO-SID	No	A			FC		
2.4.5	Tightly coupled, loosely coupled, and uncoupled programs shall provide analysis of the program's risk posture to the governing PMC as each new project reaches KDP B and C or when a project's ABC is rebaselined.	OCFO-SID	No	A		A	FC		
3.3.1	Programs and projects shall follow the Technical Authority (TA) process established in this Section 3.3.	OCE	No	A	A	A	FC		
3.4.1	Programs and projects shall follow the Formal Dissent process in this Section 3.4.	NASA AA	No	A	A	A	T	A developmental organization's equivalent and documented process will be accepted.	NASA AA Signature
3.5.1	Programs and projects shall follow the tailoring process in this Section 3.5.	NASA AA	No	A	A	A	FC		
3.5.5	A request for a permanent change to a prescribed requirement in an Agency or Center document that is applicable to all programs and projects shall be submitted as a "change request" to the office responsible for the requirement policy document unless formally delegated elsewhere.	NASA AA	No	A	A	A	FC		
3.6.1	Center Directors negotiating reimbursable space flight work with another agency shall propose NPR 7120.5 as the basis by which it will perform the space flight work.	NASA AA	No		A		FC		

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3.7.1	Each program and project shall perform and document an assessment to determine an approach that maximizes the use of SI.	OCE	No			A	FC		