

NPR 7120.5E Compliance Matrix

Template Instructions

A Word version of the Compliance Matrix can be found on the Program and Project Community of Practice on NEN at: <https://nen.nasa.gov/web/pm/7120.5d-background>

The Compliance Matrix documents the program's or project's compliance with the requirements of NPR 7120.5 or how the program or project is tailoring the requirements in accordance with paragraph 3.5. The 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 tailoring unless this authority has been formally delegated. An "X" indicates the Headquarters' requirements owner has retained approval authority for tailoring of the requirement. When there is no "X" in the "Tailor" column, tailoring authority may have been delegated by the responsible organization. In this case, program and project managers should work with the Center representative of the responsible organization (e.g., OSMA) to determine if tailoring authority has been delegated to a Center person and, if so, who is the delegated authority. Note that OCE delegations can be found in the "Letter of Delegation" located on the OCE tab under the "Other Policy Documents" menu in the NASA On-Line Directives Information System (NODIS).

The next three columns ("MDAA," "CD," and "PM") designate to whom the requirement applies. An "A" in the column indicates applicability.

The "Comply?" column is filled in by the program or project to identify the program's 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 "not applicable," per paragraph 3.5.4. The column titled "Justification" documents the rationale for tailoring, documents how the requirement will be tailored, or justifies why the requirement is not applicable. It is expected that much of the rationale will already have been developed in retrievable program and/or project records and can simply be referenced (in an appropriate, accessible form). The level of documentation should be commensurate with the significance of departure from the norm and is determined by the requirements owner or as delegated. In the case where evaluation indicates that the tailoring of a requirement increases

risk, evidence of official acceptance of that risk should be provided as referenced in retrievable program or project records. Columns in the Compliance Matrix can be adjusted to accommodate the necessary information.

For tailored requirements, the name, title, and signature of the responsible authority (requirement owner or delegate) goes in the “Approval” column to indicate that approval to tailor has been obtained from the head of the organization responsible for the requirement (or as delegated) with any required concurrences. 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 Compliance Matrix is submitted as part of the Formulation Agreement, Program Plan, or Project Plan. Redundant signatures are not required in the “Approval” column of the Compliance Matrix, if the requirements owner is already a required signatory (e.g., MDAA, CD, Program Manager, and Project Manager) on the Formulation Agreement, Program Plan, or Project Plan. An example of this would be OCE requirements that have been delegated to the Center Director (as designated by a blank in the “tailor” column and the “Letter of Delegation”). In this case, a separate signature by the Center Director is not required in the “Approval” column since the Center Director is a signatory on the plan. However, if tailoring was proposed for a requirement by an owner who isn’t normally a signatory on the Formulation Agreement, Program Plan, or Project Plan (e.g., OSMA), the program or project manager should obtain the signature of the approving official in the “Approval” column of the Compliance Matrix prior to submitting the plan for final signature.

The Compliance Matrix is provided to streamline the waiver and deviation process described in paragraph 3.5. If the Compliance Matrix is completed in accordance with these instructions, it meets the requirements for requesting tailoring and serves as a group submittal for waivers to NPR 7120.5. Once the Formulation Agreement or Program or Project Plan is signed, the tailoring is approved. A copy is forwarded to OCE. If the Compliance Matrix changes or if compliance is phased for existing programs or projects, updated versions of the Compliance Matrix are incorporated into an approved Formulation Agreement or Program or Project Plan revision.

Approver Acronyms:

CAD	Cost Analysis Division	OCFO	Office of the Chief Financial Officer	OIIR	Office of International and Interagency Relations
EMD	Environmental Management Division	OCIO	Office of the Chief Information Officer	OPS	Office of Protective Services
FED	Facilities Engineering Division	OComm	Office of Communications	OSMA	Office of Safety and Mission Assurance
LMD	Logistics Management Division	OCT	Office of the Chief Technologist	SMD	Science Mission Directorate
OCE	Office of the Chief Engineer	OE	Office of Education		

[Program or Project Name]

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
1.1.2	NASA Centers, Mission Directorates, and other organizations that have programs or projects shall develop appropriate documentation to implement the requirements of this NPR.	OCE	X	A	A				
1.1.3	The Mission Directorate shall submit their plan for phased tailoring of the requirements of this NPR within	OCE	X	A					

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
	60 days of the effective date of this NPR.								
2.1.1	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.	OCE	X			A			
2.1.4.1	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.	OCE	X	A					
2.1.4.2	When projects are initiated, they are assigned to a NASA Center or implementing organization by the MDAA consistent with direction and guidance from the strategic planning process. They are either assigned directly to a Center by the Mission Directorate or are selected through a competitive process such as an Announcement of Opportunity (AO). For Category 1 projects, the assignment shall be with the concurrence of the NASA AA.	OCE	X	A					
2.2.1	Programs and projects 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.	OCE				A			
2.2.2	Each program and project performs the work required for each phase, which is described in the NASA Space Flight Program and Project Management Handbook and NPR 7123.1. This work shall be organized by a product-based WBS developed in accordance with the Program and Project Plan templates (appendices G and H).	OCE				A			
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.	OCE				A			
2.2.4	Each program and project shall perform the LCRs identified in its respective figure in accordance with NPR	OCE				A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
	7123.1, applicable Center practices, and the requirements of this document.								
2.2.5	The program or project and an independent Standing Review Board (SRB) shall conduct the SRR, SDR/MDR, PDR, CDR, SIR, ORR, and PIR LCRs in figures 2-2, 2-3, 2-4, and 2-5.	OCE	X			A			
2.2.5.1	The Conflict of Interest (COI) procedures detailed in the NASA Standing Review Board Handbook shall be strictly adhered to.	OCE	X	A	A	A			
2.2.5.2	The portion of the LCR conducted by the SRB shall be convened by the Convening Authorities in accordance with Table 2-2.	OCE	X	A	A	A			
2.2.5.3	The program or project manager, the SRB chair, and the Center Director (or designated Engineering Technical Authority 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.	OCE	X		A	A			
2.2.6	In preparation for these LCRs, the program or project 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.	OCE	X			A			
Table I-1 Uncoupled and Loosely Coupled Program Milestone Products and Control Plans Maturity Matrix									
Tabl I-1	1. FAD [Baseline at SRR]	OCE		A		A			
Tabl I-1	2. PCA [Baseline at KDP I]	OCE		A					
Tabl I-1	3. Program Plan [Baseline at SDR]	OCE		A	A	A			
Tabl I-1	3.a. Mission Directorate requirements and constraints [Baseline at SRR]	OCE		A		A			
Tabl 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]	OCE		A		A			
Tabl I-1	3.c. Documentation of driving ground rules and assumptions on the program [Baseline at SDR]	OCE		A		A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-1	4. Interagency and international agreements [Baseline at SDR]	OCE		A		A			
Tabl I-1	5. ASM minutes	OCE		A		A			
Tabl I-1	6. Risk mitigation plans and resources for significant risks	OCE				A			
Tabl I-1	7. Documented Cost and Schedule Baselines [Baseline at SDR]	OCE				A			
Tabl I-1	8. Documentation of Basis of Estimate (cost and schedule) [Baseline at SDR]	OCE				A			
Tabl I-1	9. Documentation of performance against plan/baseline, including status/closure of formal actions from previous KDP	OCE				A			
Tabl I-1	10. Plans for work to be accomplished during Implementation	OCE				A			
	Program Plan Control Plans								
Tabl I-1	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR]	OCE				A			
Tabl I-1	2. Safety and Mission Assurance Plan [Baseline at SDR] [per NPDs 8730.5 and 8720.1, NPRs 8715.3, 8705.2, 8705.6 and 8735.2, and NASA Stds 8719.13 and 8739.8]	OSMA				A			
Tabl I-1	3. Risk Management Plan [Baseline at SDR] [per NPR 8000.4]	OSMA				A			
Tabl I-1	4. Acquisition Plan [Baseline at SDR]	OCE				A			
Tabl I-1	5. Technology Development Plan [Baseline at SDR] [per NPD 7500.2 and NPR 7500.1]	OCT				A			
Tabl I-1	6. Systems Engineering Management Plan [Baseline at SDR]	OCE				A			
Tabl I-1	7. PDLM Plan [Preliminary at SDR] [per NPR 7120.9]	OCE				A			
Tabl I-1	8. Review Plan [Baseline at SRR]	OCE				A			
Tabl I-1	9. Environmental Management Plan [Baseline at SDR] [per NPR 8580.1]	EMD				A			
Tabl I-1	10. Configuration Management Plan [Baseline at SDR]	OCE				A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-1	11. Security Plan [Baseline at SDR] [per NPD 1600.2 and NPRs 1600.1, 1040.1, and 2810.1]	OPS OCIO				A			
Tabl I-1	12. Threat Summary [Baseline at SDR]	OCE	X			A			
Tabl I-1	13. Technology Transfer (formerly Export) Control Plan [Baseline at SDR] [per NPR 2190.1]	OIIR				A			
Tabl I-1	14. Education Plan [Baseline at SDR]	OE				A			
Tabl I-1	15. Communications Plan [Baseline at SDR]	OComm				A			
Tabl I-1	16. Lessons Learned Plan [Baseline at SDR] [per NPD 7120.4 and NPR 7120.6]	OCE				A			

Table I-2 Tightly Coupled Program Milestone Products Maturity Matrix

Tabl I-2	1. FAD [Baseline at SRR]	OCE		A		A			
Tabl I-2	2. PCA [Baseline at PDR]	OCE		A					
Tabl I-2	3. Program Plan [Baseline at SDR]	OCE		A	A	A			
Tabl I-2	3.a. Mission Directorate requirements and constraints [Baseline at SRR]	OCE		A		A			
Tabl 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]	OCE		A		A			
Tabl I-2	3.c. Documentation of driving ground rules and assumptions on the program [Baseline at SDR]	OCE		A		A			
Tabl I2	4. Interagency and international agreements [Baseline at SDR]	OCE		A		A			
Tabl I-2	5. ASM minutes	OCE		A		A			
Tabl I-2	6. Risk mitigation plans and resources for significant risks	OCE				A			
Tabl I-2	7. Documented Cost and Schedule Baselines [Baseline at PDR]	OCE				A			
Tabl I-2	8. Documentation of Basis of Estimate (cost and schedule) [Baseline at PDR]	OCE				A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-2	9. Joint Cost and Schedule Confidence Level(s) and supporting documentation [Baseline at PDR]	CAD	X			A			
Tabl I-2	10. Shared Infrastructure, Staffing, and Scarce Material Requirements and Plans	OCE				A			
Tabl I-2	11. Documentation of performance against plan/baseline, including status/closure of formal actions from previous KDP	OCE				A			
Tabl I-2	12. Plans for work to be accomplished during next life-cycle phase	OCE				A			
Table I-3 Tightly Coupled Program Plan Control Plans Maturity Matrix									
Tabl I-3	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR]	OCE				A			
Tabl I-3	2. Safety and Mission Assurance Plan [Baseline at SDR] [per NPDs 8730.5 and 8720.1, NPRs 8715.3, 8705.2, 8705.6 and 8735.2, and NASA Stds 8719.13 and 8739.8]	OSMA				A			
Tabl I-3	3. Risk Management Plan [Baseline at SDR] [per NPR 8000.4]	OSMA				A			
Tabl I-3	4. Acquisition Plan [Baseline at SDR]	OCE				A			
Tabl I-3	5. Technology Development Plan [Baseline at SDR] [per NPD 7500.2 and NPR 7500.1]	OCT				A			
Tabl I-3	6. Systems Engineering Management Plan [Baseline at SDR]	OCE				A			
Tabl I-3	7. PDLM Plan [per NPR 7120.9]	OCE				A			
Tabl I-3	8. Verification and Validation Plan [Baseline at PDR]	OCE				A			
Tabl I-3	9. Information Technology Plan [Baseline at SDR] [per NPDs 2200.1 and 1440.6 and NPRs 2200.2, 1441.1 and 2810.1]	OCIO				A			
Tabl I-3	10. Review Plan [Baseline at SRR]	OCE				A			
Tabl I-3	11. Missions Operations Plan [Baseline at ORR]	OCE				A			
Tabl I-3	12. Environmental Management Plan [Baseline at PDR] [per NPR 8580.1]	EMD				A			
Tabl I-3	13. Integrated Logistics Support Plan [Baseline at PDR] [per NPD 7500.1]	LMD				A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-3	14. Science Data Management Plan [Baseline at ORR] [per NPD 2200.1 and NPRs 2200.2, 1441.1 and 8020.12]	SMD				A			
Tabl I-3	15. Configuration Management Plan [Baseline at SDR]	OCE				A			
Tabl I-3	16. Security Plan [Baseline at PDR] [per NPD 1600.2 and NPRs 1600.1, 2810.1, and 1040.1]	OPS				A			
Tabl I-3	17. Threat Summary [Baseline at PDR]	OCE	X			A			
Tabl I-3	18. Technology Transfer (formerly Export) Control Plan [Baseline at PDR] [per NPR 2190.1]	OIIR				A			
Tabl I-3	19. Education Plan [Baseline at PDR]	OE				A			
Tabl I-3	20. Communications Plan [Baseline at PDR]	OComm				A			
Tabl I-3	21. Lessons Learned Plan [Baseline at SDR] [per NPD 7120.4 and NPR 7120.6]	OCE				A			

Table I-4 Project Milestone Products Maturity Matrix

	Headquarters and Program Products								
Tabl I-4	1. FAD [Baseline at MCR]	OCE		A		A			
Tabl I-4	2. Program Plan [Baseline at MCR]	OCE		A		A			
Tabl I-4	2.a. Applicable Agency strategic goals [Baseline at MCR]	OCE		A		A			
Tabl 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]	OCE		A		A			
Tabl I-4	2.c. Documentation of driving mission, technical, and programmatic ground rules and assumptions [Baseline at SDR/MDR]	OCE		A		A			
Tabl I-4	3. Partnerships and interagency and international agreements [Baseline U.S. partnerships and agreements at SDR/MDR; Baseline International agreements at PDR]	OCE		A		A			
Tabl I-4	4. ASM minutes	OCE		A		A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-4	5. NEPA compliance documentation per NPR 8580.1	EMD		A		A			
Tabl I-4	6. Mishap Preparedness and Contingency Plan [Baseline at SMSR] [per NPR 8621.1]	OSMA		A		A			
	Project Technical Products								
Tabl I-4	1. Concept Documentation [Approve at MCR]	OCE				A			
Tabl I-4	2. Mission, Spacecraft, Ground, and Payload Architectures [Baseline mission and spacecraft architecture at SRR; Baseline ground and payload architectures at SDR/MDR]	OCE				A			
Tabl I-4	3. Project-Level, System, and Subsystem Requirements [Baseline project-level and system-level requirements at SRR; Baseline subsystem requirements at PDR]	OCE				A			
Tabl I-4	4. Design Documentation [Baseline Preliminary Design at PDR; Baseline Detailed Design at CDR; Baseline As-built hardware and software at MRR/FRR]	OCE				A			
Tabl I-4	5. Operations Concept [Baseline at PDR]	OCE				A			
Tabl I-4	6. Technology Readiness Assessment Documentation	OCE				A			
Tabl I-4	7. Engineering Development Assessment Documentation	OCE				A			
Tabl I-4	8. Heritage Assessment Documentation	OCE				A			
Tabl I-4	9. Safety Data Packages [Baseline at CDR] [per NPRs 8715.3, 8735.1, and 8735.2]	OSMA				A			
Tabl I-4	10. ELV Payload Safety Process Deliverables [Baseline at SIR] [per NPR 8715.7]	OSMA				A			
Tabl I-4	11. Verification and Validation Report [Baseline at MRR/FRR]	OCE				A			
Tabl I-4	12. Operations Handbook [Baseline at ORR]	OCE				A			
Tabl I-4	13. Orbital Debris Assessment Report per NPR 8715.6 [Final ODAR at SMSR]	OSMA		A		A			
Tabl I-4	14. End of Mission Plans per NPR 8715.6/NASA-STD 8719.14, App B [Baseline at SMSR]	OSMA		A		A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-4	15. Mission Report	OCE				A			
	Project Management, Planning, and Control Products								
Tabl I-4	1. Formulation Agreement [Baseline for Phase A at MCR; Baseline for Phase B at SDR/MDR]	OCE		A	A	A			
Tabl I-4	2. Project Plan [Baseline at PDR]	OCE		A	A	A			
Tabl I-4	3. Plans for work to be accomplished during next Implementation life-cycle phase [Baseline for Phase C at PDR; Baseline for Phase D at SIR; Baseline for Phase E at MRR/FRR; Baseline for Phase F at DR]	OCE				A			
Tabl I-4	4. Documentation of performance against Formulation Agreement (see #1 above) or against plans for work to be accomplished during Implementation life-cycle phase (see #3 above), including performance against baselines and status/closure of formal actions from previous KDP	OCE				A			
Tabl I-4	5. Project Baselines [Baseline at PDR]	OCE				A			
Tabl I-4	5.a. Top technical, cost, schedule and safety risks, risk mitigation plans, and associated resources	OCE				A			
Tabl I-4	5.b. Staffing requirements and plans	OCE				A			
Tabl I-4	5.c. Infrastructure requirements and plans, business case analysis for infrastructure Alternative Future Use Questionnaire (NASA Form 1739), per NPR 9250.1 [Baseline for NF 1739 Section A at SDR/MDR; Baseline for NF 1739 Section B at PDR]	FED OCFO				A			
Tabl I-4	5.d. Schedule [Baseline Integrated Master Schedule at PDR]	OCE				A			
Tabl I-4	5.e. Cost Estimate (Risk-Informed or Schedule-Adjusted Depending on Phase) [Baseline at PDR]	OCE				A			
Tabl I-4	5.f. Basis of Estimate (cost and schedule)	OCE				A			
Tabl I-4	5.g. Joint Cost and Schedule Confidence Level(s) and supporting documentation [Baseline at PDR]	CAD	X			A			
Tabl I-4	5.h. External Cost and Schedule Commitments [Baseline at PDR]	OCE		A		A			
Tabl I-4	5.i. CADRe [Baseline at PDR]	CAD	X			A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-4	6. Decommissioning/Disposal Plan [Baseline at DR]	OCE				A			
Table I-5 Project Plan Control Plans Maturity Matrix									
Tabl I-5	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR/MDR]	OCE				A			
Tabl I-5	2. Safety and Mission Assurance Plan [Baseline at SRR] [per NPDs 8730.5 and 8720.1, NPRs 8715.3, 8705.2, 8705.6 and 8735.2, and NASA Stds 8719.13 and 8739.8]	OSMA				A			
Tabl I-5	3. Risk Management Plan [Baseline at SRR] [per NPR 8000.4]	OSMA				A			
Tabl I-5	4. Acquisition Plan [Baseline at SRR]	OCE				A			
Tabl I-5	5. Technology Development Plan (may be part of Formulation Agreement) [Baseline at MCR] [per NPD 7500.2 and NPR 7500.1]	OCT				A			
Tabl I-5	6. Systems Engineering Management Plan [Baseline at SRR]	OCE				A			
Tabl I-5	7. Information Technology Plan [Baseline at SDR/MDR] [NPDs 2200.1 and 1440.6 and NPRs 2200.2, 1441.1, 2800.1 and 2810.1]	OCIO				A			
Tabl I-5	8. Software Management Plan(s) [Baseline at SDR/MDR] [per NPR 7150.2 and NASA-STD-8739.8]	OCE				A			
Tabl I-5	9. Verification and Validation Plan [Baseline at PDR]	OCE				A			
Tabl I-5	10. Review Plan [Baseline at SRR]	OCE				A			
Tabl I-5	11. Mission Operations Plan [Baseline at ORR]	OCE				A			
Tabl I-5	12. Environmental Management Plan [Baseline at SDR/MDR] [per NPR 8580.1]	EMD				A			
Tabl I-5	13. Integrated Logistics Support Plan [Baseline at PDR] [per NPD 7500.1]	LMD				A			
Tabl I-5	14. Science Data Management Plan [Baseline at ORR] [per NPD 2200.1 and NPRs 2200.2 and 1441.1]	SMD				A			
Tabl I-5	15. Integration Plan [Baseline at PDR]	OCE				A			
Tabl I-5	16. Configuration Management Plan [Baseline at SRR]	OCE				A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-5	17. Security Plan [Baseline at PDR] [per NPD 1600.2 and NPRs 1600.1 and 1040.1]	OPS				A			
Tabl I-5	18. Project Protection Plan [Baseline at PDR]	OCE				A			
Tabl I-5	19. Technology Transfer (formerly Export) Control Plan [Baseline at PDR] [per NPR 2190.1]	OIIR				A			
Tabl I-5	20. Lessons Learned Plan [Baseline at PDR] [per NPD 7120.4 and NPR 7120.6]	OCE				A			
Tabl I-5	21. Human Rating Certification Package [Initial at SRR;certified at MRR/FRR] [per NPR 8705.2]	OSMA				A			
Tabl I-5	22. Planetary Protection Plan [Baseline at PDR] [per NPD 8020.7 and NPR 8020.12]	SMD				A			
Tabl I-5	23. Nuclear Safety Launch Approval Plan [Baseline at SDR/MDR] [per NPR 8715.3]	OSMA				A			
Tabl I-5	24. Range Safety Risk Management Process Documentation [Baseline at SIR] [per NPR 8715.5]	OSMA				A			
Tabl I-5	25. Education Plan [Baseline at PDR]	OE				A			
Tabl I-5	26. Communications Plan [Baseline at PDR]	OComm				A			

Table I-6 Single Project Program Milestone Products Maturity Matrix

Tabl I-6	1. FAD [Baseline at MCR]	OCE		A		A			
Tabl I-6	2. PCA [Baseline at PDR]	OCE		A					
Tabl I-6	3. Traceability of Agency strategic goals and Mission Directorate requirements and constraints to program/project-level requirements and constraints. [Baseline at SRR]	OCE		A		A			
Tabl I-6	4. Documentation of driving mission, technical, and programmatic ground rules and assumptions [Baseline at SDR/MDR]	OCE		A		A			
Tabl I-6	5. Partnerships and interagency and international agreements [Baseline U.S. partnerships and agreements at SDR/MDR; Baseline international agreements at PDR]	OCE		A		A			
Tabl I-6	6. ASM minutes	OCE		A		A			
Tabl I-6	7. NEPA compliance documentation per NPR 8580.1	EMD		A		A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Tabl I-6	1. Formulation Agreement [Baseline for Phase A at MCR; baseline for Phase B at SDR/MDR]	OCE		A	A	A			
Tabl I-6	2. Program Plan [Baseline at PDR]	OCE		A	A	A			
Tabl I-6	3. Project Plan [Baseline at PDR]	OCE		A	A	A			
Tabl I-6	4. Plans for work to be accomplished during next Implementation life-cycle phase [Baseline for Phase C at PDR; baseline for Phase D at SIR; baseline for Phase E at MRR/FRR; baseline for Phase F at DR]	OCE				A			
Tabl I-6	5. Documentation of performance against Formulation Agreement (see #1 above) OR against plans for work to be accomplished during Implementation life-cycle phase (see #3 above) including performance against baselines and status/closure of formal actions from previous KDP	OCE				A			
Tabl I-6	6.Project Baselines [Baseline at PDR]	OCE				A			
Tabl I-6	6.a. Top technical, cost, schedule and safety risks, risk mitigation plans and associated resources	OCE				A			
Tabl I-6	6.b. Staffing requirements and plans	OCE				A			
Tabl I-6	6.c. Infrastructure requirements and plans, business case analysis for infrastructure Alternative Future Use Questionnaire (NASA Form 1739) [Baseline for NF 1739 Section A at SDR/MDR; Baseline for NF 1739 Section B at PDR] [per NPR 9250.1]	FED OCFO				A			
Tabl I-6	6.d. Schedule [Baseline Integrated Master Schedule at PDR]	OCE				A			
Tabl I-6	6.e. Cost Estimate (Risk-Informed or Schedule-Adjusted Depending on Phase)	OCE				A			
Tabl I-6	6.f. Basis of Estimate (cost and schedule)	OCE				A			
Tabl I-6	6.g. Joint Cost and Schedule Confidence Level(s) and supporting documentation [Baseline at PDR]	CAD	X			A			
Tabl I-6	6.h. External Cost and Schedule Commitments [Baseline at PDR]	OCE		A		A			
Tabl I-6	6.i. CADRe [Baseline at PDR]	CAD	X			A			
Tabl I-6	7. Decommissioning/Disposal Plan [Baseline at DR]	OCE				A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
Table I-7 Single-Project Program Plan Control Plans Maturity Matrix									
Tabl I-7	1. Technical, Schedule, and Cost Control Plan [Baseline at SDR/MDR]	OCE				A			
Tabl I-7	2. Safety and Mission Assurance Plan [Baseline at SRR]	OSMA				A			
Tabl I-7	3. Risk Management Plan [Baseline at SRR]	OSMA				A			
Tabl I-7	4. Acquisition Plan [Baseline at SRR]	OCE				A			
Tabl I-7	5. Technology Development Plan (may be part of Formulation Agreement) [Baseline at MCR]	OCT				A			
Tabl I-7	6. Systems Engineering Management Plan [Baseline at SRR]	OCE				A			
Tabl I-7	7. Product Data and Life-Cycle Management Plan [Initial at SDR/MDR] [per NPR 7120.9]	OCE				A			
Tabl I-7	8. Information Technology Plan [Baseline at SDR/MDR]	OCIO				A			
Tabl I-7	9. Software Management Plan(s) [Baseline at SDR/MDR]	OCE				A			
Tabl I-7	10. Verification and Validation Plan [Baseline at PDR]	OCE				A			
Tabl I-7	11. Review Plan [Baseline at SRR]	OCE				A			
Tabl I-7	12. Mission Operations Plan [Baseline at ORR]	OCE				A			
Tabl I-7	13. Environmental Management Plan [Baseline at SDR/MDR]	EMD				A			
Tabl I-7	14. Integrated Logistics Support Plan [Baseline at PDR]	LMD				A			
Tabl I-7	15. Science Data Management Plan [Baseline at ORR]	SMD				A			
Tabl I-7	16. Integration Plan [Baseline at PDR]	OCE				A			
Tabl I-7	17. Threat Summary [Baseline at PDR]	OCE	X			A			
Tabl I-7	18. Configuration Management Plan [Baseline at SRR]	OCE				A			

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Tabl I-7	19. Security Plan [Baseline at PDR]	OPS				A			
Tabl I-7	20. Project Protection Plan [Baseline at PDR]	OCE				A			
Tabl I-7	21. Technology Transfer (formerly Export) Control Plan [Baseline at PDR]	OIIR				A			
Tabl I-7	22. Lessons Learned Plan [Baseline at PDR]	OCE				A			
Tabl I-7	23. Human Rating Certification Package [Initial at SRR; certified at MRR/FRR]	OSMA				A			
Tabl I-7	24. Planetary Protection Plan [Baseline at PDR]	SMD				A			
Tabl I-7	25. Nuclear Safety Launch Approval Plan [Baseline at SDR/MDR]	OSMA				A			
Tabl I-7	26. Range Safety Risk Management Process Documentation [Baseline at SIR]	OSMA				A			
Tabl I-7	27. Education Plan [Baseline at PDR]	OE				A			
Tabl I-7	28. Communications Plan [Baseline at PDR]	OComm				A			
2.2.8	Projects in phases C and D (and programs at the discretion of the MDAA) with a life-cycle cost estimated to be greater than \$20 million and Phase E project modifications, enhancements, or upgrades with an estimated development cost greater than \$20 million shall perform earned value management (EVM) with an EVM system that complies with the guidelines in ANSI/EIA-748, Standard for Earned Value Management Systems.	OCE	X	A		A			
2.2.8.1	EVM system requirements shall be applied to appropriate suppliers, in accordance with the NASA Federal Acquisition Regulation (FAR) Supplement, and to in-house work elements.	OCE	X			A			
2.2.8.2	For projects requiring EVM, Mission Directorates shall conduct a pre-approval integrated baseline review as part of their preparations for KDP C to ensure that the project's work is properly linked with its cost, schedule, and risk and that the management processes are in place to conduct project-level EVM.	OCE		A		A			
2.2.10	Each program and project shall complete and maintain a Compliance Matrix (see Appendix C) for this NPR and attach it to the Formulation Agreement for projects in	OCE	X			A			

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	Formulation and/or the Program or Project Plan. The program or project will use the Compliance Matrix to demonstrate how it is complying with the requirements of this document and verify the compliance of other responsible parties.								
2.3.1	Each program and project shall have a Decision Authority who is 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.	OCE	X	A					
2.3.1.1	The NASA AA shall approve all Agency Baseline Commitments (ABCs) for programs requiring an ABC and projects with a life-cycle cost greater than \$250 million.	OCE	X	A		A			
2.3.2	Each program and project shall have a governing PMC.	OCE	X	A					
2.3.3	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.	OCE	X		A				
2.3.4	Following each LCR, the independent SRB and the program or project shall brief the applicable management councils on the results of the LCR to support the councils' assessments.	OCE	X	A	A	A			
2.4.1	After reviewing the supporting material and completing discussions with concerned parties, the Decision Authority determines whether and how the program or project proceeds into the next phase and approves any additional actions. These decisions 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.	OCE	X	A					
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 data (i.e., the cost and schedule datasheet) that provide further details.	OCE	X	A		A			
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.	OCE	X	A		A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
2.4.1.3	During Formulation, the Decision Memorandum shall establish a target life-cycle cost range (and schedule range, if applicable) as well as the Management Agreement addressing the schedule and resources required to complete Formulation.	OCE	X	A		A			
2.4.1.5	All projects and single-project programs shall document the Agency's life-cycle cost estimate and other parameters in the Decision Memorandum for Implementation (KDP C), and this becomes the ABC.	OCE	X	A		A			
2.4.1.6	Tightly coupled programs shall document their life-cycle cost estimate, in accordance with the life-cycle scope defined in the FAD or PCA, and other parameters in their Decision Memorandum and ABC at KDP I.	OCE	X	A		A			
2.4.1.7	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 \$250 million, 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 tightly coupled program or project has been interrupted.	OFCO	X	A		A			
2.4.2	All programs and projects develop cost estimates and planned schedules for the work to be performed in the current and following life-cycle phases (see Appendix I tables). As part of developing these estimates, the program or project shall document the basis of estimate (BOE) in retrievable program or project records.	OCE	X			A			
2.4.3	Tightly coupled and single-project programs (regardless of life-cycle cost) and projects (with an estimated life-cycle cost greater than \$250 million) shall develop probabilistic analyses of cost and schedule estimates to obtain a quantitative measure of the likelihood that the estimate will be met in accordance with the following requirements.	CAD	X			A			
2.4.3.1	Tightly coupled and single-project programs (regardless of life-cycle cost) and projects (with an estimated life-cycle cost greater than \$250 million) shall provide a range of cost and a range for schedule at KDP 0/KDP B, 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.	CAD	X			A			

Para #	NPR 7120.5 Requirement Statement	Requirement Owner	Tailor	MD AA	CD	PM	Comply?	Justification	Approval
2.4.3.2	At KDP I/KDP C, tightly coupled and single-project programs (regardless of life-cycle cost) and projects (with an estimated life-cycle cost greater than \$250 million) shall develop a resource-loaded schedule and perform a risk-informed probabilistic analysis that produces a JCL.	CAD	X			A			
2.4.4	Mission Directorates shall plan and budget tightly coupled and single-project programs (regardless of life-cycle cost) and projects (with an estimated life-cycle cost greater than \$250 million) based on a 70 percent joint cost and schedule confidence level or as approved by the Decision Authority.	CAD	X	A					
2.4.4.1	Any JCL approved by the Decision Authority at less than 70 percent shall be justified and documented.	CAD	X	A		A			
2.4.4.2	Mission Directorates shall ensure funding for these projects is consistent with the Management Agreement and in no case less than the equivalent of a 50 percent JCL.	CAD	X	A					
2.4.5	Loosely coupled and uncoupled programs are not required to develop program cost and schedule confidence levels. These programs shall provide analysis that provides a status of the program's risk posture that is presented to the governing PMC as each new project reaches KDP B and C or when a project's ABC is rebaselined.	OCE	X	A		A			
3.3.1	Programs and projects shall follow the Technical Authority process established in Section 3.3 of this NPR.	OCE	X	A	A	A			
3.4.1	Programs and projects shall follow the Dissenting Opinion process in this Section 3.4.	OCE	X	A	A	A			
3.5.1	Programs and projects shall follow the tailoring process in this Section 3.5.	OCE	X	A	A	A			
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 requirements policy document unless formally delegated elsewhere.	OCE	X	A	A	A			
3.6.1	A Center 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.	OCE	X		A	A			
3.7.1	Each program and project shall perform and document an assessment to determine an approach that maximizes the use of SI.	OCE	X			A			

