**NPR 7120.5F Project Pre-Customized Compliance Matrix Template**

*Last updated: 9-6-23*

This Pre-Customized Compliance Matrix template eliminates non-applicable requirements for Projects. Projects may choose to use this pre-customized template instead of the full NPR 7120.5F Compliance Matrix to document and obtain approval for tailoring. The project manager should coordinate with the program manager and the Mission Directorate to obtain the appropriate approval for using this pre-customized template instead of the full NPR 7120.5F Compliance Matrix.

Instructions on completing the Compliance Matrix are available at [Compliance Matrix Description and Instructions](https://appel.nasa.gov/wp-content/uploads/2021/04/Compliance-Matrix-Description-and-Instructions.docx) and in NPR 7120.5F Appendix C.

**Key:**

Gray highlighting indicates that the requirement is Non-Applicable to Projects.

| **Para #** | **NPR 7120.5 Requirement Statement** | **Require-ment Owner** | **Dele-gated** | **MD AA** | **CD** | **PM** | **Com-ply?** | **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 |  |  |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA and is fulfilled through the Agency PPM Certification Process.)* |  |
| 2.2.1 | Program and project managers shall follow their appropriate life cycle as identified in each program and project respective life-cycle figure. Life cycles include life-cycle phases, gates, and major events; performing KDPs and major life-cycle reviews (LCRs); developing principal documents that govern the conduct of each phase; and re-entering the life cycle when program or project changes warrant such action. | NASA AA | No |  |  | 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 |  |  |  |
| 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 |  |  |  |
| 2.2.4 | Each program and project shall perform the LCRs in accordance with NPR 7123.1, applicable Center practices, and the requirements of this document. | OCE | Yes |  |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  | *Note: I-Table product requirements are listed at the end of the Compliance Matrix.* |  |
| 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, Earned Value Management Systems for all portions of work including in-house and contracted portions of the project. | OCFO-SID | No | A |  | A |  |  |  |
| 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 |  |  |  |
| 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](https://nam11.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.hq.nasa.gov%2Foffice%2Fprocurement%2Fregs%2FNFS.pdf&data=04%7C01%7C%7Cd5dbf15cb6f744d616d508d88b280bc0%7C84df9e7fe9f640afb435aaaaaaaaaaaa%7C1%7C0%7C637412351388444081%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=keFZicIaOXPgTpjbMBQT4LFH2k9Skv%2FMkA1osCH9j0Y%3D&reserved=0).). | OCFO-SID | No | A |  | A |  |  |  |
| 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 |  |  |  |
| 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, Earned Value Management Systems. | OCFO-SID | No | A |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 2.3.2 | Each program and project shall have a governing PMC. | NASA AA | No | A |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  | *(This requirement is the responsibility of the Center Director.)* |  |
| 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 |  |  |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA who may ask for P/pM assistance.)* |  |
| 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. | NASA AA | No | 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. | NASA AA | No | A |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  | *Non-Applicable to Projects per Pre-Customized Compliance Matrix on Agency Tailoring web site.* |  |
| 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 scopedefined in the ABC has been changed or the project has been interrupted. | OCFO-SID | No | A |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 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 |  |  |  | *(This requirement is the responsibility of the MDAA.)* |  |
| 2.4.5 | Tightly coupled, loosely coupled, and uncoupledprograms 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 |  | *Non-Applicable to Projects per Pre-Customized Compliance Matrix on Agency Tailoring web site.* |  |
| 3.3.1 | Programs and projects shall follow the Technical Authority (TA) process established in this Section 3.3. | OCE | No | A | A | A |  |  |  |
| 3.4.1 | Programs and projects shall follow the Formal Dissent process in this Section 3.4. | NASA AA | No | A | A | A |  |  |  |
| 3.5.1 | Programs and projects shall follow the tailoring process in this Section 3.5. | NASA AA | No | 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 requirement policy document unless formally delegated elsewhere. | NASA AA | No | A | A | A |  |  |  |
| 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 |  |  | *(This requirement is the responsibility of the Center Director.)* |  |
| 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 |  |  |  |
| **I-Table Product Requirements** | | | | | | | | | |
|  | **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 |  |  |  |
| Table I-4 | 2. Program Plan [Baseline at MCR] [Required per NPR 7120.5] | NASA AA | No | A |  | A |  | *(This requirement is the responsibility of the Program.)* |  |
| Table I-4 | 2.a. Applicable Agency strategic goals [Baseline at MCR] [Required per NPR 7123.1] | NASA AA | No | A |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| Table I-4 | 4. ASM Decision Memorandum or ASM meeting summary [additional information in NPD 1000.5] | NASA AA | No | A |  | A |  |  |  |
| Table I-4 | 5. Mishap Preparedness and Contingency Plan [Baseline at SMSR] [Required per NPR 8621.1] | OSMA | Yes | A |  | A |  |  |  |
|  | **Project Technical Products** |  |  |  |  |  |  |  |  |
| Table I-4 | 1. Concept Documentation [Approve at MCR] [Required per NPR 7123.1] | OCE | Yes |  |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| Table I-4 | 4. Design Documentation [Baseline at CDR] [Required per NPR 7123.1] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 5. Operations Concept Documentation [Baseline at PDR] [Required per NPR 7120.5] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 6. Technology Readiness Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 7. Engineering Development Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 8. Heritage Assessment Documentation [Required per NPR 7120.5 Appendix F FA Template] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 9. Systems Safety Analyses (e.g., safety data packages) [Baseline at CDR] [Required per NPR 8715.3] | OSMA | Yes |  |  | A |  |  |  |
| Table I-4 | 10. Payload Safety Process Deliverables [Baseline at SIR] [Required per NPR 8715.7] | OSMA | Yes |  |  | A |  |  |  |
| Table I-4 | 11. Verification and Validation Report  [Baseline at MRR/FRR] [Required per NPR 7123.1] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 12. Operations Handbook [Baseline at ORR] [additional information in NPR 7120.5 Appendix A] | OCE | Yes |  |  | A |  |  |  |
| Table I-4 | 13. Orbital Debris Assessment Report [Final at SMSR] [Required per NPR 8715.6; additional information in NASA-STD-8719.14] | OSMA | No | A |  | A |  |  |  |
| 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 |  |  |  |
| Table I-4 | 16. Decommissioning/Disposal Plan [Baseline at ORR] [Required per NPR 7123.1] | OCE | Yes |  |  | A |  |  |  |
| 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 |  |  |  |
| Table I-4 | 18. Criticality Identification Method for Hardware [Baseline at PDR] [Required per NPR 8735.2] | OSMA | No |  |  | A |  |  |  |
|  | **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 |  |  |  |
| Table I-4 | 2. Project Plan [Baseline at PDR] [Required per NPR 7120.5] | NASA AA | No | A | A | A |  |  |  |
| 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 status/closure of formal actions from previous KDP [Required per NPR 7120.5] | NASA AA | No |  |  | A |  |  |  |
| Table I-4 | 4. Project Baselines | N/A | N/A |  |  |  |  |  |  |
| 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 |  |  |  |
| Table I-4 | 4.b. Staffing requirements and plans [Required per NPR 7120.5] | NASA AA | No |  |  | A |  |  |  |
| 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 |  |  |  |
| Table I-4 | 4.c.ii. Capitalization Determination Form (CDF) (NASA Form 1739) [Required per NPR 9250.1] | OCFO | No |  |  | A |  |  |  |
| Table I-4 | 4.d. Schedule [Baseline Integrated Master Schedule at PDR] [Required per NPR 7120.5] | OCFO-SID | No |  |  | A |  |  |  |
| Table I-4 | 4.e. Cost Estimate [Baseline at PDR] [Required per NPR 7120.5] | OCFO-SID | No |  |  | A |  |  |  |
| Table I-4 | 4.f. Basis of Estimate (cost and schedule) [Required per NPR 7120.5] | OCFO-SID | No |  |  | A |  |  |  |
| Table I-4 | 4.g. Confidence Level(s) and supporting documentation [Baseline at PDR] [Required per NPR 7120.5] | OCFO-SID | No |  |  | A |  |  |  |
| Table I-4 | 4.h. External Cost and Schedule Commitments  [Baseline at PDR] [Required per NPR 7120.5] | OCFO-SID | No | A |  | A |  |  |  |
| Table I-4 | 4.i. CADRe [Baseline at SRR] [Required per NPR 7120.5] | OCFO-SID | No |  |  | A |  |  |  |
| Table I-4 | 4.j. PMB [Baseline at PDR] [Required per NPR 7120.5 and NASA EVM Capability Process Documentation] | OCFO-SID | No |  |  | A |  |  |  |
|  | **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 |  |  |  |
| Table I-5 | 2. Safety and Mission Assurance Plan [Baseline at SRR] [Required per NPRs 8705.2 and 8705.4] | OSMA | Yes |  |  | A |  |  |  |
| Table I-5 | 3. Risk Management Plan [Baseline at SRR]  [Required per NPR 8000.4] | OSMA | Yes |  |  | A |  |  |  |
| Table I-5 | 4. Acquisition Strategy [Baseline at SRR] [Required per NPD 1000.5] | NASA AA | No |  |  | A |  |  |  |
| Table I-5 | 6. Systems Engineering Management Plan [Baseline at SRR] [Required per NPR 7123.1] | OCE | Yes |  |  | A |  |  |  |
| Table I-5 | 7. System Security Plan [Baseline at CDR] [Required per NPR 2810.1] | OCIO | No |  |  | A |  |  |  |
| 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 |  |  |  |
| 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 |  |  |  |
| Table I-5 | 10. Review Plan [Baseline at SRR] [Required per NPR 7120.5] | NASA AA | No |  |  | A |  |  |  |
| Table I-5 | 11. Mission Operations Plan [Baseline at ORR] [Required per NPR 7120.5] | OCE | Yes |  |  | A |  |  |  |
| Table I-5 | 12. NEPA Compliance Plan [Baseline at SDR/MDR] [Required per NPR 8580.1] | OSI-EMD | No |  |  | A |  |  |  |
| Table I-5 | 13. Integrated Logistics Support Plan [Baseline at PDR] [Required per NPD 7500.1] | OSI-LMD | No |  |  | A |  |  |  |
| Table I-5 | 15. Integration Plan [Baseline at PDR] [Required per NPR 7120.5] | OCE | Yes |  |  | A |  |  |  |
| 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 |  |  |  |
| Table I-5 | 17. Security Plan [Baseline at PDR]  [Required per NPR 1040.1 and NPR 1600.1] | OPS | No |  |  | A |  |  |  |
| Table I-5 | 18. Project Protection Plan [Baseline at PDR] [Required per NPR 1058.1; additional information in NASA-STD-1006] | OCE | No |  |  | A |  |  |  |
| Table I-5 | 19. Technology Transfer (formerly Export) Control Plan [Baseline at PDR] [Required per NPR 2190.1] | OIIR | No |  |  | A |  |  |  |
| Table I-5 | 21. Human-Rating Certification Package [Initial at SRR; certified at MRR/FRR] [Required per NPR 8705.2] | OSMA | No |  |  | A |  |  |  |
| Table I-5 | 22. Planetary Protection Plan [Baseline at PDR]  [Required per NPD 8020.7 and NPR 8715.24] | OSMA | No |  |  | A |  |  |  |
| Table I-5 | 23. Nuclear Launch Authorization Plan [Baseline at SDR/MDR] [additional information in NPR 8715.26] | OSMA | No |  |  | A |  |  |  |
| Table I-5 | 24. Range Safety Risk Management Process Documentation [Baseline at SIR] [Required per NPR 8715.5] | OSMA | Yes |  |  | A |  |  |  |
| 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 |  |  |  |
| Table I-5 | 27. Orbital Collision Avoidance Plan [Baseline at PDR] [Required per NID 7120.132] | OCE | No |  |  | A |  |  |  |
| Table I-5 | 28. Human Systems Integration Approach [Baseline at SRR] [additional information in NASA/SP-20210010952 NASA HSI Handbook and NPR 7123.1] | OCE-OSMA-OCHMO1 | No |  |  | A |  |  |  |

1 The Human Systems Integration approach requirement is owned by the three TA offices OCHMO, OCE and OSMA. OCE is the POC for this requirement and will coordinate verifications and relief from requirements with all TAs as necessary.

**I-Table Product Best Practices**

“BP” in the “Product Owner/Requirement or Best Practice” column of an I-Table indicates that the product is considered a best practice. These I-Table products are not requirements, but the expectation is that the products will be developed per the I-Table as part of normal program or project management activities.

Table I-4 Project Milestone Products Maturity Matrix – Best Practices

| Products | Product Owner/  Requirement or Best Practice | Pre-Phase A  KDP A | Phase A  KDP B | | Phase B  KDP C | Phase C  KDP D | | Phase D  KDP E | | Phase E  KDP F | Phase F |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MCR | SRR | SDR/MDR | PDR | CDR | SIR | ORR | MRR/FRR | DR | DRR |
| **Project Technical Products** | | | | | | | | | | | |
| 15. Final Mission Report [additional information in NPR 7120.5 Appendix A] | OCE/BP |  |  |  |  |  |  |  |  |  | Final |
| 19. Hardware Quality Data Management Analytics [additional information in NPR 8735.2] | OSMA/BP | Preliminary | Update | Update | Baseline | Update | Update | Update | Update |  |  |

Table I-5 Project Plan Control Plans Maturity Matrix – Best Practices

| (See Appendix H Template for Control Plan Details.) | Product Owner/  Requirement or Best Practice | Pre-Phase A | Phase A  KDP B | | Phase B  KDP C | Phase C  KDP D | | Phase D  KDP E | | Phase E  KDP F |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MCR | SRR | SDR/MDR | PDR | CDR | SIR | ORR | MRR/ FRR | DR |
| 5. Technology Development Plan (may be part of Formulation Agreement) [additional information in NPR 7500.2, NPR 7123.1, and NPR 7120.5] | OCE/BP | Baseline | Update | Update | Update |  |  |  |  |  |
| 14. Science Data Management Plan [additional information in NPD 2200.1 and NPRs 2200.2, 1441.1, and 8715.24] | SMD/BP |  | Preliminary Science Data Require-ments |  | Preliminary |  |  | Baseline | Update |  |
| 20. Knowledge Management Plan [additional information in NPD 7120.4 and NPD 7120.6] | OCE/BP | Approach for managing during Phase A1 |  | Preliminary | Baseline | Update |  |  |  |  |
| 25. Communications Plan [additional information in NPR 7120.5] | OComm/BP |  | Preliminary |  | Baseline | Update |  | Update |  |  |