

1. Does the new NASA governance model influence program and project management?

Answer

The new Governance Model laid out in NPD 1000.0 is the fundamental foundation for NASA programs and projects. It defines the separation between the Programmatic and Institutional Authorities, how programs and projects are structured within the agency, and how they are overseen both at Headquarters and at the program or project level. NPD 1000.0 describes Governing Councils, articulates Strategic Management Principles, and establishes Technical Authority. All these have flowed down into NPR 7120.5D as part of a comprehensive, self-consistent management system.

2. What are the most significant changes in NPR 7120?

Answer

NPR 7120.5D implements the new NASA governance model set out in NPD 1000.0 and is part of the realignment of NASA governing documents to increase accountability and clarity in the flow-down of management process requirements.

NPR 7120.5D has been streamlined to focus on space flight programs and projects. It also includes critical technical facilities specifically developed or significantly modified for space flight systems and ground systems that are in direct support of space flight operations. For existing programs and projects, the requirements of this document are applicable to the program or project's extant phase as of the effective date of this NPR and to phases yet to be completed. (See Section P2)

NPR 7120.5D establishes the processes by which NASA formulates and implements space flight programs and projects, not just requirements for program and project managers. The processes and requirements governing other NASA product lines will be addressed by two new NPR's (NPR 7120.7 – NASA Institutional Infrastructure and Information Technology Program and Project Management Requirements and NPR 7120.8 – NASA Research and Technology Program and Project Management).

The major changes from NPR 7120.5C are:

- Incorporation of the governance model's separation between programmatic and institutional authorities (includes the Technical Authorities) and implementation of Technical Authority. (See 3.4) The roles and responsibilities of the programmatic and Technical Authorities are defined (See 3.1 and 3.2).
- Implementation of updated program and project lifecycles common for both human spaceflight and robotic missions. This is a common framework for all Programs and Projects such that a uniform gate and tracking process can be implemented throughout the Agency.

- Provision of a standardized life cycle review process that is built around Key Decision Points where the specified NASA Decision Authority determines the readiness of a program or project to progress to the next phase of the life cycle. (See 2.2 and 2.3) The reviews are conducted by an independent Standing Review Board (SRB). The process for establishing and convening the SRB reviews is defined. (See 2.5.2)
- Definition of the Acquisition Strategy for program and projects. (See 2.1.2)
- Definition of criteria for Project Categorization. (See 2.1.4)
- Standardization of the process for handling changes to and waivers of requirements. (See 3.6.3)
- Standardization of the process for handling dissenting opinions. (See.3.3)

3. What is the applicability of NPR 7120.5D?

Answer

NPR 7120.5D applies to all current and future NASA space flight programs and projects (including spacecraft, launch vehicles, instruments developed for space flight programs and projects, research and technology developments funded by and to be incorporated into space flight programs and projects, critical technical facilities specifically developed or significantly modified for space flight systems, and ground systems that are in direct support of space flight operations). Version 5D also applies to reimbursable space flight programs/projects performed for non-NASA sponsors.

For existing space flight programs and projects the requirements of NPR 7120.5D are applicable to the program or project's extant phase as of its effective date and to phases yet to be completed. (See Section P2)

NPR 7120.5D can be applied to other NASA investments at the discretion of the cognizant manager or the NASA Associate Administrator.

4. How will NPR 7120.5D be implemented on existing programs?

Answer

For existing spaceflight programs, is to be implemented for the extant phase of the program as of the effective date of NPR 7120.5D and to phases yet to be completed.

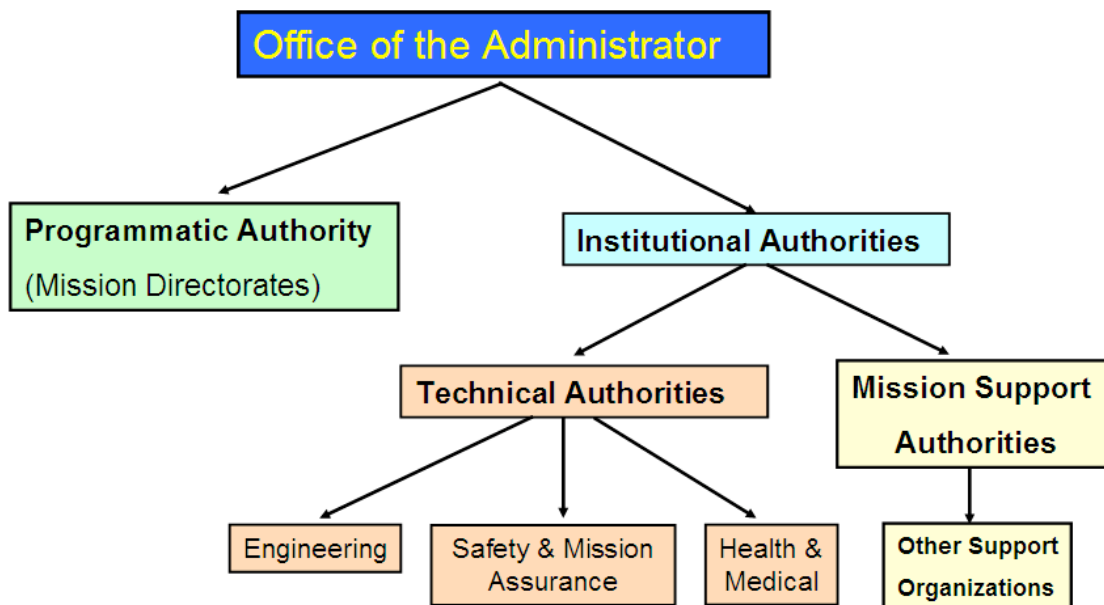
The intent is to implement it in a sensible way. When an existing program or project determines a sensible approach to implementation it should document the proposed implementation and request a waiver to NPR 7120.5D per paragraph 3.6. When approved, documented will be available that has been agreed to by all necessary parties that will avoid any future confusion on what was to be done.

5. What is meant by the separation between Programmatic and Institutional Authorities, and where does Technical Authority fit in?

Answer

The following graphic illustrates the separation between Programmatic and Institutional parts of the NASA organization. As is shown, the three Technical Authorities (Engineering, Safety and Mission Assurance, and Health and Medical) are part of the Institutional Authority.

Each of the lines is meant to convey the direct flow of authority from the Administrator to each of the individual authorities. If a difference of opinion were to occur between individuals in separate authorities, the dissenting opinion process would apply and the issue would rise up to the next level in each authority sequentially until resolved. If necessary, the issue would rise to the Administrator for a decision. (See also the Section on the Dissenting opinion process.)



6. How does the implementation of NPR 7120.5D and Technical Authority affect the responsibilities of the Program or Project Manager?

Answer

The responsibilities of a program or project manager have not been affected by the implementation of Technical Authority. The program or project manager is still ultimately responsible for the safe conduct and the successful outcome of the program or project. The responsibilities as stated in NPR 7120.5D are:

- Program Manager — is responsible for the formulation and implementation of the program per the governing agreement with the sponsoring Mission Directorate.
- Project Manager — is responsible for the formulation and implementation of the project per the governing agreement with the Program Manager.

Even though the overall roles and responsibilities have not changed, some of the reviews and processes for program or project management have changed.

7. What similar requirements apply to programs and projects not covered by NPR 7120.5D?

Answer

Research, Technology Development, and Institutional Programs and Projects covered by NPR 7120.5C will continued to be covered by 7120.5C. In the future these will each have their own NPR - NPR 7120.7 NASA Institutional Infrastructure and Information Technology Program and Project Management Requirements and NPR 7120.8 NASA Research and Technology Program and Project Management Requirements.

8. What is a KDP?

Answer

Key Decision Point: The event within a program or project's life cycle at which the Decision Authority determines the readiness of a program or project to progress to the next phase of the life cycle (or to the next KDP). (See Section 2.4)

9. What is a Decision Authority? Who is it for programs and for projects?

Answer

The Decision Authority is the Agency's responsible individual who authorizes the transition at a Key Decision Point (KDP) to the next life-cycle phase for a program or project.

For programs and Category 1 projects, the Decision Authority is the NASA Associate Administrator (AA). For Category 1 projects, this authority may be delegated to the Mission Directorate AA. (See 2.4.2)

For Category 2 projects, the Decision Authority is the MDAA. This authority may also be delegated to a lower level. The delegation of authority for projects is documented in the Program Commitment Agreement (PCA). (See 2.4.2)

For Category 3 projects, the Decision Authority is the MDAA. This authority may also be delegated to a lower level. The delegation of authority for projects is documented in the PCA. (See 2.4.2)

10. Why does NASA have 3 categories of projects?

Answer

NASA has defined 3 categories of projects in order to provide the appropriate level of reviews, management requirements, and oversight. The category is determined by the amount of funding, level of importance (priority) to the agency, and other factors. See the following table from NPR 7120.5D:

Priority Level	LCC > \$1B, use of nuclear power source, or human space flight		
	LCC < \$250M	\$250M ≤ LCC ≤ \$1B	LCC > \$1B, use of nuclear power source, or human space flight
High	Category 2	Category 2	Category 1
Medium	Category 3	Category 2	Category 1
Low	Category 3	Category 2	Category 1

Note: The threshold values in Table 2-1 are updated annually as part of the Agency's strategic planning guidance.

11. What other factors are used to determine project category, and who makes that determination?

Answer

See NPR 7120.5D paragraph 2.1.4. Projects are either *Category 1, 2, or 3* and are assigned to a category based initially on (1) the project life-cycle cost (LCC) estimate, the use of nuclear power sources, and whether or not the system being developed is for human space flight; and (2) 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 (See NPR 8705.4, *Risk Classification for NASA Payloads*). Guidelines for determining project categorization are shown in NPR 8705.4 Table 2-1, but categorization may be changed based on recommendations by the Mission Directorate Associate Administrator (MDAA) that consider additional risk factors facing the project. The NASA Associate Administrator (AA) approves final project categorization.

12. Can a Center provide programmatic direction to a project?

Answer

No.

Programmatic requirements and associated direction are the domain of the Programmatic Authority. Programmatic direction focuses on products to be developed and delivered and specifically relate to the goals and objectives of a particular NASA program or project. These requirements flow down from Agency needs, goals, and objectives described in the NASA Strategic Plan, to programs and projects via the Architectural Control Document, the Program Commitment Agreement, Program Plan, and Project Plan. (See paragraph 1.1.3 and Table 1-1).

The Centers are part of the Institutional Authority. Tasks are assigned to NASA Centers. The Centers (through the Program and Project Plans) provide resources (facilities, personnel, etc.) to execute assigned work. Centers may add management process requirements and provide programs with the results of reviews and status information. They do not provide Programmatic direction to programs or projects.

13. How will my performance reviews change if I have two “management” chains – programmatic and TA?

Answer

You as an individual do not have two management chains. Your line manager will perform your performance appraisals.

One result of changes to NASA Governance is the establishment of the Technical Authority. The Technical Authority is an independently funded entity (Funded through NASA

Headquarters). Technical Authorities are located in appropriate organizations levels. If you have delegated Technical Authority, you are funded independently of programs or projects, and your performance review will be by your supervisor in the Technical Authority chain.

In the case where an employee is matrixed to a different organization (e.g., an engineer matrixed to a project) the performance appraisal will still be performed by the individual's supervisor with inputs from the organization to which they are matrixed. For employees using NASA's GPES system, the organization's supervisor will request and authorize the manager under which the employee is matrixed to input performance evaluation comments for the performance evaluation.

You will be reviewed by your programmatic chain manager if you are a direct report to and are paid for by a program or project.

If your day-to-day work is supervised by engineering or an OSMA manager your performance review will likewise still be by management in the applicable (engineering or OSMA) chain.

14. What are the highlights of the NASA strategic acquisition process?

Answer

NASA's strategic acquisition planning and authorization is a continuous process to ensure programs and projects have the proper budget authorization and Agency commitment. To facilitate this decision process, three discrete acquisition events are required: the Acquisition Strategy Planning (ASP) meeting, the Acquisition Strategy Meeting (ASM), and the Procurement Strategy Meeting (PSM). Each event is discussed below.

The Acquisition Strategy Planning meeting (ASP) is integral to the annual budget submission process. The ASP meeting is structured to allow Agency senior management to review major acquisitions that evolve from Needs, Goals, and Objectives as well as requirements imposed on the Agency from external sources (e.g., The President's Vision for Space Exploration) and internal sources (e.g., major acquisitions initiated by Mission Directorates). It provides the forum for senior Agency management to review major acquisitions before authorizing budget expenditures.

The Acquisition Strategy meeting (ASM) is program or project-specific and examines the Agency's acquisition approach (e.g., internal make-or-buy, Center assignments, etc.). The ASM meeting also determines if a Procurement Strategy Meeting (PSM) is required for each acquisition under consideration. The meeting occurs during the program/project formulation. The Program ASM may be held in conjunction with the Program/System Requirements Review but must be held prior to KDP I (Approval for implementation). The Project ASM may be held in conjunction with the project Systems Requirements Review but must be held prior to KDP B (Phase A – Concept and Technology Development).

The Procurement Strategy Meeting (PSM - Formerly called the Acquisition Strategy Meeting) approves the procurement approach for each procurement. The meeting is project or contract-specific, developed by the Project Manager, supported by the Contracting Officer, and approved as prescribed in the NASA FAR Supplement (NFS).

(See 2.1.2)

15. Are the templates in the Appendices C – G mandatory?

Answer

Yes, and waivers are required for modifications to or non-compliances with the templates.

16. When is a project's Integrated Baseline approved?

Answer

Key Decision Point C