Components of a Project Plan

Project Overview:

The project overview includes information on the project's objectives, the mission's description and technical approach, the management structure, and the implementation approach) Describes the background of the project and its current status, including results of Formulation activities, decisions, and documentation. Documents the project's category and NASA payload development risk classification.

Project Baselines:

Project baselines consist of a set of requirements, cost (including project-held reserves), schedule, and technical content that forms the foundation for project execution and reporting done as part of NASA's performance assessment and governance process.

With "baseline" information, you outline what you plan for, such as your planned requirements, your planned "work breakdown structure", your planned schedule, the resources you think you will need (including funding, materials, and the types of people who will work on the project).

Project Control Plans:

Documents how the project plans to control project requirements, technical design, schedule, and cost to achieve the program requirements.

Describes the plan to monitor and control the project requirements, technical design, schedule, and cost of the project to ensure that the high-level requirements levied on the project are met.

Describes the project's performance measures in objective, quantifiable, and measurable terms and documents how the measures are traced from the program requirements on the project.

Adapted from:

Webster, J. (2004). Project Planning: Getting it Right the First Time. https://trs.jpl.nasa.gov/bitstream/handle/2014/38523/03-2830.pdf

NASA Space Flight Program and Project Management Requirements document (NPR 7120.5E)

https://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPR&c=7120&s=5E

Components of a Project Plan



This section of the document includes up to 27 different plans! When you read through the types of plans, you can understand why so many diverse roles are needed on a mission:

- Business
- Safety and Mission Assurance
- Risk Management
- Acquisition
- Technology Development
- Systems Engineering Implementation
- Information Technology
- Software Management
- Verification and Validation
- Review
- Mission Operations
- Environmental Management

- Integrated Logistics Support
- Science Data Management
- Flight System Integration and Testing (I&T)
- Configuration Management
- Security
- Project Protection
- Export Compliance Management
- Lessons Learned
- Planetary Protection
- Nuclear Safety Launch Approval
- Expendable Launch Vehicle Payload Safety
- Communications

A *preliminary* version of the Project Plan is provided during the Formulation Phase, at the Project Mission System Review [PMSR] for Announcement of Opportunity [AO] projects, like Psyche, or at the Mission Definition Review [MDR] for assigned projects, like Mars 2020. The *baseline* version is due at the Preliminary Design Review (PDR), which is the last review before transitioning from Phase B (Formulation) to Phase C (Implementation).

Adapted from:

Webster, J. (2004). Project Planning: Getting it Right the First Time. https://trs.jpl.nasa.gov/bitstream/handle/2014/38523/03-2830.pdf NASA Space Flight Program and Project Management Requirements document (NPR 7120.5E)

https://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPR&c=7120&s=5E