OFFICE OF THE DEPUTY ASSISTANT SECRETARY OF DEFENSE
SYSTEMS ENGINEERING

Template for the Preliminary Design Review (PDR) Report

Cover Page
- Program name, acquisition category (ACAT) level, Component
- Program Manager, Program Executive Officer, and Component submittal/concurrence/approval (if required by the Component)

Preliminary Design Review
- **Process.** Describe the PDR process and how the PDR was conducted. List the subordinate PDRs leading up to system-level PDR (i.e., the number of component, subsystem and/or systems level PDRs).

- **Agenda. Attach the detailed PDR agenda.**

- **PDR Participants.** Provide a table of all participants [name(s), organization(s), and areas of expertise and/or functional areas of responsibility] and identify the independent subject matter experts and the PDR chair(s).

- **System-Level PDR Entry Criteria.** Provide a list of the entry criteria and indicate if all criteria were met prior to conducting the PDR. If all entry criteria were not met, provide the rationale for conducting the PDR, identify who made the decision to proceed with the PDR, and describe the impact to the program if the review had been delayed until all entry criteria were achieved.

- **PDR Exit Criteria**. Provide a list of the PDR exit criteria and indicate which have been met.

- **PDR Issues, Actions, and Closure Plans** (consider a table and, depending on length, include as an attachment)

    o List and summarize issues and actions (Requests for Action) and their planned closure dates.
    o Describe the plan to close any open PDR actions and any requirements/design gaps. Mention if convening a Configuration Steering Board is planned and/or warranted.
    o Describe any PDR functionality (such as preliminary hardware or software design) that is yet to be allocated and the method to assess its impact on system design.
    o Justify why the Milestone Decision Authority should consider the PDR complete when open action items still exist.

Summary of Preliminary Design
- **Allocated Baseline.** Describe all the engineering products that now constitute the system allocated baseline. Also describe how the baseline will be configuration controlled.

- **Integration.** Discuss the establishment of interface requirements in the system allocated baseline including System of Systems interface agreements (i.e., interface control documents (ICD), interface description documents (IDD), interface requirements documents (IRD), and architectures).

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Template for the Preliminary Design Review (PDR) Report (Con't)

Summary of Preliminary Design (Con't)

- **Drawings**. Provide the status of the number of incomplete drawings/design models. List the components/subsystems they are related to and percentage of drawings expected to be released to manufacturing by the critical design review. Consider inserting a chart. Also discuss the identification and drawing release of critical safety items and critical application items.

- **Traceability.** Discuss the traceability of requirements and artifacts included in the allocated baseline.

Status of Special Topics

- **Requirements.** Discuss how the preliminary design supports the fulfillment of the user's requirements. Discuss the number and significance of requirements which the preliminary design is not expected to achieve and the plan to resolve these design gaps (e.g., updating the threshold requirement in the capability development document (CDD) to reflect what is currently achievable based on the preliminary design, deferring the capability to the next increment, working to achieve the threshold requirement in the critical design, etc.). Assess whether the accomplishment of the performance requirements in the preliminary design is aligned with the program's funding and schedule.

- **Manufacturing.** Discuss any key manufacturing efforts and the current Engineering and Manufacturing Readiness Levels (EMRL) or Manufacturing Readiness Levels (MRL) if such measures are used by the program.

- **Reliability and Maintainability.** Discuss the status of the reliability, maintainability, and Built-In Test (BIT) engineering design activities (i.e., allocations, models, block diagrams, preliminary predictions, Failure Mode, Effects and Criticality Analysis (FMECA), etc.). Address whether the preliminary design meets all R&M specification and capabilities document requirements. If the assessment of the preliminary design does not meet the requirements, describe the program's proposed corrective actions.

- **Software**. Discuss the status of software requirements decomposition to design documents, build contents, software code estimates, significance of software design not yet estimated, and expected software development schedule and resources. Address any anticipated computer storage space issue and percentage of processor usage.

- **Risk**. Provide a summary of moderate/high risks for the system. Indicate whether plans to mitigate the risks are fully funded and on track. Insert the system level risk cube from the PDR and mitigation activities.

For more information or to provide comments: http://www.acq.osd.mil/se/ | dasd-se@osd.mil