

OFFICE OF THE DIRECTOR, DEFENSE RESEARCH ENGINEERING / SYSTEMS ENGINEERING

Template for the Post-Critical Design Review (CDR) 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)

System-Level Critical Design Review

- **Process.** Describe the CDR process and how the CDR was conducted. List the subordinate CDRs leading up to the system-level CDR (i.e., the number of component, subsystem and/or systems level CDRs).
- **Agenda.** Attach the detailed CDR agenda.
- **CDR 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 CDR chair(s).
- **System-Level CDR Entry Criteria.** Provide a list of the entry criteria and indicate if all criteria were met prior to conducting the CDR. If all entry criteria were not met, provide the rationale for conducting the CDR, identify who made the decision to proceed with the CDR, and describe the impact to the program if the review had been delayed until all entry criteria were achieved.
- CDR Exit Criteria. Provide a list of the CDR exit criteria and indicate which have been met.
- **CDR 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.
 - Describe the plan to close any open CDR actions and any requirements/design gaps.
 Mention if convening a Configuration Steering Board is planned and/or warranted.
 - Describe any CDR functionality (such as detailed hardware or software design) that is yet to be completed and the method to assess its impact on system design.
 - o Justify why the Milestone Decision Authority should consider the CDR complete when open action items still exist.
- **Risk Assessment.** Provide an assessment of risk by the participants against the exit criteria for the EMD phase and identify those issues/risks that could result in a breach to the program baseline or substantively impact cost, schedule, or performance.

Summary of Product Design

• **Initial Product Baseline.** Describe all the engineering products that now constitute the system initial product baseline. Also describe how the baseline will be configuration controlled.



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Template for the Post-Critical Design Review (CDR) Report (Con't) Summary of Product Design (Con't)

- **Integration**. Discuss the status of completion of interface requirements. Address the status of any incomplete interface document to include System of Systems interface agreements and identify the plan to finalize all interface requirements in the system initial product baseline.
- **Drawings**. Provide the status of the number of incomplete drawings/design models and the percentage of build-to packages completed for this baseline. Discuss the significance of the drawings/design models not released by the time of the CDR and the date when they will be released. Also discuss the identification and drawing release of critical safety items and critical application items.

Status of Special Topics

- **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 (R&M). Discuss the status of the reliability,
 maintainability, and Built-In Test (BIT) engineering design activities (i.e., final predictions
 and final Failure Mode, Effects and Criticality Analysis (FMECA)). Address whether the
 detailed design meets all R&M specification and Capability Development Document (CDD)
 requirements. If the assessment of the detailed design does not meet the requirements,
 describe the program's proposed corrective actions.
- **Software**. Discuss the status of software design documents, build contents, percentage of software code completed, and significance of software not yet coded. Address any computer storage space issue and percentage of processor usage.
- **Certifications.** Discuss any key certifications (e.g., airworthiness, safety, spectrum, etc.) and projected progress/issues in achieving them.
- **Technical Performance Measures**. Summarize the status of Technical Performance Measures (TPMs). Insert the TPM table presented at the system-level CDR.
- **Key Performance Parameters/Key System Attributes (KPPs/KSAs).** Provide a table which shows the KPPs and KSAs with columns showing threshold, objective, and most recent achieved TPM s; discuss the progress and issues in achieving the KPPs and KSAs by Milestone C.
- **Risks**. 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 CDR and mitigation activities.

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