

IT INVESTMENT MANAGEMENT - CONTROL (2.0)  
SYSTEM DESIGN STAGE (2.3)

Number	Phase/Stage/Task	Process Description
2.3	<b>System Design Stage</b>	<p><b>Entrance Criteria:</b> <i>The entrance criteria for the System Design stage is receipt by the Project Manager from the Project Sponsor of a signed <b>Project Definition Completion Review Memorandum</b>. The Project Manager must also receive a signed copy of any system/service contract from the Contracting Officer.</i></p> <p><b>Purpose:</b> <i>The purpose of the System Design stage is to develop a completed System Design Document, update all applicable plans, and conduct the Critical Design Review.</i></p> <p><b>Exit Criteria:</b> <i>The exit criteria for the System Design Stage is issuance by the Project Sponsor to the Project Manager of a completed and signed <b>Critical Design Review Memorandum</b> with all action items resolved. Courtesy copies of the <b>Critical Design Review Memorandum</b> are provided to the AD's IRM Advisor and the SCO.</i></p> <p><b>Decisions (Go/NoGo Points) :</b> <i>The final System Design step is the Critical Design Review (CDR). This review is used as a major go/no-go decision point before any coding begins.</i></p> <p><b>Deliverables:</b></p> <ul style="list-style-type: none"> <li>• <i>System Design (build-to and code-to) Document</i></li> <li>• <i>Development and internal Quality Assurance processes intended to be used</i></li> <li>• <i>Draft Verification and Test plans</i></li> <li>• <i>Past Scope, schedule and budget status reports</i></li> <li>• <i>Requirements identification and traceability matrices</i></li> <li>• <i>Cost and Schedule updates</i></li> <li>• <i>Findings and Recommendations from Walkthroughs and Reviews</i></li> <li>• <i>Risk analysis and mitigation plans</i></li> <li>• <i>Draft Users Guide</i></li> <li>• <i>Draft Transition or Deployment Plan</i></li> </ul> <p><b>Time Frames:</b> <i>Project Schedule Driven</i></p>

Number	Phase/Stage/Task	Process Description
		<p><b>Who's Involved :</b> <i>Project Analysts/Designers/Developers, User Representatives, Project Quality Assurance Team (QAT) members, System Acceptance Test (SAT) Team members, Configuration Management (CM) Team representatives, Data Administration Team (DAT) representatives, AIS Security Team Representatives, SCO and IMG Representatives</i></p>

Number	Phase/Stage/Task	Process Description
2.3.1	Project Manager and Integrated Project Team prepare System Design Document	<b>Purpose:</b> <i>The first step is to develop the System Design Document. The System Design (build-to and code-to) Document (SDD) contains the system architecture, functional and user requirements, program specifications, security design, database specifications, and other specifications as needed.</i>
		<b>Deliverables:</b> <i>The System Design Document</i>
		<b>Time Frames:</b>
		<b>Who's Involved:</b> <i>Project Manager and the Integrated Project Team</i>
2.3.2	Project Manager and Integrated Project Team update Project Plan and all affected plans	<b>Purpose:</b> <i>To prepare and/or have the required documentation necessary to have completed prior to the Critical Design Review.</i>
		<b>Deliverables:</b>
		<b>Time Frames:</b>
		<b>Who's Involved:</b> <i>Project Manager and the Integrated Project team.</i>
2.3.3	Project Manager determine readiness for Critical Design Review	<b>Purpose:</b> <i>It is the Project Manager's responsibility to determine if the project is ready for the Critical Design Review.</i>
		<b>Deliverables:</b>
		<b>Time Frames:</b>
		<b>Who's Involved:</b> <i>Project Manager</i>
2.3.4	Critical Design Review Team conducts a Critical Design Review	<b>Purpose:</b> <i>The Critical Design Review (CDR) is used as a major go/no-go decision point before any coding begins.</i>
		<b>Deliverables:</b>
		<b>Time Frames:</b>
		<b>Who's Involved:</b> <i>Project Manager and Project Sponsor co-chair the CDR. The following are skill types or organizational representatives participate: Project Analysts/Designers/Developers, User Representatives, Project Quality Assurance Team (QAT) members, System Acceptance Test (SAT) Team members, NIRMC System Engineering, Configuration Management (CM) Team representatives, Data Management Team (DMT) representatives, AIS Security Team representatives, SCO and IMG Representatives</i>

Number	Phase/Stage/Task	Process Description
2.3.5	CDR Team develop findings and recommendations and sends to Project Sponsor	Purpose: <i>Findings and Recommendations are prepared and agreed to by the CDR Team,</i>
		Deliverables: <i>Written findings and recommendations that become part of the project file.</i>
		Time Frames:
		Who's Involved: <i>Project Manager, CDR Team, Project Sponsor</i>
2.3.5.1	Action Items from CDR are tracked and reported to the SCO	Purpose: <i>Any action items that the CDR recommends are tracked by the Project Manager and reported to the SCO. Part of the SCO's responsibility during the control phase is IT Project Oversight.</i>
		Deliverables:
		Time Frames:
		Who's Involved: <i>Project Manager and the SCO point of contact.</i>
2.3.6	Project Sponsor accepts findings and recommendations from the CDR	Purpose: <i>This step serves as the formal go-no go decision point by the Project Sponsor. Upon completing the review, the Project Sponsor decides one of the following:</i> <ul style="list-style-type: none"> <li>• <b>Approval</b> - <i>Completion of the stage is satisfactory with approval to continue the project</i></li> <li>• <b>Limited Approval</b> – <i>Action items require closure before the project can proceed</i></li> <li>• <b>Returned</b> - <i>The stage results are unacceptable and must be redone or the System Design Baseline is deficient, and the project must be re-approved after negotiation with the Business Sponsor, senior management, and/or the ITIB, as appropriate.</i></li> </ul>
		Deliverables:
		Time Frames:
		Who's Involved: <i>Project Manager and the Project Sponsor</i>
2.3.7	Project Manager prepares <b>Critical Design Review Memorandum</b>	Purpose: <i>Based on the Project Sponsor's approval of the CDR findings and recommendations, the Project Manager prepares a Critical Design Review Memorandum for the Sponsor's signature. The project can not proceed to the next stage without the CDR Memorandum so it is in the Project Manager's best interest to see that the Project Sponsor's documents their concurrence with the findings and recommendations of the CDR.</i>
		Deliverables: <b>Critical Design Review Memorandum</b>

Number	Phase/Stage/Task	Process Description
		Time Frames: Who's Involved: <i>Project Manager</i>
2.3.8	Project Manager sends <b>Critical Design Review Memorandum</b> to Project Sponsor	Purpose: <i>Now that the CDR Memorandum has been prepared it is transmitted to the Project Sponsor for signature.</i> Deliverables: Time Frames: Who's Involved: <i>Project Manager</i>
2.3.9	Project Sponsor reviews <b>CDR Memorandum</b>	Purpose: <i>Once received, the Project Sponsor reviews the CDR memorandum, the Project Sponsor may change the wording but can not change the findings and recommendations from the CDR.</i> Deliverables: <b>Critical Design Review Memorandum</b> Time Frames: Who's Involved: <i>Project Sponsor</i>
2.3.10	Project Sponsor signs and sends final <b>Critical Design Review Memorandum</b> back to Project Manager	Purpose: <i>The Project Sponsor signs and returns the CDR Memorandum to the Project Manager for documentation to the Project file.</i> Deliverables: <b>Critical Design Review Memorandum</b> Time Frames: Who's Involved: <i>Project Sponsor and Project Manager</i>