Architectural Review Report

[Note: The following template is provided for use with the Unified Architecture Method. Text enclosed in square brackets and displayed in blue italics (style=InfoBlue) is included to provide guidance to the author and should be deleted before publishing the document. A paragraph entered following this style will automatically be set to normal (style=Body Text).]

Executive Summary

[This is a one-page reiteration of the key objectives for the assessment and a summary of the most important findings and recommendations.]

Goals & Objectives

[See the architecture review checklist

List the members of the architecture review team and other key contributors. Briefly describe the information gathering and analysis methods applied. The purpose of an architecture review is to understand the impact of every architecturally significant decision on every architecturally significant requirement. Review objectives focus on specific aspects of an architecture. These aspects can include:

- *The fit of the architecture to the problem or mission statement,*
- The partitioning of system responsibilities to subsystems and components,
- The specific qualities (i.e., scalability, performance, etc.) to be architecturally controlled,
- The partitioning of the architectural design responsibilities,
- *The identification of skills to implement the system,*
- The verification of scenarios representing the critical functionality of the system, and
- The overall feasibility and specific risks of the architecture

Review objectives fall into the following categories:

- Certifying conformance to some standard:
 - Does the architecture fulfill the constraints and requirements of the relevant standards?
- Assessing the quality of the architecture:
 - Does the architecture fit to the problem or mission statement?
 - o Is the architecture a suitable basis for fulfilling the present and future requirements?
 - Can specific qualities (e.g., scalability, performance, etc.) be architecturally controlled?
 - Are there open issues that have to be clarified?
 - Can the architecture be implemented using existing skills?
 - Which new skills are needed to implement the system?
 - Does the architecture support the realization of scenarios representing the critical functionality of the system?
 - o Is the realization of the architecture and its underlying technical concepts feasible?
 - What are specific technical risks of the architecture?
 - How are the responsibilities of the architecture partitioned?
- Identifying of opportunities for improvement:
 - Which design decisions should be revised in order to improve the architecture?
 - Which improvement measures should be taken?
- Improving communication between stakeholders.]

Scope

[Define the scope of the review:

- List the work products and other deliverables being reviewed
- Does the review include the whole system or only some parts?
- *Does the review include all the stakeholders?*
- Does the review involve all architectural view?
- Does the review include all the Architectural Decisions or only a subset?]

Review Participants

[List the individuals who will participate in the review and their roles during the meeting; for example, moderator, note-taker, reviewer, author.]

Overall Architecture

[Identify the high-level architectural concerns regarding areas such as:

- High–level Architecture
 - o Topology and scalability structure/patterns issues
 - Communication structure/patterns issues
 - o Persistence structure/patterns issues
 - o Fault tolerance and redundancy issues
 - Security solutions structure/patterns issues
 - User experience and GUI structure/patterns issues
 - o Integration of hardware and hardware dependencies
 - Integration of software and software dependencies]
- Strengths Identify the strengths of the architecture and how the can be related to the architecture concerns.
- Issues Identify which topics are subject to further investigation; for all issues a plan needs to be defined with assigned tasks and responsibilities.]

Specific Architecture Aspects

• [See the architecture review checklist]

Requirements

• [See the architecture review checklist]

Application Architecture

• [See the architecture review checklist]

Information Architecture

• [See the architecture review checklist]

Operational Architecture

• [See the architecture review checklist]

Systems Management

• [See the architecture review checklist]

COTS Products Integration

• [See the architecture review checklist]

Change Management, Development & Testing

• [See the architecture review checklist]

Security Architecture

• [See the architecture review checklist]

Key Findings & Actions

[Document the architecture recommendations and findings. New Architectural Decisions (ADs) found in the review must be referenced here.]

Strengths

[Describe the positive findings of the assessment. Rank them from most significant to less significant.]

Issues

[Describe issues identified during the evaluation. Rank them from most severe to less severe. Use the following structure for consistency:

- Issue Give the issue a name
- Describe the nature of the issue and its consequences
- *Propose an approach to addressing the issue*
- Provide references to the information sources

Also see the architecture review checklist]

Recommendations

[During team discussion, recommendations need to be collected that might help the project at a later date, or are optional in the given context. The report should be concise. If there is an issue that needs an extended discussion, such discussion should be moved to the Appendixes section. Hence, the recommendations should be short and to the point.]

Action Plan

[Describe any actions required as a result of the review. Also see the architecture review checklist]

Issues for the Architecture Review Board

[Certain problems or anomalies may be discovered for which a course of action cannot be agreed on by the review team, and which needs to be escalated for resolution.]

Follow-up Review

[Describes the review team's recommendations for follow-up (for example, whether another review is necessary) and what, if any, additional information or data is needed.]