

### Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Conceptual foundation
4.1	General
4.2	Architecture evaluation context
4.3	Architecture evaluation tiers
4.3.1	Evaluation synthesis
4.3.2	Value assessment
4.3.3	Architectural analysis
4.4	Architecture evaluation conceptual model
4.5	Comparison between assessment and analysis
4.6	Architecture evaluation factors
4.7	Customized architecture evaluation frameworks
4.8	Tailoring
5	Conformance
5.1	General
5.2	Creating AE artifacts
5.3	Using generic AE framework to conduct AE efforts
5.4	Verbal forms for the expression of provisions
6	Architecture evaluation framework elements
6.1	Evaluation synthesis
6.1.1	General requirements
6.1.2	Architecture evaluation objectives
6.1.3	Architecture evaluation approaches
6.1.4	Architecture evaluation factors
6.1.5	Architecture evaluation results
6.2	Value assessment
6.2.1	General requirements
6.2.2	Value assessment objectives
6.2.3	Value assessment methods
6.2.4	Value assessment factors
6.2.5	Value assessment results
6.3	Architectural analysis
6.3.1	General requirements
6.3.2	Architectural analysis objectives
6.3.3	Architectural analysis methods
6.3.4	Architectural analysis factors
6.3.5	Architectural analysis results
7	Customized architecture evaluation frameworks
7.1	General requirements
7.2	Framework requirements for architecture evaluation
7.3	Framework requirements for value assessment
7.4	Framework requirements for architectural analysis

7.5	Framework requirements for architecture evaluation work products
8	Architecture evaluation work products
8.1	General requirements
8.2	Architecture evaluation plan
8.2.1	AE plan requirements
8.2.2	AE plan recommendations
8.2.3	AE plan permissions
8.3	Architecture evaluation report
8.3.1	AE report requirements
8.3.2	AE report recommendations
8.3.3	AE report permissions
<b>Annex A (informative) Value and quality concepts</b>	
A.1	General
A.2	Evaluation factors
A.3	Value
A.3.1	General
A.3.2	What is “Value”?
A.3.3	Value-focused thinking
A.3.4	Value assessment of system architectures
A.3.5	Ring’s value model
A.3.6	Stakeholder values, qualities and measures
A.3.7	Value articulation framework
A.4	Quality
A.4.1	General
A.4.2	What is “Quality”?
A.4.3	Architecture quality attributes
A.4.4	Boehm and Nupul’s quality model and ontology
A.4.5	The ISO/IEC 25000 family of standards on quality
A.4.5.1	General
A.4.5.2	ISO/IEC 25000 Quality model framework
A.4.5.3	ISO/IEC 25010 System and software quality models
A.4.5.3.1	Quality in use model
A.4.5.3.2	System/software product quality model
A.4.5.4	ISO/IEC 25012 Data quality model
A.4.5.5	ISO/IEC 25020 System and software product quality measurement reference model
<b>Annex B (informative) Relationship to other standards</b>	
B.1	ISO/IEC standards in the domain of systems and software engineering
B.2	ISO standards in the domain of enterprise activities
B.3	Relationship between architecture standards
<b>Annex C (informative) Architecture evaluation examples</b>	
C.1	General
C.2	Business and IT architecture evaluation
C.2.1	Situation
C.2.2	Business/IT architecture — Evaluation synthesis
C.2.3	Business/IT architecture — Value assessment
C.2.4	Business/IT architecture — Architectural analysis
C.3	Software architecture evaluation
C.3.1	Situation
C.3.2	Software architecture — Evaluation synthesis
C.3.3	Software architecture — Value assessment
C.3.4	Software architecture — Architectural analysis
C.4	Service architecture evaluation
C.4.1	Situation
C.4.2	Service architecture — Evaluation synthesis
C.4.3	Service architecture — Value assessment
C.4.4	Service architecture — Architectural analysis
C.5	Enterprise architecture evaluation
C.5.1	Situation
C.5.2	Enterprise architecture — Evaluation synthesis
C.5.3	Enterprise architecture — Value assessment

**C.5.4 Enterprise architecture — Architectural analysis**

**Annex D (informative) Example architecture evaluation frameworks**

- D.1 General**
- D.2 Architecture Tradeoff Analysis Method (ATAM)**
  - D.2.1 Overview**
    - D.2.1.1 General**
    - D.2.1.2 Purpose**
    - D.2.1.3 Basic approach**
    - D.2.1.4 Conceptual flow**
    - D.2.1.5 Sequence of steps**
    - D.2.1.6 Expected results**
  - D.2.2 Evaluation synthesis**
  - D.2.3 Value assessment**
  - D.2.4 Architectural analysis**
  - D.2.5 Evaluation plan and report**
- D.3 The Method Framework and QUASAR method**
  - D.3.1 Overview**
  - D.3.2 Evaluation synthesis**
  - D.3.3 Value assessment**
  - D.3.4 Architectural analysis**
  - D.3.5 Evaluation plan and report**
- D.4 Analysis of Alternatives (AoA)**
  - D.4.1 Overview**
    - D.4.1.1 General**
    - D.4.1.2 Basic approach**
    - D.4.1.3 Study objectives**
    - D.4.1.4 Maturity assessment**
    - D.4.1.5 Risk assessment**
  - D.4.2 Evaluation synthesis**
  - D.4.3 Value assessment**
  - D.4.4 Architectural analysis**
  - D.4.5 Evaluation plan and report**

**Page count: 0**