

ISO/IEC 25030:2019 (E)

Systems and software engineering — Systems and software quality requirements and evaluation (SQuaRE) — Quality requirements framework

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Abbreviated terms
5	Conformance
6	Concept of quality requirements
6.1	General
6.2	Types of quality requirements
6.3	Targets for quality requirements
6.4	Quality models and measures for quality requirements
6.5	Important considerations of quality requirements
6.5.1	Sources of quality requirements
6.5.2	Categories of ICT products
6.5.3	Interrelation with functional/data requirements
6.5.4	Derivation of quality requirements
6.5.5	Quality requirements trade-offs
7	Quality requirements processes
7.1	General
7.2	Overview of quality requirements processes
7.3	Elicitation of quality needs
7.3.1	Identification of stakeholders
7.3.2	Defining stakeholder needs
7.4	Steps for defining quality requirements
7.4.1	Overall description
7.4.2	Definition of steps
8	Using and governing quality requirements
8.1	Critical success factors for implementing quality requirements
8.2	Quality requirements traceability
8.3	Critical factors for testing quality requirements
Annex A	(informative) Recommended process for elicitation of quality needs
A.1	General
A.2	Defining the project contexts [S1]
A.2.1	General
A.2.2	List the general assumptions of the project [S1-1]
A.2.3	Study the domain of the project [S1-2]
A.2.4	Specify the constraints of the project [S1-3]
A.2.5	List all the stakeholders [S1-4]
A.3	Defining quality needs of each stakeholder [S2]
A.3.1	General
A.3.2	Determine the stakeholder's context of use of the product [S2-1]
A.3.3	Extract and document quality needs [S2-2]

- A.3.4 Associate each quality need to the business need it supports [S2-3]**
- Annex B (informative) Example for mapping quality needs to quality characteristics**
 - B.1 General**
 - B.2 Example: Mapping the “Hand over control” quality need**
- Annex C (informative) Example for specifying quality requirements**
- Annex D (informative) Relationship to ISO/IEC/IEEE 15288 (System lifecycle processes)**
- Annex E (informative) Relationship to ISO/IEC/IEEE 29148 (Requirement engineering)**
 - E.1 Processes and documentations of quality requirements**
 - E.2 Mapping quality requirements to the recommended outline**
- Annex F (informative) Derivation from quality in use requirements to product quality requirements**
- Annex G (informative) Example of relationship between product quality characteristics**
- Annex H (informative) Example of deployment and traceability of quality requirements to software**
- Annex I (informative) Example of stakeholder-target matrix**
- Annex J (informative) Examples of level of quality required for different ICT products(using decision table format)**
- Annex K (informative) IT service quality requirements**

Page count: 46