ISO/IEC 25022:2016 SQuaRE -- Measurement of Quality in Use

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Table 1: Data Sheet for SQuaRE – Measurement of Quality in Use

Title	Systems and software engineering – Systems and software quality requirements and evaluation (SQuaRE) – Measurement of quality in use
Acronym	
Version	2016
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Reference	https://www.iso.org/standard/35746.html

Note: The following is an excerpt from the official ISO catalog. It is provided here as a convenience and is not authoritative. Refer to the original document as the authoritative reference.

Summary

ISO/IEC 25022:2016 defines quality in use measures for the characteristics defined in ISO/IEC 25010, and is intended to be used together with ISO/IEC 25010. It can be used in conjunction with the ISO/IEC 2503n and the ISO/IEC 2504n standards or to more generally meet user needs with regard to product or system quality.

ISO/IEC 25022:2016 contains the following:

- *a basic set of measures for each quality in use characteristic;*
- *an explanation of how quality in use is measured.*

It provides a suggested set of quality in use measures to be used with the quality in use model in ISO/IEC 25010. They are not intended to be an exhaustive set.

It includes as informative annexes examples of how to measure context coverage (Annex A), options for normalising quality in use measures (Annex B), use of ISO/IEC 25022 for measuring usability in ISO 9241-11 (Annex C), a quality in use evaluation process (Annex D), the relationship between different quality models (Annex E), and quality measurement concepts (Annex F).

The measures are applicable to the use of any human-computer system, including both computer systems in use and software products that form part of the system.

It does not assign ranges of values of the measures to rated levels or to grades of compliance because these values are defined for each system or product depending, on the context of use and users' needs.

Some attributes could have a desirable range of values, which does not depend on specific user needs but depends on generic factors, for example, human cognitive factors.

The proposed quality in use measures are primarily intended to be used for quality assurance and management of systems and software products based on their effects when actually used. The main users of the measurement results are people managing development, acquisition, evaluation, or maintenance of software and systems.

The main users of ISO/IEC 25022:2016 are people carrying out specification and evaluation activities as part of the following:

- *development: including requirements analysis, design, and testing through acceptance during the life cycle process;*
- *quality management: systematic examination of the product or computer system, for example, when evaluating quality in use as part of quality assurance and quality control;*
- *supply: a contract with the acquirer for the supply of a system, software product, or software service under the terms of a contract, for example, when validating quality at qualification test;*
- *acquisition: including product selection and acceptance testing, when acquiring or procuring a system, software product, or software service from a supplier;*
- *maintenance: improvement of the product based on quality in use measures.*