## **R6.1 Requirements**

Point Release

Change Summary

November 2017



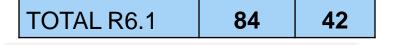
## **SUMMARY OF CHANGES**

Modified = requirement has changed			Түре	Adders	Notes
<b>Terminology</b> = no change to the requirement			Deleted	0	0
			New	0	1
<b>Reworded</b> = wording changed for clarity only			Modified	0	0
			Reworded	11	3
			Terminology	0	0
No real	Adders	Notes	Renumbered Only	0	0
		2	Moved	0	0

No real	Adders	Notes
change	11	3

Terminology	0	0
Renumbered Only	0	0
Moved	0	0
Combined	0	0





**8.3.2.C.1 Project Planning** – The organization's project planning activities shall be based on the defined product and service life cycle model (see <u>8.1.C.1</u>). The project plan should include Throughout the project life cycle, the planning activities should include the following:

- a) project organizational structure,
- b) roles, responsibilities, and accountabilities of the project team,
- c) roles, responsibilities, and accountabilities of related teams or individuals, within and outside the organization, and interfaces between them and the project team,
- d) methods means for scheduling, tracking, issue resolution, and management reporting,
- e) estimation of project factors,
- f) budgets, staffing, and schedules associated with project activities,
- g) the various identification of method(s), standards, documented information, and tools to be used (if such items are clearly defined as part of the product and service life cycle model, a reference to that life cycle model is sufficient),
- h) other related project dependencies references to related plans (e.g., risk management, development, testing, configuration management, and quality),
- i) project-specific development or service delivery environment and physical resource considerations (e.g., resources to address development, user documentation, testing, operation, required development tools, secure computing environment, lab space, workstations, etc.),
- j) customer, user, and external provider involvement during the product and service life cycle (e.g., joint reviews, informal meetings, and approvals),
- k) management of project quality, including appropriate quality measures,
- I) reference to design for X (DFx) plans as appropriate to the product and service life cycle,
- m) lessons learned from previous post-project analyses and retrospectives, including root cause analysis of project lessons learned, and corrective actions to be taken to preclude repetition in future projects.
- n) project-specific training requirements,
- o) required certifications (e.g., product and/or service certifications or employee technical certifications),
- p) proprietary, usage, ownership, warranty, licensing rights, and

q) post-project analysis and improvement activities, including root cause analysis of project lessons learned, and corrective actions to be taken to preclude repetition in future projects. 8.3.2.C.1-NOTE 1 Work instructions defining tasks and responsibilities common to all development projects need not be replicated as part of a project plan per individual project.

8.3.2.C.1-NOTE 2 Estimation of project factors should may consider project factors such as include size, complexity, requirements changes, effort, staffing, schedules, cost, quality, reliability, velocity, and productivity. Data from the estimation process should be analyzed to compare original estimates to actuals.

**8.3.2.C.2 Risk Management Planning** – The organization shall develop and document a plan for the identification, analysis, identify, analyze and control of the risks to the project that can impact cost, schedule, quality, or performance of product and service.

**8.3.2.C.4 Test Planning** – Test plans shall be documented and planning should include determining and documenting as necessary, the: ...

**8.3.2.C.5 Integration Planning** – The organization shall develop and document execute a plan to integrate the hardware, software, and/or service components to ensure they interact as designed. The plan planning shall include...

**8.3.2.HS.1 Configuration Management Planning** – The organization shall establish and maintain a method(s) to perform configuration management plan, which should include...

**8.3.2.HS.2 Product Computing Resources** – The organization shall establish and maintain methods for estimating and tracking estimate and track critical performance parameters for any computing device utilized by the product.

8.3.2.HS.3 Development Process Quality Measurement – During the design and development planning phase activities, the organization shall establish and maintain a method(s) for selecting and reporting identify the appropriate design and development process quality measures for the project. As recommended during this phase, this During these activities, the measurement system shall be implemented appropriately to the project. The measures should cover the areas of project schedule (life cycle phase transition or milestone monitoring), test execution, and test phase defect monitoring. On request by the customer, communications shall include reporting and evaluation of a jointly agreed set of design and development process measurements.

**8.3.4.HS.3 System Testing** – Each product release shall be subjected to a system test in accordance with a documented system test plan. The product release shall be subjected to system testing in accordance with test plans (see 8.3.2.C.4).

**8.3.5.HS.1 Product Design and Development Output** – Product design and development outputs to support, maintain, and use the product should include, but are not limited to

- a) system architecture,
- b) system detailed design,
- c) source code, and
- d) user documentation.

8.3.5.HS.1 Note: Product Design and Development Output may also include items such as training materials and Application Program Interface (API) specifications.

**8.3.6.C.1 Change Management Process** – The organization shall maintain documented information to ensure that all requirements and design changes, which may arise at any time during the product and service life cycle, are managed and tracked in a systematic and timely manner appropriate to the life cycle stage. ...

8.3.6.C.1-NOTE While a A change management process is required throughout the life cycle, controls within that process may depend on the life cycle stage. For example, during design and development, the organization needs the ability to react to rapidly changing customer requirements, and take advantage of emerging technologies with an encompassing, responsive change management process. ...

**8.6.S.1 Test Documentation** – Software tests shall be conducted according to a documented test plan. Information retained from software testing shall include

- a) test results,
- b) analysis of test results,
- c) conformity to expected results, and
- d) problem reporting for nonconforming items.

## **R6.1 Training**

All of the changes in R6.1 are for clarity.

None change the intent or impact of the requirement.

Therefore there will be no training required for R6.1