

Checklist for Requirements Specification Reviews

Validity

- ☐ Are all internal cross-references to other requirements correct?
- ☐ Are all performance objectives properly specified?
- ☐ Are any specified error messages unique and meaningful?
- ☐ Is each requirement uniquely and correctly identified?
- ☐ Is each software functional requirement traceable to a higher-level requirement (e.g., system requirement, use case)?
- ☐ Are TBDs still TBD (can any details be added)?

Consistency

- ☐ Are all requirements written at a consistent and appropriate level of detail (aside from TBD)?
- ☐ Do any requirements conflict with or duplicate other requirements?
- ☐ Is each requirement written in clear, concise, unambiguous language?
- ☐ Is each requirement free from content and grammatical errors?
- ☐ Are all requirements actually requirements, not design or implementation solutions?

Completeness

- ☐ Are all external hardware, software, and communication interfaces defined?
- ☐ Have algorithms intrinsic to the functional requirements been defined?
- ☐ Does the specification include all of the known customer or system needs?
- ☐ Is the expected behavior documented for all anticipated error conditions?
- ☐ Are the use cases fully defined and documented to the known extent?
- ☐ Is any necessary information missing from a requirement? If so, is it identified as TBD?
- ☐ Are all security and safety considerations properly specified?
- ☐ Are other pertinent quality attribute goals explicitly documented and quantified, with the acceptable tradeoffs specified?
- ☐ Are all time-critical functions identified, and timing criteria specified for them?

Feasibility/Realizability

- ☐ Do the requirements provide an adequate basis for design?
- ☐ Is the implementation priority of each requirement included?
- ☐ Is each requirement in scope for the project?
- ☐ Can all of the requirements be implemented within known constraints?
- ☐ Are there any potential unnecessary requirements or “golden plating”?

Testability/Verifiability

- ☐ Is each requirement verifiable by testing, demonstration, review, or analysis?
- ☐ Is each use case testable independently of one another or are dependencies specified and defined?
- ☐ Are all alternate paths and exceptions defined in a verifiable way?