

Assurance case argument quality can be checked during the assessment process with the use of a checklist given below.

1. Clear and unambiguous assurance case

- a) Well focused – the argument goal clearly specifies an object, required properties and all context elements
- b) Understandable – the goals, line of reasoning and context are clearly specified
- c) Precise – descriptions are clear and the terms used are defined
- d) Explicit – claims and argumentation strategies are explicitly defined
- e) Restricted – the context and boundaries are clearly specified
- f) Defined terminology – abbreviations, acronyms, and technical terms are defined within the assurance case or in a referenced glossary

2. Convincing arguments

- a) Direct – reasoning should aim directly at the specific claim
- b) Defensible – capable of being justified and defended
- c) Comprehensive – reasoning should cover the full scope of the top claim, its context and the assumptions
- d) Complete – containing all elements required to reason the conclusion but not redundant elements
- e) Robust – not based on optimistic assessment and weak premises
- f) Justified assumptions – assumptions are explicitly stated and justified, supported by evidence when appropriate

3. Compelling evidence

- a) Veracious – representing the truth and being accurate
- b) Applicable – consistent with the goals and useful for the reasoning, adequate
- c) Unambiguous – not open to more than one interpretation
- d) Sufficient – containing all information required by the supported base claim
- e) Up to date – representing the current state adequate for the goals and context
- f) Traceable – evidence sources are traceable to original documents or systems of record