This document contains the list of questions that compose the CoFI-based checklist of the benchmark to be applied to software requirement specifications that describe the telecommand verification service of software implementing the packet utilization standard – PUS.

This document uses the following abbreviations:

- APID Application Process ID

- TC Telecommand

- TVSS Telecommand Verification Service Specification

Questions Normal Behaviour

- 1. Does the TVSS state that this service shall send the telecommands received from the ground to its destination process after its checking?
- 2. Does the TVSS define the situations in which this service shall send the verified TC to its destination application process and shall not send it?
- 3. Does the TVSS state that this service shall send a report of success acceptance to the ground station if this is requested through the first bit set?
- 4. Does the TVSS state that the confirmation of acceptance sent by the destination application shall be different from the other confirmations sent by it?
- 5. Does the TVSS state that the verification of the TC execution starting shall occur after the acceptance confirmation by the destination application process?
- 6. Does the TVSS state that the TC execution started report of success shall be generated after the starting confirmation sent by the destination application process?
- 7. Does the TVSS state that the starting confirmation sent by the destination application shall be different from the other confirmations sent by it?
- 8. Does the TVSS state how the number of steps of the TC execution progress shall be informed to the TC verification service?
- 9. Does the TVSS state that the TC execution progress report of each step shall be generated after the destination application process receives the confirmation of progress?

- 10. Does the TVSS state that the confirmation of progress sent by the destination application shall be different from the other confirmations sent by it?
- 11. Does the TVSS state that the confirmation of progress sent by the destination application shall identify its step?
- 12. Does the TVSS state that the verification of the TC execution completion shall be performed after the confirmation of the execution of the last step of progress sent by the destination application?
- 13. Does the TVSS state that the confirmation of completion sent by the destination application shall be different from the other confirmations sent by it?

Questions Specified Exceptions Behaviour

- 14. Does the TVSS define the situations in which this service shall send the TC acceptance report of failure to the ground duo to illegal APID?
- 15. Does the TVSS define the situations in which this service shall send the TC acceptance report of failure to the ground duo to wrong checksum?
- 16. Does the TVSS define the situations in which this service shall send the TC acceptance report of failure to the ground duo to illegal packet type?
- 17. Does the TVSS define the situations in which this service shall send the TC acceptance report of failure to the ground duo to illegal packet subtype?
- 18. Does the TVSS define the situations in which this service shall send the TC acceptance report of failure to the ground duo to illegal or inconsistent application data?
- 19. Does the TVSS state whether other types of failure shall be handled by this service?
- 20. Does the TVSS state that the not acceptance of the TC by the destination application process shall result in a TC acceptance report of failure?
- 21. Does the TVSS state that a TC execution start report of failure shall be generated after the destination process application confirms the failure of the TC execution starting?

- 22. Does the TVSS state that a TC execution progress report of failure shall be generated after the destination process application confirms the failure of the TC execution progressing?
- 23. Does the TVSS state that a TC execution completed report of failure shall be generated after the destination process application confirms the failure of the TC execution completion?

Questions Sneak Paths Behaviour

- 24. Does the TVSS define the answers that the destination application process can generate?
- 25. Does the TVSS state the action of this service if any expected answer is not received?
- 26. Does the TVSS define the action of this service if it receives a TC acceptance answer from the application process while the service verifies the TC packet fields?
- 27. Does the TVSS define the action of this service if it receives a TC execution started answer from the application process while the service verifies the TC packet fields?
- 28. Does the TVSS define the action of this service if it receives a TC execution progress answer from the application process while the service verifies the TC packet fields?
- 29. Does the TVSS define the action of this service if it receives a TC execution completed answer from the application process while the service verifies the TC packet fields?
- 30. Does the TVSS define the action of this service if it receives a TC execution started answer from the application process while the service waits for the TC acceptance answer?
- 31. Does the TVSS define the action of this service if it receives a TC execution progress answer from the application process while the service waits for the TC acceptance answer?

- 32. Does the TVSS define the action of this service if it receives a TC execution completed answer from the application process while the service waits for the TC acceptance answer?
- 33. Does the TVSS define the action of this service if it receives a TC execution progress answer from the application process while the service waits for the TC execution started answer?
- 34. Does the TVSS define the action of this service if it receives a TC execution completed answer from the application process while the service waits for the TC execution started answer?
- 35. Does the TVSS define the action of this service if it receives a TC execution completed answer from the application process while the service waits for the TC execution progress answer?