



**Smart Cards;
Technical Report to improve test equipment integrity;
(Release Independent)**

Reference

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Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Smart Card Platform (SCP).

The contents of the present document are subject to continuing work within TC SCP and may change following formal TC SCP approval. If TC SCP decides to modify the contents of the present document, it will be re-released by TC SCP with an identifying change of release date and an increase in version number as follows:

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The aim was to develop a technical report (TR) that defines how to optimally set up the test environment to execute test case implementations based on ETSI TC SCP test specifications.

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

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1 Scope

The present document provides how to optimally set up the test environment to execute test case implementations based on ETSI TC SCP test specifications.

This includes (but is not limited to):

- Derived guidelines to set up a test environment;
- Test equipment behaviour in case of additional activity triggered by test sequences;
- Optimization of the test environment;
 - Noise issues when using the Single Wire Protocol;
 - Limiting the noise impacts;
- Checking the integrity of the test environment;
- Example of a Test Case for Integrity check.

The targeted audience for the present document is users of test case implementations based on ETSI TC SCP test specifications as well as test equipment manufacture.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

Not applicable.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] ETSI TS 102 613: "Smart Cards; UICC - Contactless Front-end (CLF) Interface; Part 1: Physical and data link layer characteristics".
- [i.2] ETSI TS 102 694-1: "Smart Cards; Test specification for the Single Wire Protocol (SWP) interface; Part 1: Terminal features".