



Smart Ticketing Alliance - Certification Working Group



**STA Contactless Interface Certification
for Public Transport Products
Implementation Conformance Statement
(ICS) for PICC**



REVISION LIST

| Version | Date | Modifications |
|---------|------------|--|
| V1.0 | 13/12/2017 | First public version for PICC and PCD |
| V2.0 | 06/07/2018 | Separation in two different documents: one for PCD and this document for PICC Version applicable for PICC testing in accordance with CEN/TS 16794:2017 |
| V2.1 | 16/11/2018 | Editorial changes and correction of some mistakes |
| V2.2 | 16/06/2020 | Editorial update on the item [PICC3.1] The information about a previous certification shall be published in the certification letter. |
| V2.3 | 23/11/2022 | The item “[PICC1.9] Type of card body structure” shall be published in the certification letter. |
| V3.0 | 17/11/2022 | Version applicable for PICC testing in accordance with ISO/IEC TS 24192:2021 Release Candidate version subject to adjustments post round robin tests campaign with accredited Test Laboratories |
| V3.1 | 09/07/2024 | Editorial changes |
| V3.2 | 07/10/2024 | The version 2.3 has been added in the revision list. |



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1 Scope

This document contains the Implementation Conformance Statement (ICS) for STA Contactless Interface Certification for Public Transport products and is intended for vendors submitting a PT object for certification.

Please note that ICS data with (*) will be published in the certification letter issued by the STA Certification Body.



2 Certification Stakeholders

a. Vendor

| Vendor identification | |
|-----------------------|---------------------------|
| Company name: | Click here to enter text. |
| Main contact | |
| Contact name: | Click here to enter text. |
| Address: | Click here to enter text. |
| Telephone: | Click here to enter text. |
| Email address: | Click here to enter text. |

b. Test Laboratory

| Test Laboratory identification | |
|--------------------------------|---------------------------|
| Company name: | Click here to enter text. |
| Main contact | |
| Contact name: | Click here to enter text. |
| Address: | Click here to enter text. |
| Telephone: | Click here to enter text. |
| Email address: | Click here to enter text. |

c. Certification Body

| Certification Body identification | |
|-----------------------------------|---------------------------|
| Company name: | Click here to enter text. |
| Main contact | |
| Contact name: | Click here to enter text. |
| Address: | Click here to enter text. |
| Telephone: | Click here to enter text. |
| Email address: | Click here to enter text. |



3 ICS for PT objects – PICC (information to publish)

This clause and the following set out the information that needs to be provided by the PT object vendor when filing a product validation request.

This ICS references the technical characteristics for PICC defined in Clause 11.4 of ISO/IEC TS 24192-1:2021.

a. PICC Product Description

[PICC1] Administrative data

[PICC1.1] (*) Brand name: [Click here to enter text.](#)

[PICC1.2] (*) Trade name: [Click here to enter text.](#)

[PICC1.3a] (*) Hardware version: [Click here to enter text.](#)

[PICC1.3b] (*) Software version: [Click here to enter text.](#)

[PICC1.4] (*) PICC features ISO/IEC 7816 contact interface (dual): Yes No

[PICC1.5] (*) IC manufacturer: [Click here to enter text.](#)

[PICC1.6] (*) IC reference / size: [Click here to enter text.](#)

[PICC1.9] (*) Type of card body structure: [Click here to enter text.](#)

The PICC is based on a STA certified PICC (*): Yes No

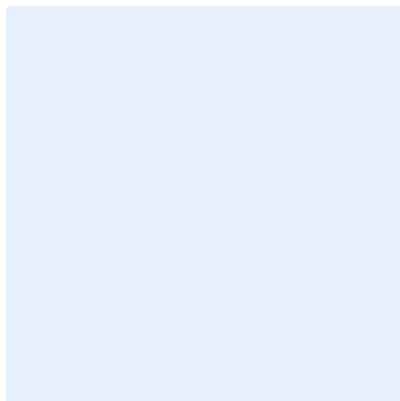
If yes STA PICC certificate number (*): [Click here to enter text.](#)

If yes rationale to justify the delta-certification (*): [Click here to enter text.](#)

b. PICC General Technical Characteristics

[PICC2] General technical characteristics

[PICC2.2] (*) Reference of PICC Zero Point (target ID-marked on sample or photo or diagram):



[Click here to enter text.](#)



[PICC2.3] (*) Operational temperature class supported as defined in Clause 11.2 of ISO/IEC TS 24192-1:2021:

Class A

Class I

[PICC2.4] (*) PICC class according to ISO/IEC 14443:

"Class 1"

"Class 2"

"Class 3"

Does not claim to meet the requirements of one particular PICC class

c. PICC Supported Options

[PICC3] General supported options

[PICC3.1] (*) Supported communication signal interface(s) and protocol(s):

Type A Type B

Other: [Click here to enter text.](#)

[PICC4] Type A supported options (where applicable)

[PICC4.1] (*) PCD to PICC bit rates supported: fc/128 (~106 kbit/s)

Other: [Click here to enter text.](#)

[PICC4.2] (*) PICC to PCD bit rates supported: fc/128 (~106 kbit/s)

Other: [Click here to enter text.](#)

[PICC4.3] (*) Only symmetrical bit rates supported: Yes No

[PICC4.10] (*) S(PARAMETERS) support: Yes No

[PICC5] Type B supported options (where applicable)

[PICC5.1] (*) PCD to PICC bit rates supported: fc/128 (~106 kbit/s)

Other: [Click here to enter text.](#)

[PICC5.2] (*) PICC to PCD bit rates supported: fc/128 (~106 kbit/s)

Other: [Click here to enter text.](#)

[PICC5.3] (*) Only symmetrical bit rates supported: Yes No

[PICC5.4] (*) PUPI value: Fixed number Random number

[PICC5.9] (*) Extended ATQB support: Yes No

If yes, SFGI: [Click here to enter text.](#)

[PICC5.10] (*) S(PARAMETERS) support: Yes No

[PICC5.11] (*) All AFIs are supported: Yes No

If not, indicate all supported AFI(s): [Click here to enter text.](#)

[PICC5.12] (*) REQB/WUPB with N > 1 support: Yes No



4 ICS for PT Objects – PICC (information not to publish)

a. PICC Product Description

[PICC1] Administrative data

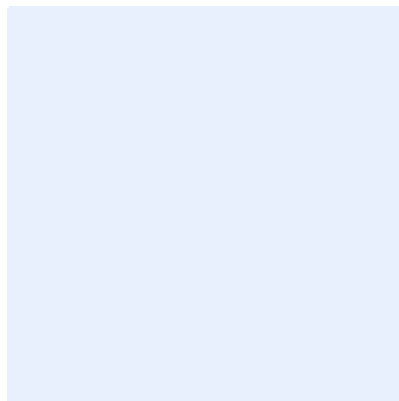
- [PICC1.7] Contactless antenna manufacturer: [Click here to enter text.](#)
- [PICC1.8] Contactless antenna model reference: [Click here to enter text.](#)
- [PICC1.10] Card body or PICC structure manufacturing site: [Click here to enter text.](#)
- [PICC1.11] IC embedding site (for dual PICC card): [Click here to enter text.](#)

Additional information concerning product description: [Click here to enter text.](#)

b. PICC General Technical Characteristics

[PICC2] General technical characteristics

- [PICC2.1] Antenna diagram and position on the PT object under test (with dimensions):



[Click here to enter text.](#)

Additional information concerning technical characteristics: [Click here to enter text.](#)

c. PICC Supported Options

[PICC4] Type A supported options (where applicable)

- [PICC4.4] UID: Single size (4 bytes) random Single size (4 bytes) fixed
 Double Size (7 bytes)
 Triple size (10 bytes)
- [PICC4.5] FWI: [Click here to enter text.](#)
- [PICC4.6] SFGI: [Click here to enter text.](#)
- [PICC4.7] FSCI: [Click here to enter text.](#)



[PICC4.8] CID support: Yes No

[PICC4.9] NAD support: Yes No

[PICC4.11] Frames with error correction support: Yes No

[PICC5] Type B supported options (where applicable)

[PICC5.5] FWI: [Click here to enter text.](#)

[PICC5.6] Maximum Frame Size Code in ATQB: [Click here to enter text.](#)

[PICC5.7] CID support: Yes No

[PICC5.8] NAD support: Yes No

[PICC5.13] Frames with error correction support: Yes No

Additional information concerning supported options: [Click here to enter text.](#)

d. PICC Test Parameters

[PICC6] Test parameters

[PICC6.1a] TEST_COMMAND1 APDU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.1b] TEST_COMMAND1 Answer to ADPU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.1c] Precondition sequence for TEST_COMMAND1: [Click here to enter text.](#)

Is there a command which expects a response consisting of n chained I-blocks? Yes No

[PICC6.2a] TEST_COMMAND2 APDU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.2b] TEST_COMMAND2 Answer to ADPU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.2c] Precondition sequence for TEST_COMMAND2: [Click here to enter text.](#)

Is there a command which needs more than FWT time for execution? Yes No

[PICC6.3a] TEST_COMMAND3 APDU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.3b] TEST_COMMAND3 Answer to ADPU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.3c] Precondition sequence for TEST_COMMAND3: [Click here to enter text.](#)

[PICC6.4a] TEST_COMMAND4 APDU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.4b] TEST_COMMAND4 Answer to ADPU definition (hexadecimal value): [Click here to enter text.](#)

[PICC6.4c] Precondition sequence for TEST_COMMAND4: [Click here to enter text.](#)

[PICC6.5] TEST_COMMAND_SEQUENCE1: [Click here to enter text.](#)

Additional information concerning test parameters: [Click here to enter text.](#)

NOTE Usages of TEST_COMMAND1, TEST_COMMAND2, TEST_COMMAND3 and TEST_COMMAND4 for PICC tests are defined in ISO/IEC 10373-6.



If the PICC requires additional sequences to be ready to accept TEST_COMMAND1, TEST_COMMAND2, TEST_COMMAND3 or TEST_COMMAND4, those sequences shall be described in the precondition sequence fields.

TEST_COMMAND_SEQUENCE1 shall contain at minimum 2 APDUs with their respective expected answers. It shall also include application specific cryptographic functions, if applicable.



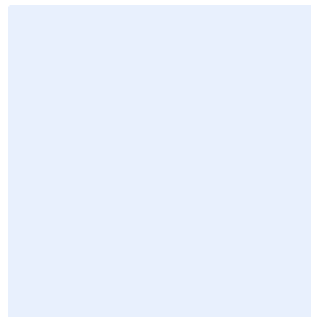
5 Status of the ICS

| | |
|----------------|-----------------|
| Status: | To be validated |
|----------------|-----------------|

ICS number¹: [Click here to enter text.](#)

Date of validation by the Certification Body: [Click here to select a date.](#)

Signature of the Certification Body's representative:



- END OF DOCUMENT -

¹ For Certification Body use