STA Contactless Interface Certification
for Public Transport Products
Implementation Conformance Statement (ICS) for PICC
## REVISION LIST

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Modifications</th>
</tr>
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<tbody>
<tr>
<td>V1.0</td>
<td>13/12/2017</td>
<td>First public version for PICC and PCD</td>
</tr>
<tr>
<td>V2.0</td>
<td>06/07/2018</td>
<td>Separation in two different documents: one for PCD and this document for PICC</td>
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<tr>
<td></td>
<td></td>
<td>Version applicable for PICC testing according to CEN/TS 16794:2017</td>
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<tr>
<td>V2.1</td>
<td>16/11/2018</td>
<td>Editorial changes and correction of some mistakes</td>
</tr>
<tr>
<td>V2.2</td>
<td>16/06/2020</td>
<td>Editorial update on the item [PICC3.1]</td>
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<td></td>
<td>The information about a previous certification shall be published in the certification letter.</td>
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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

<table>
<thead>
<tr>
<th>Vendor identification</th>
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<tbody>
<tr>
<td><strong>Company name:</strong></td>
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<tr>
<td><strong>Main contact</strong></td>
</tr>
<tr>
<td><strong>Contact name:</strong></td>
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<tr>
<td><strong>Address:</strong></td>
</tr>
<tr>
<td><strong>Telephone:</strong></td>
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<tr>
<td><strong>Email address:</strong></td>
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b. Test Laboratory

<table>
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<tr>
<th>Test Laboratory identification</th>
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</thead>
<tbody>
<tr>
<td><strong>Company name:</strong></td>
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c. Certification Body

<table>
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<th>Certification Body identification</th>
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<tr>
<td><strong>Company name:</strong></td>
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</table>
3 ICS for PT objects - PICC

This clause sets 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 9.2.4 of CEN/TS 16794-1:2017.

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.

[ PICC1.7] Contactless antenna manufacturer: Click here to enter text.

[ PICC1.8] Contactless antenna model reference: Click here to enter text.

[ PICC1.9] Type of card body structure: 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.

The PICC is based on a STA certified PICC (*):

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

If yes rationale to justify the delta-certification (*): 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:

Click here to enter text.

[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 range supported:

- Class A (Ambient)
- Class I (-10 °C to + 50 °C)

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

- Unclassified
- "Class 1"
- "Class 2"
- "Class 3"

Additional information concerning technical characteristics: Click here to enter text.
### c. PICC Supported Options

**PICC3**  Protocol characteristics

- **PICC3.1** (*) Supported communication signal interface(s) and protocol(s):
  - Type A ☐ Type B ☐
  - Other: Click here to enter text.

**PICC4**  Type A (where applicable)

- **PICC4.1** (*) PCD -> PICC bit rates supported: ☑ fc/128 (~106 kbit/s)
  - Other: Click here to enter text.

- **PICC4.2** (*) PICC -> PCD bit rates supported: ☑ fc/128 (~106 kbit/s)
  - Other: Click here to enter text.

- **PICC4.3** (*) Only symmetrical bit rates supported: ☑ Yes ☐ No

**PICC4.4**  UID:

- Single size (4 bytes) ☐
- Double size (7 bytes) ☑
- Triple size (10 bytes) ☐

**PICC4.5** (*) UID value:

- Fixed number ☑
- Random number ☐

**PICC4.6**  FWI: Click here to enter text.

**PICC4.7**  SFGI: Click here to enter text.

**PICC4.8**  FSCI: Click here to enter text.

**PICC4.9**  CID support:

- Yes ☑ No ☐

**PICC4.10**  NAD support:

- Yes ☑ No ☐

**PICC4.11** (*) S(PARAMETERS) support:

- Yes ☑ No ☐

**PICC5**  Type B (where applicable)

- **PICC5.1** (*) PCD -> PICC bit rates supported: ☑ fc/128 (~106 kbit/s)
  - Other: Click here to enter text.

- **PICC5.2** (*) PICC -> 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 ☑

**PICC5.5**  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 ☐

**PICC5.9** (*) 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

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 1-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.

[PICC6.4] TEST_COMMAND_SEQUENCE: Click here to enter text.

Additional information concerning test parameters: Click here to enter text.

NOTE    Usages of TESTCOMMAND1, TESTCOMMAND2 and TESTCOMMAND3 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 or TEST_COMMAND3, those sequences should be described in the precondition sequence fields.

A test sequence (list of APDUs) shall be defined. The list shall contain at minimum 2 APDUs with their respective expected answers.

Since the use of cryptographic functions have a strong influence on the power consumption of the carrier medium and therefore on the parameters of its contactless interface, testing of the RF interface shall be conducted with those cryptographic functions that are employed by the specific application-to-application transactions.
4 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