**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. |
| 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 |

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# 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.**

# Certification Stakeholders

## 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. |

## 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. |

## 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. |

# 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.

## 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):  

[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 (\*):  

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

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

## 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:





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





## 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: 

Other: Click here to enter text.

[PICC4.2] (\*) PICC to PCD bit rates supported: 

Other: Click here to enter text.

[PICC4.3] (\*) Only symmetrical bit rates supported:  

[PICC4.10] (\*) S(PARAMETERS) support:  

[PICC5] Type B supported options (where applicable)

[PICC5.1] (\*) PCD to PICC bit rates supported: 

Other: Click here to enter text.

[PICC5.2] (\*) PICC to PCD bit rates supported: 

Other: Click here to enter text.

[PICC5.3] (\*) Only symmetrical bit rates supported:  

[PICC5.4] (\*) PUPI value:  

[PICC5.9] (\*) Extended ATQB support:  

If yes, SFGI: Click here to enter text.

[PICC5.10] (\*) S(PARAMETERS) support:  

[PICC5.11] (\*) All AFIs are supported:  

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

[PICC5.12] (\*) REQB/WUPB with N > 1 support:  

# ICS for PT objects – PICC (information not to publish)

## 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.

## 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.

## PICC Supported Options

[PICC4] Type A supported options (where applicable)

[PICC4.4] UID:  





[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:  

[PICC4.9] NAD support:  

[PICC4.11] Frames with error correction support:  

[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:  

[PICC5.8] NAD support:  

[PICC5.13] Frames with error correction support:  

Additional information concerning supported options: Click here to enter text.

## 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?  

[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?  

[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.

# Status of the ICS

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

ICS number[[1]](#footnote-2): 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 [↑](#footnote-ref-2)