



**Smart Ticketing Alliance
Certification Working Group**

STA Certification

Overview

October 2016

Acronyms

CB	Certification Body
CEN	Centre for European Norms, the European Committee for Standardization, is an association that brings together the National Standardization Bodies of 33 European countries
CWG	Certification Working Group
STA	Smart Ticketing Alliance
GCB	Group of Certification Bodies
TS	Technical Specification

Terms and Definition

Certification Body: Third-party entity, member of the STA or sponsored by a STA member, in charge of the certification process as described in ISO 17065:2012

Evaluation: Process defining compliance of the product or functional system, based on the Laboratory test, audit or analysis report, laboratory advice and certification requirements conformity.

Product: Product, system or solution for which the certification of compliance is requested.

Reference Sample: sample of a Product under test to be delivered to an Applicant Laboratory. The same Reference Sample shall be sent to each laboratory in order to ensure the consistency of results.

Reference Test Results: measurements established after a first round-robin test of Reference Samples by chosen laboratories. These measurements will be considered as reference measurements for future Applicant Laboratories.

Test Laboratory (or Test Lab): entity performing the Evaluation of a Product.

Test Tools: set of test apparatus and test circuits used for testing the contactless communication of Products.

Vendor: Provider of the Product which is candidate for certification.

References

The STA Certification proposal is based on the following standards:

[REF1] CEN TS 16794, « Public transport — Communication between contactless readers and fare media — Part 1: Implementation requirements”.

[REF2] CEN TS 16794, « Public transport — Communication between contactless readers and fare media — Part 2: Test plan”.

[REF3] ISO/IEC 17065:2012 General requirements for the certification of products, services and process.

[REF4] ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories.

STA Certification

STA considers it is **essential that public authorities and users can be confident in the quality of contactless communication between contactless readers and fare media. Certification is the appropriate means to give trust.**

The STA certification program established by STA consists of a Group of Certification Bodies (STA GCB) bringing together certification bodies authorized to certify compliance of transportation and acceptance media with the CEN technical specification TS 16794 about contactless communication.

Extension of the certification scope to other technical fields, such as the application layer, may be decided later.

The objective of the STA Group of Certification Bodies is to **establish a common approach to conformity certification** and the technical equivalence of certification carried out by the STA Group of Certification Bodies' members. The members will work collectively to achieve these aims but remain independent certification bodies being responsible for their own decisions and for the control of their different certification marks.

The STA Group of Certification Bodies (STA GCB) works as a platform to ease mutual recognition between the member certification bodies (and the testing laboratories for product testing) and to limit the costs of those agreements.

A primary goal of the STA GCB is to ensure that the certification bodies and the associated testing laboratories operate on a common basis.

The main principles of the STA certification program are the following:

- a Group of Certification Bodies (GCB) gathers Certification Bodies (CB) authorized to certify compliance with CEN TS 16794;
- Membership of GCB is open to two categories of CB:
 1. a CB accredited according to ISO/IEC 17065 against CEN TS 16794 can be a member of the GCB;
 2. a CB complying with a subset of ISO/IEC 17065 can be member of the GCB; it has to submit to an audit.
- Certificates delivered by an ISO/IEC 17065 accredited CB are recognized throughout the EU.

A set of documents gives the framework for this certification program:

The **Terms of Reference**, prepared by the STA CWG and approved by the STA board, defines the Group of Certification Bodies (GCB) and organizes the community of STA CBs. This document indicates:

- the conditions of membership for the CB
- the governance: Board of Management (its initial and current composition)
- the technical structure : CWG and audit manager
- the CB approval process

The others documents, elaborated and approved by the CWG, are:

- **Code of Conduct** based on ISO/IEC 17065 and dealing with ethical matters
- **Certification Procedure**
- **Certification Body's Requirements and Evaluation Methodology**
- **Technical Guidelines** for the CB and Test laboratories
- **Test Tools Validation Methodology** for laboratories

The laboratories associated with a CB run “round robin tests” using reference devices and media in order to check that tests realized on the same products by each laboratory lead to similar results thus ensuring consistency across the network of test labs.

All these documents are available in the STA repository: www.smart-ticketing.org