

## Guidance to Applicant

For

### Smart card / Microcontroller Module / Inlay product Certification

(Issue 5 Dated 06 October 2016)

## INTRODUCTION

Smart card / Microcontroller module / Inlay Product Certification scheme is a third party Certification scheme promoted by NIC, Ministry of Electronics and Information Technology, Government of India. This scheme is intended to provide by means of system assessment, testing and subsequent surveillance, an adequate level of confidence that the products (Smart card / Microcontroller module / Inlay) conforms to the specified requirements of appropriate standards.

## 1 TERMINOLOGY

### 1.1 Smart card / Microcontroller module / Inlay Product Certification Scheme

Certification scheme for Smart card / Microcontroller module / Inlay is being operated by NIC, Department of Electronics and Information Technology, Government of India.

### 1.2 Certification Body (CB)

A body, which conducts certification product of conformity, as per the standards and specifications defined.

### 1.3 Definition of Smart card / Microcontroller module / Inlay

Smart card / Microcontroller module is a device capable of storing data and executing commands, which is a single chip Microcontroller mounted on a plastic card and the dimensions of the card and chip are specified in ISO-7816 specifications. Inlay is a device containing the chip module and antennae laminated in the paper or card body as per ISO-14443 specification is also capable of storing data and executing commands. The products (Smart card/Microcontroller module/inlay) should be compliant with the specifications annexed at **Annexure-I** and any subsequent instructions from user / line ministries as may be issued from time to time. The said Microcontroller chip should have non-volatile re-writable memory capacity of minimum as mentioned in application consisting of application data, file headers, security definitions, and a

maximum of 350 bytes for Operating System Interfacing, as specified by user departments / line ministries from time to time.

### **1.4 Certification**

Action by Certification Body demonstrating its confidence that manufacturer's product and quality system is in conformity with specified requirements of appropriate standard and quality system requirements.

## **2 OBJECTIVE**

The objectives of the scheme are to:

- provide confidence that the certified smart cards from different vendors will be interoperable in the ecosystem. This is achieved by providing a testing and certification framework based on compliance with SCOSTA / SCOSTA-CL.

## **3 SCOPE**

For the purpose of certification products mentioned at 1.1 above are covered in the scope. The scheme envisages to demonstrate conformance to SCOSTA/SCOSTA-CL requirements. The scope of certification is limited to smart card compliance certificate of SCOSTA / SCOSTA-CL standard and does not cover the processes and controls required in the complete lifecycle of the smart card like security at card level, personalization etc.

## **4 OPERATION OF THE SCHEME**

Operation of the scheme covers following aspects:

### **4.1 Quality System**

The manufacturer shall maintain a well defined and documented quality system as per the requirements of the product (Smart card / Microcontroller module / Inlay) Certification Scheme.

- 1) Manufacturer shall produce a certificate of ISO 9001 / CMMI Level 3 or above for Quality management system of product (Smart card / Microcontroller module / Inlay) production facility from an accredited certification body.

- 2) If supplier/applicant is different from manufacturer (implantation / embedding) then it shall demonstrate to the implementation of QMS to certification body by providing ISO 9001 / CMMI Level 3 or above certificate by an accredited certification body for respective activity.

#### **4.2 Testing Procedure**

The manufacturer shall forward necessary information/documents, H/w, S/w to the test laboratory through Director (Smart card product Certification) along with samples. The manufacturer shall maintain records of all in-house testing (test reports) as per relevant requirements.

#### **4.3 Testing and Test Report**

All Samples of product (Smart card / Microcontroller module / Inlay) for testing are submitted to certification body by manufacturer/supplier/or their authorized representative at company cost from his factory, godown or distributor/dealer. The samples for surveillance testing are selected at random by Certification Body or its authorized representatives and provided by supplier or manufacturer at company cost from his factory, godown or distributor/dealer. The test charges would be borne by the manufacturer/supplier and are payable directly to the certification body. The test laboratory after conducting the tests, forwards the test report to Certification Body. A copy of the test report can be made available to manufacturer/supplier on request to Certification Body.

#### **4.4 Analysis of Test Report and Assessment Report**

The Certification Committee scrutinizes the test & assessment reports and recommends for approval to Certification Body ensuring technical and procedural conformance with the requirements. However, if any non-conformity is observed in the above, the Certification body advice to the manufacturer to carry out corrective actions or submit the fresh samples for testing to the extent of non-conformance observed.

#### **4.5 Grant of Certification of Approval**

The decision regarding certification of Products (Smart card / Microcontroller module / Inlay) of a manufacturer or otherwise shall be taken by Certification Committee. Following the committee decision to grant certificate, the certificate of approval will be signed by Head (Smart card product Certification Body). The supplier/applicant is conveyed for successful completion of processing of his application and grant of certification.

#### **4.6 Validity of Certificate**

The approval is granted initially for one year and is renewed annually subject to demonstrating compliance with the requirements. Only 3 consecutive renewals are allowed for a product to be certified, after that a fresh application should be submitted.

#### **4.7 Need of Re-Certification:**

Any change after Certification, in any of the components listed below, will be treated as Major Nonconformity and will require re-certification

- Operating System of product (Smart card / Microcontroller module / Inlay) or its Version.
- Microcontroller Chip (Integrated Circuit) Module (its Make, Model or Technical Architecture).

### **5 CONFIDENTIALITY**

The Certification Body ensures confidentiality of information obtained in the course of certification activities at all levels of its organization including committees and sub-committees, unless otherwise required by law.

### **6 RENEWAL OF CERTIFICATE**

The Approval shall be valid for a period one year subject to the provisions of the Scheme. The approved manufacturer shall submit its product for renewal within the specified period as mentioned in the renewal document (SCPC-05-07). The current validity period of the certificate is display on the website <http://scosta.gov.in>. The Certification Body may, at its discretion, decide for any one of the following actions:

renewal after partial assessment/testing;

renewal after complete assessment/testing;

reject the renewal request after assigning reasons.

After three subsequent renewals applicant have to submit fresh application.

### **7 SUSPENSION OF CERTIFICATE**

Certificate may be suspended for a limited period at the discretion of Certification Body under any of the following circumstance:

If the audit/renewal testing is done on the certified device obtained from market based on input received from any stake holder questioning about the quality of device indicates minor non-conformance.

Failure of manufacturer to notify any major design changes in the product or change in standard/sources of critical components.

If improper use of the approval is not rectified to the satisfaction of Certification Body.

If there has been any other contravention of the applicable requirements or rules of procedures of the scheme.

An official suspension is confirmed by the Certification Body through a registered letter to the manufacturer or by equivalent means and indicates the conditions under which suspension will be revoked. The Certification Body may publish notification of suspension. Upon fulfillment of indicated conditions within the specified period, the Certification Body shall revoke suspension and notify the manufacturer accordingly. Otherwise, the approval shall be withdrawn.

## **8 WITHDRAWAL OF APPROVAL**

The Certification body shall withdraw the approval under any of the following circumstances:

If the manufacturer remains under suspension for six months continuously for persistent non-conformance to the requirements of the scheme;

If the manufacturer either will not or cannot ensure conformance to changed rules of procedure of the Scheme;

If the manufacturer ceases to produce the product;

If the manufacturer fails to meet the financial obligations to Certification Body;

At the formal request of the manufacturer;

Any other serious contravention of applicable requirements of rules of procedures of the scheme.

The official communication by the Certification Body of the withdrawal shall be either through a registered letter or equivalent means. The Certification Body may publish notification of the withdrawal of approval.

## **9 LIABILITY**

The approval given shall not be regarded as in any way diminishing the normal contractual responsibilities/obligations between the manufacturer and the buyer. While the approval will normally be a sound indicator of the competence of the manufacturer to produce product (Smart card / Microcontroller module / Inlay) conforming to certification body requirements, it should not be taken as any sort of guarantee accorded by the Certification Body. The Certification Body or the test laboratories will not be liable for any damage/loss caused to anyone on account of malfunctioning of the item or otherwise for which approval is given. The manufacturer will ensure manufacture of safe products and is fully responsible for any damage/loss etc. caused to anyone on account of the usage of the item.

## **10 COMPLAINTS/APPEALS**

### ***Complaints***

Complaint from user against the applicant/manufacturer pertaining to scope of certification:

User is expected to interact with manufacturer for rectification of his grievance.

If the matter remains unresolved, user can make a formal complaint to Certification Body. Certification Body is expected to resolve the issue expeditiously but within three months.

Complaint from manufacturer against Certification Body:

If manufacturer disagrees with a decision related to assessment, testing, interpretation of standard etc., he can discuss his views (without jeopardizing future decisions) with Director (Smart card product certification), Certification Body.

### ***Appeal***

If the matter still persists, then a formal appeal can be made to DG, NIC who in turn, would appoint a three member committee. Two members, at least, of such committee shall be acceptable to both sides. Decision of DG, NIC would be final and binding to

both the parties. All dealings/correspondence in respect of appeals are strictly confidential.

**Annexure – I**

- a) Product (Smart card / Microcontroller module / Inlay) specifications Microcontroller based IC card with contacts/contactless and with a minimum non-volatile re-writable memory capacity as available and as mentioned in application form.
- b) Compliant to ISO/IEC 7816-1, 2, 3 for SCOSTA/SCOSTA-CL for contact base interface and compliant to ISO 14443 part 1, 2, 3 and SCOSTA-CL for contactless interface.
- c) Compliant to SCOSTA v1.2b dated March 15, 2002, including all addendums and errata including the latest of dated 1<sup>st</sup> July 2006 and for SCOSTA-CL it should be compliant to SCOSTA-CL Ver. 1.2, dated 06<sup>th</sup> July 2007 including all addendums & errata.
- d) Supply voltage 3V nominal
- e) T=0 or T=1 transport protocol for contact interface and ISO-14443 type A or B for contactless interface.
- f) Min 10 years data retention
- g) Min 300,000 E<sup>2</sup>PROM write cycles / Rewritable Flash write cycles
- h) Operating ambient temperature range –25 Deg C to +55 Deg C
- i) The card must be Non-initialized SCOSTA/SCOSTA-CL card.