

IMMEDIATE

F No. STQC/IT&eGov/IoTSCS/2024/001
STQC Directorate
Ministry of Electronics & Information Technology
New Delhi

Date: 05.03.2024

OFFICE MEMORANDUM

Subject: Rules and Procedures related to IoT System Certification Scheme (IoTSCS) -Reg

Internet of Things (IoT) refers to a vast network that provides an interconnection between various objects and intelligent devices. The three important components of IoT are sensing, processing, and transmission of data. Nowadays, the IoT technology is used in many different sectors, including the domestic, healthcare, telecommunications, environment, industry, construction, water management, and energy. IoT technology, involving the usage of embedded devices, differs from computers, laptops, and mobile devices. Due to exchanging personal data generated by sensors and the possibility of combining both real and virtual worlds, security is becoming crucial for IoT system.

To safeguard the IoT ecosystem, testing & evaluation framework of this system is desirable. STQC Directorate has prepared the scheme for assessment of IoT devices/system with objective to promote security of IoT devices/system. This scheme will facilitate improvement of National Cyber Security profile. The implementation of this certification scheme is to provide confidence to users that the risks associated with the threats currently set forth in the IoT ecosystem are addressed by a device/system provider through conformance to this scheme. Demonstration of conformance through this certification program provides formal recognition of a conformance to the industry standards.

STQC Directorate proposed IoT System Certification Scheme (IoTSCS) prepared as per international standards. During the pilot scheme, Four IP cameras (with different models having same SoC and firmware) are certified under pilot scheme of IoT System Certification Scheme (IoTSCS). Initial certification was based on ISO/IEC 27400 (Testing Specification as per OWASP Application Security Verification Standard v4.0 - Appendix C: Internet of Things Verification Requirements).

The scheme is revised with the approval of competent authority on 15-12-2023. The current scheme is based on ISO/IEC 27400 and Testing Specification as per OWASP Application Security Verification Standard - Appendix C: Internet of Things Verification Requirements and ISO/IEC 27402:2023 Cybersecurity IoT security and privacy Device baseline requirements.

For further information on the registration process and guidelines, please refer to the below process:

Step No.	Step details	Pre-requisite	Remarks
Step1	Contact with CB of IoTSCS (IoT System Certification Scheme)	1. IoT product details	Email may be send to Head (IT & eGov)
Step2	Submission of formal application with Technical Construction File (TCF) to IoTSCS. Application Fee will be submitted only after getting proposal and invoice from STQC.	1. Filled up Application form 2. Submission of TCF with supporting documentation.	The application form is available from STQC portal. Registration fees of Rs 25,000.00 plus Applicable GST
Step3	Submission of Documentation along with the application to IoTSCS	NIL	The outline of the requirements for documents is available.
Step4	The project is formally allotted to the Testing Lab by IoTSCS and appointment of Assessor	The evaluation project is registered at IoTSCS	The registration number shall be used for all future references.
Step 5	Testing Lab sends quotation	Developer / Sponsor Contacting lab for Evaluation.	
Step 6	Developer / Sponsor confirms and place work Order to Testing Lab for Evaluation	Acceptance of Quotation for evaluation	
Step 7	Agreement between Lab and Developer / Sponsor	Receipt of the work order by Testing Lab	The Agreement format will be sent by Lab
Step 8	Evaluation and Validation	Submission of technical documents Submission of Product and process documents by the developer	The result of evaluation will be shared in the form of Test Report with supporting documents
Step 9	Release of Certification Report	All the requirements of IoTSCS for target IoT product/system	
Step 10	Grant of Certification	Compliance to all the requirements and the requirements of IoTSCS	

The IoT devices will be categorized with three levels (Level 1, Level 2 and Level 3)

- a) Level 1 requirements aim to provide a baseline security for connected devices.
- b) Level 2 requirements are to provide protection against attacks that go beyond software and that target the hardware of the device.
- c) Level 3 requirements are to provide requirements for devices where compromise should be avoided at all cost.

IoT System Certification Scheme (IoTSCS) is following below mentioned certification process (in brief) for certification of product:

1. Certification Body (CB) allocate the job of product evaluation to one of the STQC/STQC empanelled lab.
2. To monitor and review the product evaluation, Assessor is appointed by the CB to continuously associated with evaluation project in laboratory, reviews all evaluation work outputs like test reports etc. on behalf of CB.
3. After evaluation and validation, Assessor will present the case in front of Certification Committee (CC) of IoTSCS. Meeting will be arranged by CB.
4. After recommendation of CC members, CB will issue a certificate.

Developer/ sponsor may opt for Common Criteria (CC) certification for the critical IoT devices.

Following are the scheme documents available on the website:

- a) Rules and Procedures for IoT System Certification Scheme (STQC/IoTSCS/D01)
- b) Differential Analysis Report (DAR) for Product Series Details (STQC/IoTSCS/F02)
- c) Technical Construction File ((STQC/IoTSCS/F03)
- d) Checklist for Auditors/Assessors (STQC/IoTSCS/F04)
- e) Application for IoT Product Certification (STQC/IoTSCS/F01)

In event of change of Manufacturing Location for the device already certified under IoTSCS Scheme, thereafter in case vendor needs to apply for Re-certification with the change in OEM address in comparison to the previous certified IoT Device, then the Vendor shall apply for full testing as it was done for the case of initial certification at laboratory for certification mandatorily.

The Vendor while submitting certificates as evidences may ensure that Certification Body shall have mechanism for validation of these certificates. Further, Vendor must submit the certificates along weblinks through which the certificates will be verified online or email of the certificate issuing body from which the verification may be conducted within 15 working days failing which the certification/re-certification will not be considered.

The certificates/Test reports shall be in Hindi or English language only.

Laboratory shall issue two test reports in duplicate with an original copy to Applicant and Duplicate to CB STQC Directorate.

Any declaration/document submitted by Vendor or OEM shall be signed digitally with a valid Digital Certificate issued in India from certifying authority only as per IT Act, 2000 and the same shall be verifiable failing which the submitted document may not be considered.

Vendor shall apply for Re-Certification at least 3 months before expiry of existing certificate.

Vendor shall inform Certification Body about any change in Device, Management, Manufacturing locations etc. within 3 months with supporting documents for continuation of certificate.

IoT Certificate may be issued in fresh applications with validity from date of issuance of certificate. Further, in case of Re-certification certificate validity may be issued for 3 years in continuation with original certificate.

In case of change in any certified devices, vendor need to submit impact analysis report with conclusion stating Minor Change or Major Change. The same will be reviewed by Certification Body and the decision of Certification Body shall be final for granting of status as Minor or Major Change. In case of Major Change, Fresh Certification shall be conducted and device certificate validity shall be granted from date of recommendations of Certification Committee.

To maintain the highest standards of testing and ensure compliance with certification process, it is mandatory for all applicants to register their products with Certification Body before initiating any testing procedures at laboratory.

This is issued with the approval of competent authority.



(Suresh Chandra)

Scientist G & Head of Group (IT & eGov)

Copy to:

1. o/o Director General - For Information
2. STQC Website - For information to Vendors
3. STQC/STQC empaneled Test Laboratory - Through STQC website
4. Members of Certification Committee - Through STQC website
5. Members of Certification Body - Through STQC website