

भारत सरकार दूरसंचार विभाग दूरसंचार अभियांत्रिकी केन्द्र खुर्शीद लाल भवन, जनपथ, नई दिल्ली—110001

Government of India

Department of Telecommunications

Telecom Engineering Centre

Khurshid Lal Bhawan, Janpath, New Delhi-110001

OFFICE MEMORENDUM

No. 2-1/2018/SD/TSDSI/TEC/5

dated 08-05-2020

Subject: Policy for adoption of domestic/international Standards by TEC – Standardization Guide regarding

Telecommunication Engineering Centre (TEC) under Department of Telecommunications (DOT) is a Standards Setting Organization (SSO) for telecom and related ICT sector in India. TEC formulates new standards/ specifications (GR/IR/SR/ER). The broad roles & responsibilities are attached at Annexure I. In addition to development of new standards/specifications, TEC has also initiated adoption of standards of domestic/international bodies' standards like TSDSI, ITU, ETSI, IEEE, ISO, IEC, 3GPP, IETF etc.

- 2. After formation of Telecom Standards Development Society, India (TSDSI), need was felt for a policy for ratification/adoption of TSDSI/international standards. In view of this, a committee was constituted in TEC to formulate the policy for ratification/adoption of TSDSI/international standards. Based on the recommendations of the Committee, the "Standardization Guide" a policy document that outlines the process and the procedures to be used by TEC for ratification/adoption of domestic/international telecom and related ICT standards of SDOs as National standards has been approved by the competent authority. The copy of the Standardization Guide is attached as Annexure II for ready reference.
- 3. The broad guidelines of deliberation/recommendations of the Committees as given below:
 - i. As standards are highly technical and complex documents and therefore require to be properly examined before these are endorsed, meaning thereby that these need to pass through a public consultation process. TEC shall therefore adopt the standards after due consultation process instead of ratifying them.
 - ii. For adoption ISO/IEC-Guide 21 has been used as guiding document.
 - iii. The standards should be adopted by TEC as National Standards.





- iv. National Standards adopted shall be voluntary unless made mandatory by its use, reference or adoption by regulation / Govt. directive.
- v. TEC shall implement the standard adoption process with the help of institutional frame work which will consist of:
 - Telecom Standards Advisory Committee (TSAC),
 - Consultative Committees (CC)
 - Task Force (TF) setup for the purpose.
 - Standardization Secretariat

The details of the institutional mechanism including their responsibility, constitution etc are detailed at Annexure C of Standardization Guide.

- vi. The adoption process will be completed in three months after circulation of the draft.
- vii. IPR shall not be subject matter of adoption.
- viii. Standards ratification/adoption process as recommended by the committee is detailed out in the Standardization Guide placed at Annexure 2.
- 4. The Telecom Standards Advisory Committee (TSAC) will be Apex committee to be headed by DDG (S), TEC and comprising members from TEC, CDOT, TSDSI, Govt. bodies, OEMs, TSPs, Academia, R&D organizations etc. (max 11 members), with following functions:
 - i. To examine, evaluate and endorse standards
 - ii. To oversee & review the standardization program
 - iii. To strategize and prioritize standardization activities
 - iv. To advise TEC on standardization policies, strategies and best practices
 - v. To collaborate with other standard formulating bodies
- 5. Consultative Committee (CC) will be the Working Group (WG) constituted under TSAC consisting of the technical experts from TEC, CDOT, TSDSI, Govt. bodies, OEMs, TSPs, Academia, R&D organizations etc (min 10 members) with Chairman from the concerned TEC division and Vice chairs from the industry/academia and the function of the CC will be to collate, review and include or reject public comments. Task Force (TF) will be constituted for a specific or inter-related work which shall submit its report to CC or TSAC.
- 6. Standardization Secretariat -comprising of one Director, 2 ADGs/ADEs, 2 JTOs, one PA, one MTS under Standardization division in TEC will scrutinize the proposals. It will also invite the public comments and its collation, approvals etc. The Standardization Secretariat will set up by utilizing the internal staff from TEC in the interim with approval of Head, TEC.
- 7. Other details like maintenance of Standards, revision of Standards, numbering plan etc are also detailed in the Standardization Guide.

And

- 8. The institutional mechanisms for adoption of TSDSI/international standards has been put in place by constituting two committees i.e. Telecom Standards Advisory Committee (TSAC) and Consultative Committee (CC) for adoption of oneM2M standards vide letter no 2-1/2018/SD/TSDSI/TEC/4 dated 12-02-2019 in anticipation of approval of Standardization Guide. Subsequently, a Consultative Committee (CC) for adoption of the 3GPP has been constituted. Similarly, committees as and when required will be constituted on case to case basis after due approval.
- The competent authority has approved the "Standardization Guide a policy document for adoption/ratification of domestic/international Standards into National Standards". Under the policy, all other approvals like formation of any committee, approval of adoptions of standards will be carried out with the approval of Head, TEC.

This issues with approval of Hon'ble Minister of Communication.

(Premjit Lal)

Director (Standardization) (dirsted.tec-dot @gov.in)

To

- 1. All DDGs, TEC, K.L. Bhawan, New Delhi
- 2. ED, CDOT, New Delhi
- 3. DG, TSDSI, New Delhi
- All the Industry Associations/Manufacturers/Telecom Service Providers (TSPs)/Academia/R&D Institutes etc.

Copy to:

- 1. PPS to Secretary (Telecom), DOT, New Delhi for kind information please
- 2. PPS to Member (Services), Digital Telecom Commission, New Delhi for kind information please
- PPS to Member (Technology), Digital Telecom Commission, New Delhi for kind information please
- 4. Advisor & Head, TEC, K. L. Bhavan New Delhi for kind information please
- 5. DDG (SRI)/DDG(NT)/DDG(IC), Department of Telecom, New Delhi
- 6. Dir (IT), TEC for uploading on TEC website
- 7. All Directors, TEC, New Delhi

Telecom Engineering Centre (TEC) is the technical arm and attached office of Department of Telecommunication (DOT). The broad role and responsibilities of the TEC are as given below:

- i. It formulates standards, specifications {Generic requirements (GR), Interface requirement (IR), Service requirements (SR)} and technical regulation {Essential Requirements (ER)} as a Standards Setting Organization (SSO) in the field of telecom and related ICT sector. TEC as SSO has developed more than 600 specifications/standards in the form of GRs/IRs/SRs/ ERs/Standards in the field of telecom and related ICT sector.
- ii. Under Unified License (clause 23.1) of Department of Telecommunications mandates the use of TEC standards/specifications in the Indian Networks is prescribed as below:

"the Licensee shall provide the details of the technology, proposed to be deployed for operation of the service, to the Licensor. For providing the Service, the Licensee shall utilize any type of equipment and product that meet TEC standards/ specifications, wherever made mandatory by the Licensor from time to time. In the absence of mandatory TEC standard, the Licensee may utilize only those equipment and products which meet the relevant standards set by International standardization bodies, such as, ITU, ETSI, IEEE, ISO, IEC etc.; or set by International Fora, such as 3GPP, 3GPP-2, IETF, MEF, WiMAX, Wi-Fi, IPTV, IPv6, etc. as recognized by TEC and subject to modifications/adaptation, if any, as may be prescribed by TEC from time to time."

Thus, the telecom standards /specifications developed or prescribed by TEC DOT are regarded in India as de-facto National standards /specifications.

- iii. TEC is implementing the Mandatory Testing & Certification of Telecom Equipment (MTCTE) framework wherein
 - "any telegraph which is used or capable of being used with any telegraph established, maintained or worked under the licence granted by the Central Government in accordance with the provisions of section 4 of the Indian Telegraph Act, 1885 (hereinafter referred to as the said Act), shall have to undergo prior mandatory testing and certification in respect of parameters specified in Essential requirements prepared by TEC for various products."
- iv. As per allocation of Business Rules, 1961 (modified as on 31-1-2017), the activity "Promotion of standardization, research and development in telecommunications" is under the mandate of DOT (Para 3, Page 31 of Allocation of Business Rules) that is undertaken by TEC.



- v. TEC is the designating authority (DA) for designating the conformity assessment bodies (CABs)/certification bodies (CBs) for the purpose of certification of telecom products.
- vi. TEC is the designated National Enquiry Point (NEP) of World Trade Organization (WTO) Technical Barrier to Trade (TBT) for telecom sector.
- vii. TEC also works as testing and inspection agency for telecom products through its various labs like IPV6 lab, SAR lab, NGN lab etc.
- viii. India is member of International Telecommunication Union (ITU) since 1869 and DOT is the nodal ministry for ITU. DOT/TEC represents India in ITU as country member. In addition, Head TEC is the coordinator for National Woking Groups (NWG) that corresponds to ITU-T's Study Groups (SGs). The India's position and interest are articulated in the Study Groups through these NWGs. These NWGs/NSGs contribute participate in the standardization process of ITU in standardization sector (ITU-T) and Radiocommunication (ITU-R).
- ix. Under Public Procurement Preference to Make in India (PPP-MIII) Department of Promotion of Industry & Internal Trade (DPIIT) has identified Department of Telecom (DoT) as the nodal Department for implementing the provisions related to procurement of goods, services or works related to telecom sector in all ministries/departments. For compliance of national standards or specification, certification from Indian bodies like TEC, STQC, BIS is a mandatory requirement to be submitted by the bidders for DOT/telecom sector.
- x. TEC is also involved in cross sector standardization work to evolve the relevant standards in cross-sectors in telecom and related ICT sector.

Annexure II

(The Standardization Guide is attached separately in the PDF format.)

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