

प्रक्रियाएं और मार्गदर्शिकाएँ टीईसी ०५००९:२०२५

(सं: टीईसी ०५००९:२०२० को अधिक्रममत करता है)

PROCEDURES AND GUIDELINES

TEC 05009:2025

(Supersedes TEC 05009:2020)

टीईसी मानकों/दस्तावेजों के नियमन हेतु प्रक्रियाएं और मार्गदर्शिकाएँ

PROCEDURES AND GUIDELINES FOR FORMULATION OF TEC STANDARDS/DOCUMENTS



दूरसंचार अभियांत्रिकी केंद्र

खुर्शीद लाल भवन, जनपथ, नई दिल्ली -११०००१,भारत

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इस सर्वाधिकार सुरक्षित प्रकाशन के किसी भी भाग को दूरसंचार इंजीनियरिंग केन्द्र, नई दिल्ली की लिखित अनुमित के बिना किसी भी रूप में या किसी भी माध्यम से—इलेक्ट्रॉनिक, यांत्रिक, छायाप्रति, रिकॉर्डिंग, स्कैनिंग या अन्य किसी प्रकार से—पुनः प्रस्तुत, भंडारित या प्रसारित नहीं किया जा सकता।

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CONTENTS

S. No.	Description	Page No.		
1.0	Background	6		
2.0	Scope of the Document	7		
3.0	About TEC	8		
4.0	Definitions and Structure of TEC Standards/Documents	9		
4.1	Standard for Essential Requirements for a Product/Equipment	10		
4.2	Standard for Generic Requirements for a Product/Equipment	11		
4.3	Standard for Interface Requirements for a Product/Equipment	11		
4.4	Standard for Service Requirements	12		
4.5	Standard Document of TEC	12		
4.6	TEC Test Guide	12		
5.0	Format and Numbering for Standard Document	13		
5.1	Broad format of TEC Standard Document	13		
5.2	Numbering of Standard Document	14		
6.0	Constitution of Committees, Groups and Forum	15		
6.1	Development Coordination Committee (DCC)	15		
6.2	DCC Sub-Committee	17		
6.3	Draft for Comments (DFC) Group	18		
6.4	Manufacturers' Forum (MF)	18		
6.5	Timelines for Committee/Forum formation	19		
6.6	Telecom Standards Advisory Committee (TSAC)	20		
6.7	Consultative Committee (CC)	21		
6.8	Task Force			
6.9	Public consultation	22		
7.0	Functions of The Committees, Groups and Forum for formulation of TEC Standard	24		
	Documents			
7.1	DCC	24		
7.2	DCC Sub-Committee	24		
7.3	Manufacturers' Forum (MF)	24		
7.4	Draft for Comments (DFC)	25		
7.5	Concerned Division	25		
8.0	Standard Document Formulation, Modification, Withdrawal & Review	25		
8.1	Initiation for framing TEC Standard	25		
8.2	TEC Standard Document Formulation Procedure	26		
8.3	Framing of TEC Test Guide (Erstwhile TSTP)	33		
8.4	Time Schedule	35		
8.5	Proceedings of the Meetings	38		
8.6	Modifications to TEC Standard	38		
8.7	Withdrawal of TEC Standard	39		
8.8	Review of TEC Standard	39		
9.0	TEC Standard for Essential Requirements	39		
9.1	Essential Requirements (ER) Numbering Scheme	39		
9.2	Mechanism for formulation of Essential Requirements (ERs)	40		
9.3	Formulation of TEC Standard for Essential Requirements (ERs) 41			

9.4	Modification of ER	42
9.5	Withdrawal of ER	42
9.6	Review of ER	43
10.0	Review of Procedures and Guidelines document for formulation of TEC Standards	43
	Abbreviations	44
	Annexure-A: Template for TEC Standard for Generic Requirements for a	
	Product/Equipment	
	Annexure-B: Template for TEC Standard for Interface Requirements for a	
	Product/Equipment	
	Annexure-C: Template for TEC Standard for Service Requirements	
	Annexure-D: Template for Standard document of TEC	
	Annexure-E: Template for TEC Test Guide	
	Annexure-F: Template for Information Sheet	
	Annexure-G: Checklist for Document Verification by RC Division	
	Annexure-H: Template for cover page of Standard Adopted by TEC	

HISTORY SHEET

S.No	Document No.	Title	Remarks
1	SSP-002 Oct.06	Standard and Specifications	
		Formulation Procedure	
2	CSSP (01 MAY 2008)	Network Conformity Standards	
		System & Procedures	
3	TEC 05009:2020	Procedures and Guidelines for	Includes revised
	(Dec,2020)	formulation of TEC Standards	Numbering Scheme,
		/Documents	timelines for
			formulation of
			documents, ERs with
			the launch of MTCTE
			and other related
			matter
4	TEC 05009:2025	Procedures and Guidelines for	Revised to ensure
	(Dec,2025)	formulation of TEC Standards	alignment with the
		/Documents	Telecommunications
			(Framework to Notify
			Standards, Conformity
			Assessment and
			Certification) Rules,
			2025

PROCEDURES AND GUIDELINES FOR FORMULATION OF TEC STANDARDS/DOCUMENTS

No. TEC 05009: 2025

1.0 BACKGROUND

- 1.1 Network Conformity Standards System & Procedures, hereinafter referred to as CSSP (01 MAY 2008), was formulated for Standardization of process & procedures, numbering scheme, structure of TEC documents viz. Generic Requirements (GR)/Interface Requirements (IR)/Service Requirements (SR)/ Test Schedule and Test Procedure (TSTP). It also envisaged the process for formulation, modification, withdrawal and review of documents i.e. GR/IR/SR etc. through involvement of Groups, Committees and Forums.
- 1.2 Subsequently, it was decided to convert existing TEC documents (ER/GR/IR/SR etc.) into Standard documents and also provide a new numbering scheme.
- 1.3 This revised version of Procedures and Guidelines for Formulation of TEC Standards/Documents i.e. CSSP (01 MAY 2008), after consultation with concerned TEC Divisions, also includes the formulation of Essential Requirements (ERs) with the launch of Mandatory Testing and Certification of Telecommunications Equipment (MTCTE) from 01.08.2019.
- 1.4 Section 19 of the Telecommunications Act, 2023 empowers the Central Government of India to notify standards and conformity assessment measures in respect of
 - a) telecommunication equipment, telecommunication identifiers and telecommunication network;
 - b) telecommunication services, in consonance with any regulations notified by the Telecom Regulatory Authority of India from time to time;
 - c) manufacture, import, distribution and sale of telecommunication equipment;
 - d) telecommunication security, including identification, analysis and prevention of intrusion in telecommunication services and telecommunication networks;
 - e) cyber security for telecommunication services and telecommunication networks; and
 - f) encryption and data processing in telecommunication.

- 1.5 Thereafter, the central Government in exercise of the powers conferred by section 19 read with clause (zj) of sub-section (2) of section 56 of the Telecommunications Act, 2023, and in supersession of rules 528 to 537 of the Indian Telegraph Rules, 1951 relating to testing and certification of telegraph has framed the Telecommunications (Framework to Notify Standards, Conformity Assessment and Certification) Rules, 2025, hereafter referred as TFNSCAC Rules, 2025.
- 1.6 The Telecommunication Engineering Center has been designated as an appropriate authority for framing the standards and conformity assessment measures in accordance with TFNSCAC Rules, 2025.
- 1.6 A committee was constituted vide letter No. 27-08/2023-STD/TEC, dated 26.05.2025, to review the standard development procedure to ensure alignment with the Telecommunications (Framework to Notify Standards, Conformity Assessment and Certification) Rules, 2025, hereinafter referred to as TFNSCAC Rules, 2025, notified as G.S.R. 315(E) on 16 May 2025 and to propose necessary modifications for effective implementation of the framework.

2.0 SCOPE OF THE DOCUMENT

- 2.1 The purpose of this document is to outline the process to be followed and the procedure to be used by Telecommunication Engineering Centre (TEC), for formulation of:
 - TEC Standards (erstwhile specifications viz. ERs/GRs/IRs/SRs/SDs)
 - Test Guide (erstwhile TSTP) associated with TEC Standards or special instructions, if any.
 - Adoption of Standards.
- 2.2 The document also contains the framework for the procedure for formulation of:
 - Committees
 - Sub-Committees and
 - Forums
- 2.3 These Committees/Sub-Committees/Forums are formed for development of TEC documents including revision of documents, as mentioned above.

3.0 ABOUT TEC

- 3.1 TEC is the technical arm of Department of Telecommunications, entrusted with the task of framing Standards/Specifications/Guidelines for Telecom Equipment & Telecom Network in the country with an objective to establish State-of-the-Art, seamlessly interoperable Telecom Networks. Telecom Equipment Manufacturers/Suppliers get their products tested and certified against these Standards.
- 3.2 TEC is driven by a vision consistent with the new demands of a competitive telecom environment wherein it would leverage its capability as a "Centre of Excellence" in telecom to position India as a lead Telecom Knowledge and Manufacturing Hub of Asia Pacific nations, by driving Telecom Standards, Manufacturing Support and Network Building Skill-sets in the interests of this region and market. Standards are formulated/adopted in consultation with its various stakeholders viz. Manufacturers, Traders, Telecom Service Providers, Labs, Academia etc.
- 3.3 Indian Telegraph (Amendment) Rules 2017, notified vide Gazette Notification No G.S.R. 1131(E) Part XI dated 5th September 2017, stipulates prior Mandatory Testing and Certification of Telecom Equipment (MTCTE) in respect of parameters as determined by the Telegraph Authority.

The above said Rules of 2017 are now replaced with the Telecommunications (Framework to Notify Standards, Conformity Assessment and Certification) Rules, 2025 (TFNSCAC Rules, 2025).

- 3.4 TEC also issues the following certificates after conformance testing against relevant documents (TEC Standard document / Manufacturers Specifications and prototype of a telecom product).
 - Type Approval Certificate (TAC)
 - Interface Approval certificate (IAC)

- Certificate of Approval (CoA)
- Technology Approval
- 3.5 TEC has been notified as the Appropriate Authority for framing the standards and conformity assessment measures in accordance with TFNSCAC Rules, 2025.

4.0 DEFINITIONS AND STRUCTURE OF TEC STANDARDS/DOCUMENTS

STANDARD

Rule 2(h) of TFNSCAC Rules, 2025 defines standard as a document issued by the Appropriate Authority which lays down the characteristics, related processes, codes, specifications, essential requirements, recommended practices, classification, test methods and procedures, in respect of any or all aspects specified under section 19 of the Telecommunications Act, 2023.

Most important advantages/needs of using Standards, with regard to telecom equipment/network/services, are to:

- Ensure quality and reliability
- Comply with regulatory requirements & Improve market acceptance
- Ensure system interoperability & facilitate interchangeability of parts
- Comply with customer requirements & ensure safety of user
- Achieve economies in purchase of equipment

The TEC Standard documents are as follows:

Sr. No	Description of the Standard	Earlier Nomenclature
1.	TEC Standard for Essential	Essential Requirements
	Requirements for a Product/Equipment	(ERs)
2.	TEC Standard for Generic	Generic Requirements
	Requirements for a Product/Equipment	(GRs)
3.	TEC Standard for Interface Requirements for	Interface Requirements
	a Product/Equipment	(IRs)
4.	TEC Standard for Service Requirements	Service Requirements
		(SRs)
5.	Standard document of TEC	Standard
6.	TEC Test Guide (associated with the TEC	Test Schedule and Test
	Standard)	Procedure (TSTP)

Table-1

The details of TEC Standards are as follows:

4.1 STANDARD FOR ESSENTIAL REQUIREMENTS (ERS) FOR A PRODUCT/ TELECOMMUNICATION EQUIPMENT

Essential Requirements of equipment are a set of requirements against which Certification of Conformity Assessment is issued. Essential Requirements (ER) comprises of following requirements:

- EMI/EMC
- Safety
- Interoperability
- Interface
- Other Technical requirements
- Security Requirements: As per notification issued by NCCS from time to time.

4.2 STANDARD FOR GENERIC REQUIREMENTS FOR A PRODUCT/EQUIPMENT

The Standard for Generic Requirements for a Product/Equipment (erstwhile Generic Requirements (GR)) for a telecom network element or a set of network elements, lays down its requirements for the product/equipment to work seamlessly in Indian Telecom Network. These requirements refer to the following:

- EMI/EMC requirements
- Safety requirements
- Interoperability requirements
- Interface requirements
- Other technical requirements
- Security requirements
- Quality requirements
- Any other equipment requirements that are considered generic
- Desirable requirements, if any

Type Approval Certificate (TAC) is issued for conformance testing against the clauses of Standard for Generic Requirements for a Product/Equipment.

4.3 STANDARD FOR INTERFACE REQUIREMENTS FOR A PRODUCT/EQUIPMENT

The Standard for Interface Requirements for a Product/Equipment (erstwhile Interface Requirements (IR)) refers to the requirements of an interface between two network elements at different layers of protocol stacks as applicable. Interfaces are defined at different layers for convenience of peer-to-peer communication:

- Layer 1 Physical (Cable, RJ-45, E1 etc.)
- Layer 2 Link (MAC, Switches, PPP etc.)
- Layer 3 Network (IP, Q. 931 etc.)
- Layer 4 Transport (TCP, UDP, etc.)
- Layer 5 Sessions (Call setup, teardown, syn, ack, duplex/simplex operation etc.)
- Layer 6 Presentation (Encryption, ASCII, MPEG etc.)
- Layer 7 Application (SNMP, HTTP, FTP, WebSocket etc.)

Interface Approval Certificate (IAC) is issued for conformance testing against the clauses of Standard for Interface Requirement for a Product/Equipment.

4.4 STANDARD FOR SERVICE REQUIREMENTS

The Standard for Service Requirements (erstwhile Service Requirements (SR)) details the services and network related requirements for specific applications, which should be met by service providers in accordance with the requirements specified by the Central Government.

4.5 STANDARD DOCUMENT OF TEC

The Standard Document of TEC refers to a set of standard/common requirements or specifications inter-alia, in respect of protocols, numbering, routing, switching, safety, security, EMI/EMC, environmental related requirements etc. issued by TEC for the equipment or product or network. It can be used either independently or can be referred to in Essential Requirements/Generic Requirements/Interface Requirements/Service Requirements of the telecom products/services.

4.6 TEC TEST GUIDE

The TEC Test Guide (erstwhile Test Schedule and Test Procedure (TSTP)) is associated with erstwhile Specifications i.e GRs/IRs/SRs. Test Guide involves testing and measurements to be performed as per Standard for Generic Requirements of a Product/Equipment, Standard for Interface Requirements of a Product/Equipment and Standard for Service requirements. In case of Essential Requirements, the test guide is part of ER in the form of Annexure II.

In view of the multi-functionality of the equipment with the advancement of technology, the testing method/procedure may broadly specify the expected/specified outcomes without insistence / adherence to particular testing equipment.

5.0 FORMAT AND NUMBERING FOR TEC STANDARDS

5.1 Broad format of TEC Standard shall be as under:

- i. Contents
- ii. History Sheet
- iii. References
- iv. Introduction (of network element, or system, if any)
- v. Description (of network element, or system in terms of components, architecture, etc.)
- vi. Functional/Operational Requirements
- vii. Interconnectivity and Interoperability Requirements
- viii. Quality requirements
- ix. EMI/EMC requirements
- x. Safety requirements
- xi. Security requirements
- xii. Other Mandatory Requirements
- xiii. Desirable Requirements
- xiv. Glossary

The broad templates for TEC Standard for Generic Requirements for a Product/Standard for Interface Requirements for a Product/Standard for Service Requirements/Standard Document of TEC and TEC Test Guide are annexed as Annexure A, B, C, D and E respectively. The template for cover page of TEC adopted Standard document is annexed as Annexure H.

5.2 NUMBERING OF TECSTANDARD

In order to maintain alignment/uniformity with the International pattern of numbering of Standards, TEC has adopted the following numbering scheme

5.2.1 NUMBERING SCHEME FOR TEC STANDARDS

TEC Standard documents shall be numbered as:

TEC ABCDE: YYYY

- TEC denotes TEC Standard
- ABCDE is Five-digit numeric number given to standard document

AB (00-99) indicates Domain / Major Technologies

CD (00-99) –Numeric number of Standard document; may be decided by respective TEC Division

Digit E (Type of document): Standard for Generic Requirements for a Product/ Standard, for Interface Requirements for a Product/ Standard for Service Requirements (Earlier GRs/IRs/SRs) and their TSTPs may be numbered serially by respective Divisions. i.e. digit E can be even number i.e. 0,2,4,6 for Product/Interface/Service/document and +1 i.e. 1,3,5, for related TSTP/Test Guide.

7&8 - Spare/reserve for future allotment by RC Division

9 - Guidelines (Division Specific)

YYYY: Document Approval Year.

If a document is revised during a year, then the revision should be mentioned in bracket after YYYY e.g. ABCDE: YYYY (Rev1.0). Where Rev1.0 means first revision, Rev 2.0 means second revision and so on during a year. If revision is done in subsequent years, then YYYY shall describe the revision whereas ABCDE will remain same.

5.2.2 NUMBERING SCHEME FOR ADOPTED STANDARDS:

TEC has adopted two line numbering scheme for adoption of Standards. As an example, if TEC has adopted TSDSI Standard document, it shall be represented as:

TEC Standard Document No.... First Line

Adopted from

TSDSI STD No..... Second Line

In case of adoption of documents, digit E shall be allotted by the concerned Division, giving a range of 000-999 (digits CDE) per domain (digits AB).

6.0 CONSTITUTION OF COMMITTEES, GROUPS AND FORUM

TEC Standard formulation mechanism envisages involvement of the following Committees, Groups and Forums:

- a. Development Coordination Committee (DCC)
- b. DCC Sub-Committee
- c. Draft for Comments (DFC) Group
- d. Manufacturers" Forum (MF)
- e. Mandatory Testing Consultative Forum (MATCOF)(ref: para 9.2)
- f. Concerned Division of TEC

Further, the Standard Adoption process by TEC consists of the following Institutional Framework:

- > Telecom Standards Advisory Committee (TSAC)
- Consultative Committee (CC)
- > Task Force

6.1 DEVELOPMENT COORDINATION COMMITTEE (DCC)

i. DCC shall be the apex body approved by Sr. DDG / Head of TEC, which should consist of representatives from various stakeholders viz. DoT, C-DOT, LSAs, NCA-T, TCIL, ITI, NCCS, other associated Govt. Departments/Societies, Service Providers and Industry Associations etc. Each Division shall constitute a DCC for formulating a standard. Being a technical body, special effort would be made to identify appropriate experts in telecom domain, while seeking nominations for DCC. DCC shall be the final body for recommending the draft TEC Standard. The draft TEC Standard shall be approved by Sr. DDG/Head of TEC and shall be called TEC Standard.

- Technical subjects dealt by TEC are sub-divided into following broad categories but not limited to
 - a. Switching (Core Networks, Interoperability between networks Associated Services & Applications etc.)
 - b. Transmission (Optical, Radio, Satellite transport for Core, Edge and Access etc.)
 - c. Customer Networks (Access and Terminals etc.)
 - d. Information Technology (LAN, WAN, Routers, Switches etc.)
 - e. Wireless Systems (GSM, CDMA, WiMAX, LTE, NR, WiFi, Spectrum etc.)
 - f. Passive Infrastructure (Cable, Power Plant, Towers, Antennas etc.)
 - g. IoT, M2M, Smart devices, Future Networks, AI etc.
 - h. Convergence and Broadcasting
 - i. Telecom Security matters
 - j. Quantum Technologies
 - k. Satellite systems and Non-Terrestrial Networks
- iii. A DCC member shall ordinarily be from the top management of an organization capable of articulating the vision, plan and objective of his/her organization.
- iv. Each DCC shall have a nominated Deputy Director General (DDG) of TEC from concerned Division as its Chairperson and Director as Convener. Any DCC may have more than one DDG as member depending upon the subjects dealt with and for inter-disciplinary co-ordination. Steering of specific subjects within a discipline shall be carried out by the concerned DDG. DDG can also seek advice/input from industry experts not covered in the DCC.
- v. DCC shall be constituted on yearly basis (Financial year wise). Members of Government Departments shall be nominated by designation. Experts from users /service providers shall be nominated by name. DCC shall be approved by Sr. DDG/Head of TEC. DDG may co-opt members from industry as per the specific subject matter, if needed.

- vi. Formation of DCC i.e. seeking nomination of members for DCC, receipt, compilation of nominations, approval of DCC by Head of the TEC and circulation shall be completed in 4 weeks (as per Table-2) from the date of seeking nominations for DCC. Till the time a new DCC is constituted, the existing DCC will continue to operate.
- vii. DCC may be reconstituted at any time by Sr. DDG/Head of TEC, if found necessary.
- viii. Minutes of DCC Meeting shall be approved by the concerned DDG, being DCC Chairperson. The suggestions / recommendations of DCC Meeting shall be incorporated in Pre-DCC draft. The document, so formulated shall be called TEC Draft Standard which is submitted to Sr. DDG / Head of TEC for approval.

6.2 DCC SUB-COMMITTEE

- i. Each DCC shall have a DCC Sub-Committee for dealing with specific subjects and creating TEC draft documents. Nomination of members of DCC Sub-Committee shall be approved by concerned DDG. DCC Sub-Committee shall be a group of working-level experts drawn from Service-providers / User organizations, Laboratories (NABL accredited/TEC designated), Associations and Director level officers of DoT/TEC & other DoT Units. Any other known experts can also be nominated in the DCC Sub-Committee.
- ii. Prior to conduction of DCC Sub-Committee meeting, Sub-DCC Draft shall be prepared by incorporating the comments of DFC Group members, if any and suggestions emerged during MF meeting in the initial draft prepared by the concerned Division. DCC Sub-Committee shall deliberate on this Sub-DCC Draft and offer further suggestions, if any. The suggestions/recommendations of DCC Sub-Committee members should be incorporated by the concerned Division in Sub-DCC Draft to formulate Pre-DCC Draft.
- iii. Director of the concerned Division shall be the Chairperson and should moderate the proceedings of the DCC Sub-Committee.
- iv. Formulation of DCC Sub-Committee (including seeking nomination of members,

receipt and compilation of nominations, approval of DCC Sub- Committee by concerned DDG and circulation to nominated members) should be completed within 4 weeks (as per Table-2) from the date of seeking nomination of members for DCC Sub-Committee.

v. Minutes of DCC Sub-Committee Meeting shall be approved by the concerned Director.

6.3 DRAFT FOR COMMENTS (DFC) GROUP

- DFC Group consists of experts for a particular family of network elements from R&D Institutions, reputed academic institutions such as IITs etc., Research units of user organizations, service providers etc.
- ii. DFC Group, if required, will be proposed by respective DDG, then it shall be approved by Sr. DDG/Head of the TEC.
- iii. Formulation of DFC Group (including seeking nomination of members for the group, receipt and compilation of nominations, approval of DFC group by Head of TEC and circulation) shall be completed within 4 weeks (ref: Table- 2) from the date of seeking nomination of members for DFC Group.

6.4 MANUFACTURERS' FORUM (MF)

- i. Manufacturers" Forum shall be a group of technical representatives of manufacturers/OEMs, suppliers, representatives of a network element or a group of network elements and any related Industry Associations etc.
- ii. Manufacturers" Forum shall be constituted by concerned DDG for a specific network element (e.g. modem, router etc.) or a system comprising of interconnected network elements (e.g. GPON System etc.) as per the requirement.
- iii. Manufacturers" Forum shall be chaired by concerned DDG. Director of the concerned Division shall be the Convener and should moderate the proceedings of the MF.

- iv. Formulation of Manufacturers" Forum (including seeking nomination of members, receipt and compilation of nominations, approval of MF by concerned DDG and circulation) shall be completed within 4 weeks (as per Table-2) from the date of seeking nomination of members for Manufacturers" Forum.
- DCC Sub-Committee and MF Meeting may be held jointly which then shall be chaired by concerned DDG. In such case, the Minutes of the Joint Meeting shall be approved by concerned DDG.

6.5 TIMELINES FOR COMMITTEE / FORUM FORMATION

The broad timeline for various activities for formation of Committee, Sub-Committee, Group and Forum as required for formulation of TEC Standard document is as follows:

Sr.		Duration			
No.	Activity Description	DCC	Sub-DCC	DFC	MF
1	Seeking Nominations of members		3 weeks	1	
	for Committee/Group/Forum				
2	Receipt and compilation of				
	Nominations				
3	Issue of 1st reminder to non-				
	responders				
4	Receipt and compilation of additional				
	Nominations for				
	Committee/Group/ Forum				
5	Issue of 2 nd reminder to non-				
	responders, if required				
6	Receipt and compilation of				
	additional Nominations for				
	Committee/Group/ Forum				
7	Formation/Finalization of		1 week		
	Committee/ Group/Forum				

8	Approval of Committee/Group/Forum	
	by	
	Competent Authority	
9	Circulation of list of members of	
	Committee/Group/Forum to all the	
	concerned	
	Total	4 weeks

Table-2

Note: Formation of committee/ forum may be done concurrently.

6.6 TELECOM STANDARDS ADVISORY COMMITTEE (TSAC)

TEC shall implement the Standard Adoption process with the help of institutional framework, which may consist of Telecom Standards Advisory Committee (TSAC), Consultative Committee (CC) and Task Force setup for this purpose.

Telecom Standards Advisory Committee (TSAC) shall be headed by DDG (Standardization), TEC. It will have maximum eleven members including the Chairman. The constitution of TSAC shall be as follows:

- DDG (Standardization), TEC (Chairman)
- DDG (Telecom Security), TEC
- Chairman consultative committee
- Member CDOT
- Member TSDSI
- Other members Member(s) from other Govt. bodies /cross- Sector organizations, technology experts from industry (OEMs), Members from Network/service providers and academia /R&D
- Director (Standardization) TEC as Member Convener

The members from industry / organizations other than those from TEC/ DOT shall be nominated from amongst the persons of repute /having sufficient experience in the field of telecom technology /standardization.

TSAC shall be constituted for a period of two years. However, a member may be renominated for another term, if the competent authority so decides.

TSAC shall function at the apex level and has following responsibilities.

- Examine the issues e.g. whether a TSDSI or an international standard can be adopted as national standard or whether to waive off wide circulation etc.
- b. Evaluate and endorse standards for approval/ adoption
- c. Perform an oversight role in reviewing the standardization program
- d. Strategize and prioritize work areas /standardization activities
- e. Advise TEC on matters like ratification / adoption of standards, formulate standardization policies and strategies to be adopted, best practices to be followed and setting up and dissolution of consultative committee(s)/ task force(s)etc.
- f. Collaborate with other standard formulating bodies/organizations within country and abroad

6.7 CONSULTATIVE COMMITTEE (CC)

Consultative Committee shall be a working group constituted under TSAC. Members of Consultative committee shall be technical experts in the respective fields of Telecom and related ICT industry, based in India, who are nominated to participate in the standardization related work allocated to the committee.

Consultative committee shall collate public comments against any standard, review them and accordingly prepare a report towards inclusion or rejection of those comments. It may also offer recommendations, if any. Only technical content / Amendments affecting the technical content of standard shall be open for public comments and therefore discussion/review by consultative committee.

Consultative committee shall consist of a minimum of ten members. DDG of concerned technology division shall be the Chairman and the concerned Director shall

be the "convener cum co-rapporteur" respectively of the committee.

The Members of Consultative Committee shall be drawn from the following organizations depending upon the standard to be adopted.

- a. TSPs
- b. OEMs of Telecom NW equipment and mobile hand sets
- c. VAS providers
- d. R&D including CDOT
- e. Academia
- f. TSDSI/ SDO
- g. Govt. bodies & cross sector standardization organizations
- h. Technical officers (Mobile, Radio, Security, IoT, SN, IT etc.) from TEC
- Technical officers (Licensing, NT, Policy, WPC and security etc.)
 from DOT

6.8 TASK FORCE

TSAC /Standardization Division of TEC may constitute a Task Force for a specific or inter-related work. Task force will submit its recommendations to Consultative Committee or TSAC.

6.9 PUBLIC CONSULTATION

Public Consultation of 60 days shall be done for framing of TEC standards. It will fulfill requirement of the TFNSCAC Rules, 2025 in respect of national consultation and the WTO-TBT agreement in respect of international consultation wherever applicable as per the following procedure:

- 6.9.1 Publication and review of standards and conformity assessment procedure will be as per Rule (5) of TFNSCAC Rule, 2025 which states that
 - "(1) The Appropriate Authority shall ensure prior publication of the draft standards

and draft conformity assessment measures in the portal, so as to allow for a consultation process of at least sixty days to enable all stakeholders to provide their comments, which shall be taken into consideration before finalization of such standards or conformity assessment measures.

- (2) The condition for prior publication and stakeholder consultation under sub-rule
- (1) shall also apply to revisions or amendments to published standards or conformity assessment measures: Provided that the condition for prior publication under sub-rule
- (1) shall not apply where the Appropriate Authority undertakes rectification of typographical mistakes or errors apparent in any notified standard or conformity assessment measure, which are not substantive in nature.
- (3) The Appropriate Authority may, notwithstanding sub-rule (1), notify a standard or conformity assessment measure on a provisional basis without prior consultation process, where it determines, for reasons to be recorded in writing— (a) that such notification is necessary to expeditiously achieve a policy objective; or (b) the risks of non-fulfillment of such objective, if such notification on a provisional basis is not undertaken: Provided that the Appropriate Authority shall within a period of sixty days of such notification, undertake a consultation process, and take into consideration stakeholder comments for either finalising the standards or conformity assessment measures with or without modifications, or withdrawing such standards or conformity assessment measures.
- (4) The Appropriate Authority shall review the notified standards and conformity assessment measures, at least once in five years, to determine the need for revision, amendment or withdrawal of such standards, in accordance with these rules.
- (5) Any standard notified under these rules shall be effective from the date specified therein: Provided that in case of a notification for revision or amendment of an existing standard, the Appropriate Authority may, by order, permit the concurrent operation of such revised or amended standard along with the existing standard for such period as may be specified in such order.

<u>Explanation</u> – In this sub-rule, "Existing standard" means a standard which is in effect on the date of notification of revision or amendment to such standard."

6.9.2 Under the Technical Barriers to Trade (TBT) agreement, stakeholders have at least 60 days to submit comments before technical regulations are adopted. This period may, however, be shortened in cases where urgent problems of safety, health or environment arise or threaten to arise. Further detailed guidelines are given on WTO

TBT Enquiry Point Guide which is available at its website.

7.0 FUNCTIONS OF THE COMMITTEES, GROUPS AND FORUM FOR FORMULATION OF TEC STANDARD DOCUMENTS

7.1 DCC

- 7.1.1 DCCs shall be responsible for recommending formulation of draft TEC Standard to Sr. DDG / Head of TEC.
- 7.1.2 DCC may also recommend review or withdrawal of any Standard document. Being an Apex body, DCCs may provide vision for future network elements or technologies and provide necessary guidance to its respective DCC Sub- Committee, which engages in technical deliberations and helps in preparation of draft standard. DCCs may also initiate work on national level plans and give their recommendations to TEC.

7.2 DCC SUB-COMMITTEE

Prior to conduction of DCC Sub-Committee Meeting, Sub-DCC Draft shall be prepared by incorporating the comments of DFC Group members, if any and suggestions emerged during MF meeting in the initial draft prepared by the concerned Division. DCC Sub-Committee shall deliberate on this Sub-DCC Draft and offer further suggestions, if any. The suggestions/recommendations of DCC Sub-Committee members should be incorporated by the concerned Division in Sub-DCC Draft to formulate Pre-DCC Draft.

7.3 MANUFACTURERS' FORUM (MF)

Manufacturers" Forum shall be responsible for furnishing relevant technical information for the concerned product/equipment/interface while formulating TEC Standard and TEC Test Guide associated with standard (erstwhile TSTP)

7.4 DRAFT FOR COMMENTS (DFC)

In case of DFC being constituted, initial Draft Standard prepared by the concerned Division should be circulated to Members of DFC Group for comments via electronic mode.

7.5 CONCERNED DIVISION

The concerned Division of TEC shall be responsible for formulation of DCC, DCC Sub-Committee, DFC Group & MF, conduction of Meetings, circulation of drafts for seeking inputs & Minutes of the Meetings etc. as required for formulation of TEC Standard and TEC Test Guide associated with the standard as per Annual Action Plan or any other requirement during the year with the approval of Sr. DDG / Head of TEC.

8.0 STANDARD DOCUMENT FORMULATION, MODIFICATION, WITHDRAWAL & REVIEW PROCESS

8.1 INITIATION FOR FRAMING TEC STANDARD

- 8.1.1 Framing of any TEC Standard document can be initiated after receiving a request from any of following:
 - a. Department of Telecommunications (DoT)
 - b. User groups including but not limited to Telecom Service Providers, Associations, R&D Organizations etc.
 - c. Members of DCC
 - d. Any requirement based on PPP-PMI (Preference to make in India).
 - e. Any other Central/State/Autonomous Govt. agency/department.
- 8.1.2 Manufacturers can also request TEC to initiate document's requirement for new /upcoming technology.

- 8.1.3 TEC can suo-moto decides to frame Standard based on worldwide developments and trends in telecommunications and technology.
- 8.1.4 After initiation and processing of the draft, the framing and approval of a Standard shall be done with the approval of Sr. DDG/Head of TEC.

8.2 TEC STANDARD FORMULATION PROCEDURE

8.2.1 INITIAL DRAFT BY CONCERNED DIVISION

TEC Standard documents are framed for a telecommunications, identified network element or network element family etc. Concerned Division in TEC may prepare an initial draft Standard, after detailed study on the subject, consulting relevant journals, reports, recommendations and Standards/specifications issued by Standardization Bodies, such as ITU, ETSI, IEEE, CISPR, IEC, ISO, 3GPP, IETF, International Forums, etc., including inputs from service providers, other users of telecom equipment and services, manufacturers, via seminars and discussions with various experts, etc. This document shall be called TEC Initial draft standard.

8.2.2 ROLE OF DFC GROUP

- i. In case of DFC being constituted, initial draft standard prepared by the concerned Division should be circulated to Members of DFC Group for comments via electronic mode. DFC Group members should furnish their comments on this initial draft document in a time bound manner.
- ii. Comments received from Members of DFC Group and MF are compiled and incorporated in the initial draft by the Division for formulation of Pre-MF draft.

8.2.3 ROLE OF MANUFACTURERS' FORUM (MF)

- i. The initial draft standard shall also be circulated to members of MF for their comments/suggestions prior to conducting MF Meeting.
- ii. The comments/suggestions received from members of MF and DFC group, if any, should be compiled by the concerned Division and incorporated in initial draft for formulation of Pre-MF draft.
- iii. MF meeting should be conducted under the Chairpersonship of concerned DDG within a week of compilation of comments/suggestions received from MF members, if any.
- iv. The draft Minutes of the MF Meeting, with the consent of Convener/Director shall be circulated via electronic mode to the participating members for their comments, if any. In case, no response is received from the members within a week, the draft Minutes shall be considered as being deemed accepted by the members. Subsequently, the Minutes of MF Meeting shall be put up to concerned DDG for approval.
- v. In case, the comments are received after the approval of the Minutes of the Meeting, the concerned DDG may decide to include/exclude the same for DCC meeting.
- vi. Recording of Minutes of MF Meeting, finalizing of draft Minutes and its circulation, compilation of responses, if any, approval of finalized Minutes by concerned DDG and circulation should normally be within the timeframe prescribed in Table 5 after conduction of MF Meeting.

8.2.4 ROLE OF DCC SUB-COMMITTEE

- The concerned Division shall compile and incorporate the comments/suggestions of MF Meeting in Pre-MF draft for formulation of Sub-DCC draft.
- ii. Meeting of DCC Sub-Committee shall take place within the timeframe prescribed in Table 5, after circulation of Sub-DCC draft to Members of DCC Sub-Committee. Meeting can be convened earlier also, if required.
- iii. All necessary documents shall be sent via electronic mode to all members, at least one week before the date of DCC Sub-Committee meeting.
- iv. In the DCC Sub-Committee meeting, the Sub-DCC draft including comments/suggestions given by members of DFC Group, if any and during MF meeting shall be discussed and deliberated.
- v. Member or an alternate member, present in a meeting, shall represent his/her organization, and his/her opinion shall be treated as final view of his/her organization.
- vi. All members are expected to come prepared for meeting. Members are also expected to send their comments on the document, well in advance to help arrive at conclusions in the meeting.
- vii. The draft Minutes of the DCC Sub-Committee Meeting, with the consent of Director shall be circulated via electronic mode to the participating members for their comments, if any. In case, no response is received from the members within a week, the Draft Minutes shall be considered as being deemed accepted by the members. Subsequently, the Minutes of the DCC Sub-Committee Meeting shall approved by concerned Director.
 - a. In case, the comments are received after the approval of the Minutes of the DCC Sub-Committee Meeting, the concerned Director may include the same for DCC meeting.

- viii. Recording of Minutes of DCC Sub-Committee, finalizing of draft Minutes and its circulation, compilation of responses if any, approval of the finalized Minutes by concerned Director and circulation to members shall normally be within the timeframe prescribed in Table 5, after conduction of DCC Sub-Committee Meeting.
- ix. DCC Sub-Committee and MF Meeting may be held jointly with the approval of concerned DDG. In such case, single Sub-DCC cum MF draft should be prepared by the concerned Division and the Minutes of the Joint meeting shall be approved by the concerned DDG.

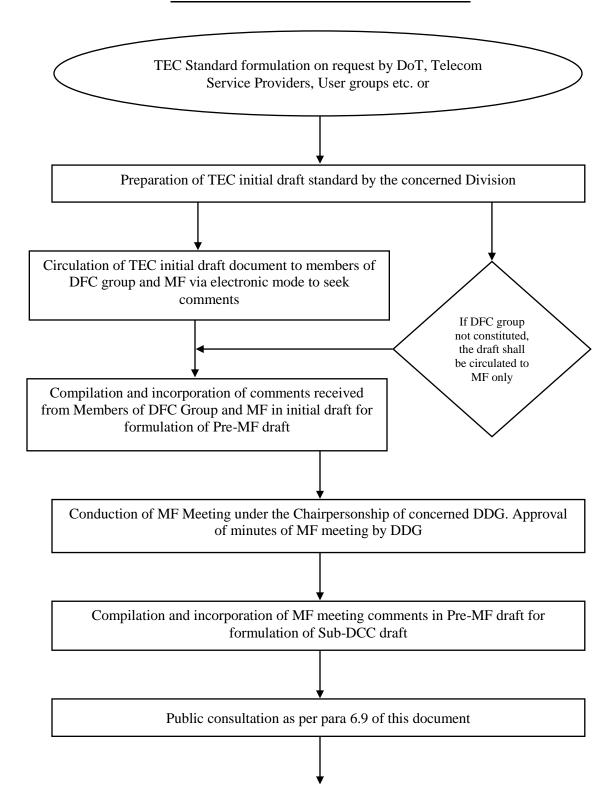
8.2.5 ROLE OF DCC

- The suggestions/recommendations received during DCC Sub-Committee
 Meeting should be complied by the concerned Division and incorporated in
 Sub-DCC draft. The revised draft so formed, after incorporation, is called PreDCC draft.
- ii. Pre-DCC draft should be circulated to all DCC members at least 1 week before the date of meeting after seeking approval of concerned DDG.
- iii. In DCC meeting, Pre-DCC draft along with other associated information, if any, shall be discussed and deliberated.
- iv. Member or an alternate member, present in a meeting, shall represent his/her organization, and his/her opinion shall be treated as final view of his/her organization.
- v. All members are expected to come prepared for the meeting. They are also expected to send their comments on the document, well in advance to help arrive at conclusions in the meeting.
- vi. Draft Minutes of DCC Meeting, with the consent of concerned DDG, shall be circulated via electronic mode to participating members for their perusal and consent. In case, no response is received from the members within a week,

- the Draft Minutes of DCC Meeting shall be considered as being deemed accepted by the DCC Members.
- vii. Convener of DCC shall issue the Minutes of DCC Meeting with the approval of concerned DDG being DCC Chairperson.
- viii. After approval of minutes of DCC meeting, Pre-DCC draft Standard document shall be modified as per the recommendations of DCC meeting (mentioned in the minutes of DCC meeting). The document, so formulated, shall be called TEC draft Standard.
- ix. TEC draft Standard, along with Minutes of DCC and related documents, shall be put up to Sr. DDG/Head of TEC for approval.
- x. After approval of the TEC draft Standard document by Sr. DDG/Head of TEC, the final document shall be referred to as TEC Standard.
- xi. The concerned Division shall send approved TEC Standard to RC division for verification w.r.t. template and checklist (Annexure-G) prior to its notification. The Standard shall also be uploaded on TEC website thereafter.

Hence, the formulation of TEC Standard should broadly follow the Procedure as depicted in the following flow chart:

Flow chart for formulation of a TEC Standard



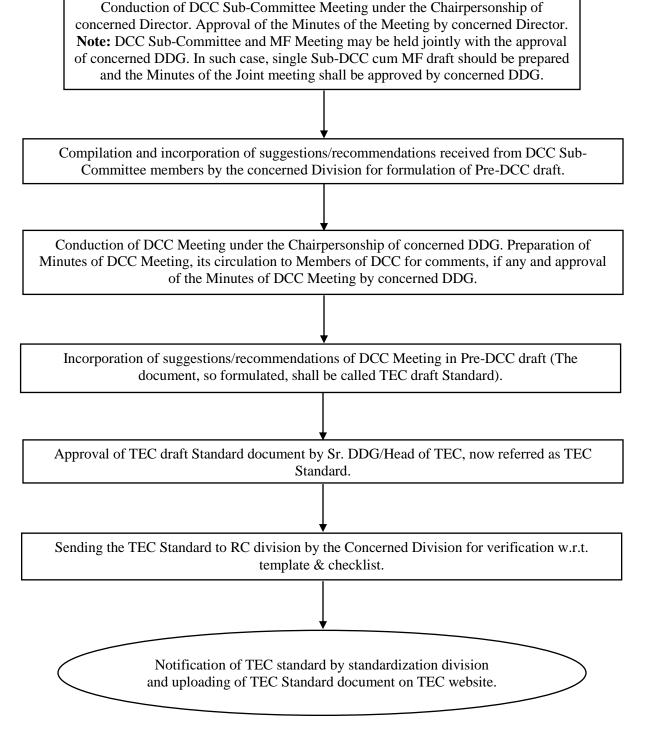


Figure-1

Note: DCC Sub-Committee and MF Meeting may be held jointly with the approval of concerned DDG. In such case, single Sub-DCC cum MF draft should be prepared and the Minutes of the joint meeting shall be approved by the concerned DDG.

The above flow broadly defines the sequence for formulation of a TEC Standard

(erstwhile GR/IR/SR/SD). If more than one Standard is under formulation & development by the concerned Division, the timeline may increase proportionately.

8.3 FRAMING OF TEC TEST GUIDE (ERSTWHILE TSTP)

- 8.3.1 Process for framing of Test Guide by TEC (erstwhile TSTP) shall be initiated after the approval of TEC Standard, within a week.
- 8.3.2 Concerned Division shall prepare an initial draft of TEC Test Guide as per the format (attached at Annexure E).
- 8.3.3 For formulation of Test Guide, the concerned Division shall seek inputs from the members of Manufacturers" Forum/concerned stakeholders via electronic mode as required by para 6.9 of this document. If required, a consultation meeting for the same may be conducted.
- 8.3.4 The suggestions / inputs received during consultation meeting / circulation to concerned stakeholders via electronic mode should be suitably incorporated in the draft Test Guide.
- 8.3.5 If required, 2nd consultation meeting with MFs/concerned stakeholders may be conducted.
- 8.3.6 The said draft Test guide shall be submitted to concerned DDG for approval.
- 8.3.7 After approval, it shall be sent to RC Division for verification & repository purpose, prior to its notification and uploading on TEC website.
- 8.3.8 If required, existing TSTPs may be revised for conversion into TEC Test Guide after following the above-mentioned consultation process.
- 8.3.9 Final draft after approval of concerned DDG may be called as TEC Test Guide for associated TEC Standard.

Standard document. The process of Test Guide formulation may be initiated concurrently with the formalisation of the draft Generic Requirement (GR), once the draft stage is completed. In case, 2nd MF consultation is required for Test Guide formulation, the time duration may be further increased by two weeks.

8.3.11 After framing the TEC Test Guide, Man - Hour calculation by the concerned Division should broadly include following items/activities:

Man-Hour Calculation Table

(A)	(B)	(C)	(D)
S.No	Description No. of Man-		No. of Man-
		days	hours
		required	i.e. (C) x 8 hours
1	Initial document study prior		
	to testing		
2	Testing at Manufacturer's		
	Premises / in-house /		
	accredited lab @ 8 working		
	hours/day and 22 working		
	days in a month (ADG or		
	AD level)		
3	Field Trial, if applicable		
4	Test results evaluation/		
	report generation		
5	Others		
6	Issue of certificate by RC	1	8
	Division		
		Total Man-Hours	

Table-3

8.3.12 Based on the Total Man - Hours calculated, as per assessment of above mentioned activities by the concerned Division, the category of product and tariff/fees presently are as follows:

Category	Man- Hours	In-station	Out-
of	(Scrutiny of application, Testing,	Tariff ₹	station
Product	evaluation, Certification etc.)		Tariff ₹
I	0-57	21,400	41,400
II	58-114	46,650	82,800
III	115-228	86,250	1,47,800
IV	229-457	1,51,450	2,46,500
V	458-914	2,10,000	3,54,800
VI	915-1600	3,41,250	5,94,600
VII	1601-2286	5,25,000	7,78,300
VIII	2287-5714	7,87,500	10,40,800
IX	5715-11426	15,75,000	18,28,300
X	>11426	26,25,000	28,78,300

Table-4

Ref: TEC letter.no.TEC/NR.RC/Tariff/33/2014(Vol II) dated 31.12.2015

TEC may revise the above tariffs/other testing fees, if any, from time to time.

- 8.3.13 After Identifying the Man-Hour & Category of product, Information sheet shall be prepared. The broad format of Information sheet is attached at Annexure F.
- 8.3.14 After the approval of Information sheet by concerned DDG, the same shall be forwarded to RTECs and RC division of TEC for record purpose.

8.4 TIME SCHEDULE

A TEC Standard document should normally be finalized within 18 weeks as per schedule of Annual Action Plan. However, if a request is received during a financial year for formulation of Standard which is not mentioned

in Annual Action Plan, it can also be considered after approval of Sr. DDG / Head of TEC and finalized accordingly.

Broad timeline for formulation of TEC Standard Document is as follows:

S.No.	Activity Description	Duration		
1	Preparation of TEC Initial draft standard by the concerned			
	Division and its circulation to members of DFC Group and			
	MF to seek comments.			
2	Compilation and incorporation of comments received	2 weeks		
	from members of DFC Group and MF for preparation of pre			
	MF Draft			
3	Conduction of MF meeting under the Chairpersonship	1 weeks		
	of concerned DDG.			
4	Compilation and incorporation of MF comments in Pre-	1 week		
	MF draft for formulation of Sub-DCC draft.			
5	Circulation of Sub-DCC draft on portal for	8 and half		
	Public/Stakeholders consultation for 60 days period	weeks		
6	Conduction of DCC Sub-Committee meeting under the			
	Chairpersonship of concerned Director. Approval of the			
	Minutes of the Meeting by concerned Director.			
	Note: DCC Sub-Committee and MF Meeting may be held			
	jointly with the approval of concerned DDG. In such case,			
	the Minutes of the Joint meeting shall be	2 weeks		
	approved by concerned DDG.			
7	Compilation and incorporation of suggestions			
	/recommendations received from Sub-DCC members for			
	formulation of Pre-DCC draft.			
8	Conduction of DCC meeting under the Chairpersonship of	2 weeks		
	concerned DDG. Preparation of Minutes of DCC meeting,			
	its circulation to DCC members for comments, if any and			
	approval of the Minutes by concerned DDG.			
	its circulation to DCC members for comments, if any and			

		•
	Incorporation of suggestions/recommendations of	
	DCC in Pre-DCC draft. The document, so formulated,	
	shall be called TEC draft Standard document.	
9	Approval of TEC draft Standard by Sr.DDG	1/2 week
	/Head of TEC, now referred as TEC Standard	
	document.	
10	Sending the approved Standard document to RC Division for	1 week
	verification as per checklist, communication of	
	discrepancies by RC Division to	
	concerned division, if any.	
11	Notification and uploading of document on	
	TEC website.	
	Total	18 weeks
	FOR TEC TEST GUIDE (ERSTWHILE TSTP)	
1	Formulation of draft Test Guide (erstwhile TSTP) by	1 week
	core Division after formulation of TEC Standard	
2	Circulation of draft Test guide via electronic mode for	8 and 1/2
	MF/Public/stakeholders consultation as per para 6.9 of	weeks
	this document	
3	Incorporation of suggestions/inputs/feedback from	1 week
	stakeholders into draft Test Guide	
4	Finalization of Test Guide and its approval by	1/2 week
	concerned DDG	
5	Submission of Test Guide to RC Division for	1 week
	verification record purpose prior to its notification and	
	uploading of Test Guide on TEC website	
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Table-5

In case, 2^{nd} MF/Public/stakeholders" consultation is required for Test Guide formulation, the time duration may be further increased by two weeks.

8.5 PROCEEDINGS OF THE MEETINGS

- 8.5.1 Maximum use of electronic mode of transfer of documents, comments, etc., shall be relied on. All notices for meetings, relevant documents, and communications shall be sent electronically to all the members. All members are also expected to send their comments electronically. Seeking of Nominations for DCC, DCC Sub-Committee, Manufacturers" Forum and DFC Groups through TEC website and e-meetings should be encouraged for wider participation.
- 8.5.2 Members may exchange/discuss documents before sending their comments to Committees, Forum and Groups.
- 8.5.3 All the recommendations of the Committees, Forum and Groups shall be finalized through consensus, as far as possible, rather than through taking votes, to ensure safeguarding interests of all the stakeholders.
- 8.5.4 In all matters arising out of the Committee work, the convener shall be the official spokesperson for the respective Committee.
- 8.5.5 The Minutes of the Sub-DCC, MF, DCC Meetings shall be circulated to participating members.
- 8.5.6 Framework for formulation of standards shall be sufficiently flexible to cover all stakeholders, viz., service providers, manufacturers, developers, vendors, etc.
- 8.5.7 All expenses incurred by nominees for participating in various meetings and interactions, shall be borne by the participating organizations.

8.6 MODIFICATIONS TO TEC STANDARD

Any modification to TEC Standard can be taken up based on first equipment testing, field trial, or feedback received from service providers/user organizations etc. Comments from DCC members shall be obtained either in a meeting or through circulation. Modifications to TEC Standard shall be approved by Sr. DDG/Head of TEC, as Amendment/Errata to Standard.

8.7 WITHDRAWAL OF TEC STANDARD

There may be need to withdraw TEC Standard document due to supersession by a new Standard, technology obsolescence, equipment not in use, or any other reason. On the advice of service provider(s), any member of DCC, DoT, or suo-moto by TEC, Standard shall be discussed in DCC either in a meeting or through circulation. It shall be withdrawn after recommendation of DCC and approval of Sr. DDG/Head of TEC.

8.8 REVIEW OF TEC STANDARD

Review of TEC Standard will be taken up at least once in five years to determine the need for revision, amendment or withdrawal. A standard can be reviewed earlier also due to advancement in technology, service providers "/user organizations" inputs, or on advice of DoT. TEC can suo-moto take-up review of standards based on worldwide developments and trends in Telecommunications. Review of a Standard shall follow the same steps as outlined for framing of a Standard.

TEC Standard remains valid unless it is withdrawn or revised or superseded.

9.0 TEC STANDARD FOR ESSENTIAL REQUIREMENTS (ERs)

Essential Requirements shall be assigned specific numbers in accordance to numbering scheme enumerated in para 9.1 below. Consultation process of MATCOF (Mandatory testing Consultative Forum) shall be followed for formulation of new Essential Requirements.

9.1 ESSENTIAL REQUIREMENTS (ER) NUMBERING SCHEME

The numbering scheme, for Essential Requirements prepared for Mandatory Testing and Certification of Telecom Equipment under MTCTE, is as follows:

ER Number-TECGPPPYYMM

where

TEC denotes TEC organization

G refers to the concerned Division in TEC responsible for preparation of Essential

Requirement of the product.

G- Codes given to concerned Divisions

- 1. Future Networks, Fixed Access Divisions
- 2. Internet of Things (IoT), Smart Networks Division
- 3. Information Technology Division
- 4. Mobile Technology Division
- 5. Radio Division
- 6. Next Generation Switching Division
- 7. Transmission Division

PPP refers to the code given to the particular product whose Essential Requirements has been prepared. PPP will be assigned by TC division or as per specific directions issued by the competent authority.

YY refers to the year in which Essential Requirements of the particular product was approved by Sr. DDG / Head of TEC.

MM (01-12) refers to the month in which Essential requirements of the particular product was approved by Sr. DDG/ Head of TEC.

As an example: The ER Number for 2 Wire Telephone Equipment is TEC18351906 where 1 refers to Future Networks Division which has prepared the ER of this product, 835 is the code given to 2 Wire Telephone Equipment, 19 refers to year 2019 when ER was finalized and 06 refers to the month June which is the 6th Calendar month in which ER was approved.

9.2 Mechanism for formulation of Essential Requirements (ERs)

Consultation through Mandatory Testing Consultative Forum (MATCOF) shall be adopted for discussion and obtaining feedback of stakeholders on draft Essential Requirement.

Mandatory Testing Consultative Forum (MATCOF)

 A separate Forum shall be constituted for each Division by Sr. DDG/ Head of TEC. The proposal for constitution of MATCOF for each Division shall be

initiated by the concerned Division. DDG of the concerned Division shall be the Chairperson and Director shall be the Convener of the forum.

- ii. The forum shall comprise representatives of Service Providers,Manufacturers, Labs and their Associations, if any.
- iii. The forum may include DDG (s) from other TEC Divisions/RTECs and experts from R&D and Academia, depending upon the nature of the subjects dealt. DDG (Telecom Certification), DDG (Conformity Assessment) and DDG (Standardization) shall be members of each Forum and presence of at least one of them in the meeting along-with one other member from RTEC i.e. DDG(NR)/DDG(ER)/(SR)/(DDG(WR) shall be mandatory.
- iv. The formation of Forum shall be approved by Sr. DDG/Head of TEC.

9.3 FORMULATION of ESSENTIAL REQUIREMENTS (ERs)

- The concerned Division may start the process of formulation of ER for a Telecom equipment as per clause 8.1 of this document.
- ii. Initial Draft of ER shall be prepared by the concerned Division using the online interface provided by TC division to the concerned Divisions.
- iii. The initial Draft is circulated electronically to members of MATCOF (Mandatory Testing Consultative Forum).
- iv. The comments received shall be compiled and circulated via electronic mode to members of MATCOF along with notice for Meeting of MATCOF.
- v. Initial draft of ER and comments received shall be discussed in MATCOF.
- vi. After recording deliberations and decisions arrived in the meeting, along with the attendance of participants, the minutes are approved by DDG and circulated to the members.
- vii. The responses, comments, suggestions, etc., sent by the participants are compiled.
- viii. The stakeholder consultation will be done for 60 days as per para 6.9.

- ix. Holding of 2nd MATCOF: On the basis of complexity and variance of responses/comments, the concerned Division may hold a 2nd MATCOF, if required for further discussion and deliberation on such issues.
- x. A draft ER is prepared after suitable consideration and incorporation of comments of stakeholders.
- xi. After preparation of draft ER, incorporating suitably the comments of all the stakeholders, a portal version of the ER is generated, for maintaining uniformity of ERs across other Divisions of TEC on MTCTE portal and also keeping in view conformity to MTCTE scheme.
- xii. Any difficulty in generation of portal version of the ER or any conflicting issue with regard to parameters / Interfaces proposed in the ER should be resolved by TC Division or through the meeting of Standing Committee for finalization of ERs.
- xiii. The finalized portal version of the ER is approved by the Sr. DDG/ Head of TEC.
- xiv. Approved copy of the ER is notified and uploaded on MTCTE portal.
- xv. Formulation of ER should normally be completed within 20 weeks.
- xvi. Test guide is part of ER and attached as Annexure II to the ER.

9.4 MODIFICATION OF ER

The concerned Division shall initiate modification(s) of ER, if required. In case of major/critical changes, MATCOF shall be conducted. Before MATCOF meeting, public consultation should be done as per para 6.9 of this document. The modification(s) shall be approved by Sr.DDG / Head of TEC. TC division shall upload the modified ER on MTCTE portal.

9.5 WITHDRAWAL OF ER

There may be need to withdraw an ER due to supersession by a new ER, technology obsolescence, equipment not in use, or any other reason. On the advice of service

Provider (s) /other stakeholders, DoT, or TEC, ER shall be discussed in MATCOF either in a meeting or through circulation. It shall be withdrawn after recommendation of MATCOF and approval of Sr. DDG/Head of TEC.

9.6 REVIEW OF ER

An ER document can be reviewed due to advancement in technology, service providers"/user organizations" inputs, or on advice of DoT. TEC can suo-moto take-up review of ER document based on worldwide developments and trends in Telecommunications. Review of an ER document shall follow same steps as outlined for framing of an ER document. ER document remains valid unless it is withdrawn or revised.

10.0 REVIEW OF PROCEDURES AND GUIDELINES FOR FORMULATION OF TEC STANDARDS

The Procedures and Guidelines for Formulation of TEC Standards should be reviewed normally every five years in consultation with Divisions of TEC. The revised document, if formulated, shall be approved by Sr. DDG / Head of TEC.

This document remains valid unless revised or superseded or withdrawn.

Abbreviations

For the purpose of this document the following abbreviations apply:

1	BBNL	Bharat Broadband Network Limited
2	CAB	Conformity Assessment Body
3	СВ	Certification Body
4	CSSP	Network conformity Standards System & Procedures
5	DCC	Development Coordination Committee
6	DDG	Deputy Director General
7	DoT	Department of Telecommunications
8	EMI/EMC	Electromagnetic interference/Electromagnetic compatibility
9	ER	Essential Requirement
10	GR	Generic Requirement
11	IR	Interface Requirement
12	ITI	Indian Telephone Industries
13	LSA	Licensed Service Area
14	MATCOF	Mandatory Testing Consultative Forum
15	MF	Manufacturers" Forum

16	MRA	Mutual Recognition Arrangement
17	МТСТЕ	Mandatory Testing and Certification of Telecommunications Equipment
18	NCCS	National Centre for Communication Security
19	NCA-T	National Communications Academy – Technology
20	OEM	Original Equipment Manufacturer
21	PPP-PMI	Public Procurement Policy-Preference to Make in India
22	RC	Regional Co-ordination
23	SR	Service Requirement
24	TC	Telecom Certification
25	TCIL	Telecommunications Consultants India Limited
26	TEC	Telecommunication Engineering Center
27	TSTP	Test Schedule and Test Procedure

-- End of Document--