> भारतीय मानक Indian Standard

IS 17802 (Part 2) : 2022

आइसीटी उत्पादों और सेवाओं के लिए अभिगम्यता

भाग 2 अनुरूपता का निर्धारण

Accessibility for the ICT Products and Services

Part 2 Determination of Conformance

ICS 35.240.80, 11.180

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FOREWORD

This Indian Standard (Part 2) was adopted by the Bureau of Indian Standards, after the draft is finalized by the Active Assisted Living Sectional Committee, had been approved by the Electronics and Information Technology Division Council of BIS is obtained.

This Indian Standard is published in two parts. The other part in the series is:

Part 1 Requirements

The development of the Indian standard on Accessibility for ICT products and services was initiated by Ministry of Electronics and Information Technology (MeitY) under the 'Knowledge and Resource Centre for Accessibility in ICT (KAI) Project' led by Centre for Development of Advanced Computing (CDAC). During the preparation of this standard, several consultations, meetings and discussions were held with a wide cross section of stakeholders Ministry of Electronics and Information Technology (MeitY), Department of Empowerment of Persons with Disabilities (DEPwD), Ministry of Housing and Urban Affairs (MoHUA) and Department of Telecommunications (DoT). This Indian Standard is developed to provide a set of accessibility requirements that specify how to make content accessible, primarily for the people with disabilities and also for all the end users.

The present Indian Standard (Part 2) is the technical adoption of the European Standard EN 301 549 v 3.2.1 "Accessibility requirements for ICT products and services" developed by CEN, CENELEC and ETSI. Modifications have been made to adapt it to India and are limited to referencing the relevant regulatory context (*Rights of Persons with Disabilities Act*, 2016) and the official languages of India. The technical coverage is otherwise identical.

This Indian Standard (Part 2) is to be read in conjunction with the Part 1 of this standard to understand the functional performance statements and their relation with the specific accessibility requirements for various functions of ICT Products and Services.

The mapping of real-world ICT products and services with requirement clauses mentioned in part1 of this standard is given in Annex A (*informative*).

A guidance document for Accessibility conformity report is given in Annex B (informative).

The Composition of the panel, LITD 35/P1 and the sectional committee, LITD 35 responsible for the formulation of this standard is given at Annex C.

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Indian Standard

ACCESSIBILITY FOR THE ICT PRODUCTS AND SERVICES PART 2 DETERMINATION OF CONFORMANCE

1 SCOPE

This Indian Standard (Part 2) specifies the test procedures and evaluation methodology for the accessibility requirements of ICT products and services mentioned in Part 1 of this standard. This standard (Part 2) also gives guidance in preparing the accessibility conformance report for ICT products and services against each requirement.

2 REFERENCES

The standards or other publications given below contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards or other publications are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards or other publications.

IS/ISO/IEC/ Other Publications	Title
17802 (Part 1) : 2021	Accessibility for the ICT Products and services: Part 1 Requirements
EN 301 549 v 3.2.1	Accessibility requirements for ICT products and services, March, 2021
W3C/WAI/WCAG 2.1	Web Content Accessibility Guidelines, 2018
ISO/IEC 40500 : 2012	Information technology — W3C web content accessibility guidelines (WCAG) 2.0
WCAG 2.0	WCAG 2.0, Understanding Conformance
CEN/CLC/ETSI TR 101 552	Guidance for the application of conformity assessment to accessibility requirements for public procurement of ICT products and services in Europe, March, 2014
ISO/IEC 10646 : 2020	Information technology — Universal coded character set (UCS)

IS/ISO/IEC/ Other Publications	Title		
16333 (Part 3) : 2017	Mobile phone handsets: Part 3 Indian language support for mobile phone handsets — Specific requirements (<i>first revision</i>)		
IS/ISO/IEC 14496- 22 : 2019	Information technology — Coding of audio — Visual objects: Part 22 open font format		
Character Encoding: 01: 2009	Character encoding standard for Indian languages, Document No: - Character Encoding: 01, Version: 1.0, November, 2009, MCIT, Government of India		
MoI&B Accessibility Standard	Accessibility Standards for Persons with Disabilities in TV Programs, Sept, 2019, Ministry of Information and Broadcasting, Government of India		
Harmonized Guidelines and Space Standards for Barrier-Free Built Environment for persons with			

Harmonized Guidelines and Space Standards for Barrier-Free Built Environment for persons with Disability and Elderly Persons, Feb, 2016, CPWD, MoUD

WCAG2ICT, 2013	W3C, Guidance on Applying WCAG 2.0 to Non-Web Information and Communications Technologies (WCAG2ICT), 2013, https://www.w3.org/ TR/wcag2ict/
RPwD Act, 2016	Rights of Persons with Disabilities Act, 2016
ISO/IEC 17000 : 2004	Conformity assessment — Vocabulary and general principles
16350 : 2016	Indian language Inputting and Keyboard Standard computers, "Enhanced INSCRIPT Keyboard Layouts

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IS/ISO/IEC/ Other Publications	Title	IS/ISO/IEC/ Other Publications	Title
Recommendation ITU-T V.18 (2000) IETF RFC 4103	Operational and interworking requirements for DCEs operating in the text telephone mode RTP Payload for Text	ETSI ES 200 381-2 (V1.1.1) (October 2012)	Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids; Part 2: Cellular speech
(2005): ETSI TS 126 114	Conversation Universal Mobile Telecommunications System (UMTS); LTE; IP Multimedia Subsystem (IMS); Multimedia telephony; Media handling and interaction (3GPP TS 26.114)	ANSI/IEEE C63.19 (2011) ETSI ES 200 381-1 (V1.2.1) (October	terminals American National Standard Method of Measurement of Compatibility between Wireless Communication Devices and Hearing Aids Telephony for hearing impaired people; Inductive coupling
ETSI EG 201 013	Human Factors (HF); Definitions, abbreviations and symbols	2012)	of telephone earphones to hearing aids; Part 1: Fixed-line speech terminals
ETSI TS 122 173	Digital cellular telecommunications system	Voluntary Product Ac EN 301 549 Edition	cessibility Template® (VPAT®) V2.4
	(Phase 2+) (GSM); Universal Mobile Telecommunications System (UMTS); LTE; IPMultimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1 (3GPP TS 22.173)	3.1 Terminology For the purpose of this IS 17802 (Part 1) : 202 and the following shall	
ETSI TS 134 229	Universal Mobile Telecommunications System (UMTS); LTE; Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); User Equipment (UE) conformance specification (3GPP TS 34.229)	 principles of extending some type of perform number of potential c product, building or s by: a) designing produ that are readily u modification; b) making products users (adapting u 	esign — Design focused on g standard design to persons with ance limitation to maximize the sustomers who can readily use a service, which may be achieved cts, services and environments asable by most users without any or services adaptable to different ser interfaces); and
IETF RFC 4103	RTP Payload for Text Conversation	with special prod	zed interfaces to be compatible ucts for persons with disabilities.
ANSI/TIA-4965	Receive volume control requirements for digital and analogue wireline terminals		ign for all, barrier-free design, inclusive rational design are used similarly but in
TIA-1083-A (2010)	Telecommunications; Telephone Terminal equipment; Handset magnetic measurement procedures and performance requirements	products and enviror greatest extent poss or specialized design	is a subset of universal design, where ments are usable by all persons, to the ible, without the need for adaptation n. [Source: ISO/IEC Guide 71 : 2001; de 6:2002, 3.2] (<i>see</i> [26] and [1])
ETSI ETS 300 381 (Edition 1) (December 1994)	Telephony for hearing impaired people; Inductive coupling of telephone earphones to hearing aids	assistive technologies features in browsers a 3.1.3 <i>Common Web</i>	 <i>pported</i> — Supported by users' s as well as the accessibility nd other user agents. <i>Pages</i> — Web pages and web levant to the entire website. This

includes the homepage, login page, and other entry pages, and, where applicable, the sitemap, contacts page, site help, legal information, and similar web pages that are typically linked from all other web pages (usually from the header, footer, or navigation menu of a web page).

3.1.4 *Complete Processes* — When a web page is one of a series of web pages presenting a process (that is, a sequence of steps that need to be completed in order to accomplish an activity), all web pages in the process conform at the specified level or better (conformance is not possible at a particular level if any page in the process does not conform at that level or better).

3.1.5 *Captcha*—Initialism for "Completely Automated Public Turing test to tell Computers and Humans Apart".

3.1.6 Conformance — Satisfying all the requirements of a given standard, guideline or specification.

3.1.7 *Conforming Alternate Version* — Version that:

- a) conforms at the designated level;
- b) provides all of the same information and Functionality in the same human language;
- c) is as up to date as the non-conforming content; and
- d) for which at least one of the following is true:
- the conforming version can be reached from the non-conforming page via an accessibility-supported mechanism,
- **2)** the non-conforming version can only be reached from the conforming version, or
- **3**) the non-conforming version can only be reached from a conforming page that also provides a mechanism to reach the conforming version.

3.1.8 *Conformity Assessment* — Demonstration that specified requirements relating to a product, process, system, person or body are fulfilled [source: ISO/IEC 17000 : 2004).

3.1.9 *Context-sensitive Help* — Help text that provides information related to the function currently being performed.

3.1.10 Contrast Ratio — (L1 + 0.05)/(L2 + 0.05), where L1 is the relative luminance of the lighter of the colours, and L2 is the relative luminance of the darker of the colours.

3.1.11 *Correct Reading Sequence* — Any sequence where words and paragraphs are presented in an order that does not change the meaning of the content.

3.1.12 *Essential* — If removed, would fundamentally change the information or functionality of the content, and information and functionality cannot be achieved in another way that would conform.

3.1.13 *Essential Functionality* — Functionality of a website that, if removed, fundamentally changes the use or purpose of the website for users. This includes information that users of a website refer to and tasks that they carry out to perform this functionality.

3.1.14 *Functionality* — Processes and outcomes achievable through user action.

3.1.15 *Informative* — For information purposes and not required for conformance.

3.1.16 *Input Error* — Information provided by the user that is not accepted.

3.1.17 *Keyboard Interface* — Interface used by software to obtain keystroke input.

3.1.18 *Keyboard Shortcut* — Alternative means of triggering an action by the pressing of one or more keys.

3.1.19 *Label* — Text or other component with a text alternative that is presented to a user to identify a component within web content.

3.1.20 *Large Scale (Text)* — With at least 18 point or 14 point bold or font size that would yield equivalent size for Indian language [Chinese, Japanese and Korean (CJK)] fonts.

3.1.21 *Link Purpose* — Nature of the result obtained by activating a hyperlink.

3.1.22 *Live* — Information captured from a real-world event and transmitted to the receiver with no more than a broadcast delay.

3.1.23 *Media Alternative for Text* — Media that presents no more information than is already presented in text (directly or via text alternatives).

3.1.24 Navigated Sequentially — Navigated in the order defined for advancing focus (from one element to the next) using a keyboard interface.

3.1.25 *Non-text Content* — Any content that is not a sequence of characters that can be programmatically determined or where the sequence is not expressing something in human language.

3.1.26 *Normative* — Required for conformance.

3.1.27 *Paused* — Stopped by user request and not resumed until requested by user.

3.1.28 *Pointer Input* — Input device that can target a specific coordinate (or set of coordinates) on a screen, such as a mouse, pen, or touch contact.

3.1.29 *Pre-recorded* — Information that is not live.

3.1.30 *Process* — Series of user actions where each action is required to complete an activity.

3.1.31 *Programmatically Determined (Programmatically Determinable)* — Determined by software from author-supplied data provided in a way that different user agents, including assistive technologies, can extract and present this information to users in indifferent modalities.

3.1.32 *Programmatically Determined Link Context* — Additional information that can be programmatically determined from relationships with a link, combined with the link text, and presented to users in different modalities.

3.1.33 *Programmatically Set* — Set by software using methods that are supported by user agents, including assistive technologies.

3.1.34 *Pure Decoration* — Serving only an aesthetic purpose, providing no information, and having no functionality.

3.1.35 *Real-time Event* — Event that a) occurs at the same time as the viewing and b) is not completely generated by the content.

3.1.36 *Relationships* — Meaningful associations between distinct pieces of content.

3.1.37 *Relative Luminance* — The relative brightness of any point in a colourspace, normalized to 0 for darkest black and 1 for lightest white.

3.1.38 *Relied Upon (Technologies that are)* — The content would not conform if that technology is turned off or is not supported.

3.1.39 *Role* — Text or number by which software can identify the function of a component within web content.

3.1.40 *Same Functionality* — Same result when used.

3.1.41 *Same Relative Order* — Same position relative to other items.

3.1.42 Satisfies a Success Criterion — The success criterion does not evaluate to 'false' when applied to the page.

3.1.43 Set of Web Pages — Collection of web pages that share a common purpose and that are created by the same author, group or organization.

3.1.44 *State* — Dynamic property expressing characteristics of a user interface component that may change in response to user action or automated processes.

States do not affect the nature of the component, but represent data associated with the component or user interaction possibilities. Examples include focus, hover, select, press, check, visited/unvisited, and expand/collapse.

3.1.45 *Status Message* — Change in content that is not a change of context, and that provides information to the user on the success or results of an action, on the waiting state of an application, on the progress of a process, or on the existence of errors.

3.1.46 Structure

- a) The way the parts of a web page are organized in relation to each other; and
- b) The way a collection of web pages is organized.

3.1.47 *Supplemental Content* — Additional content that illustrates or clarifies the primary content.

3.1.48 Synchronized Media — Audio or video synchronized with another format for presenting information and/or with time-based interactive components, unless the media is a media alternative for text that is clearly labelled as such.

3.1.49 *Technology (Web Content)* — Mechanism for encoding instructions to be rendered, played or executed by user agents.

3.1.50 *Templates* — Content patterns that are filled in by authors or the authoring tool to produce web content for end users (for example, document templates, content management templates, presentation themes). Often templates will pre-specify at least some authoring decisions. ATAG 2.0 definition for "templates".

3.1.51 *Text* — Sequence of characters that can be programmatically determined, where the sequence is expressing something in human language.

3.1.52 *Text Alternative* — Text that is programmatically associated with non-text content or referred to from text that is programmatically associated with non-text content. Programmatically associated text is a text whose location can be programmatically determined from the non-text content.

3.1.53 *Unicode* — UNICODE, formally the UNICODE Standard, is an information technology standard for the consistent encoding, representation, and handling of text expressed in most o f the world's writing systems.

3.1.54 Up-event — Platform event that occurs when the trigger stimulus of a pointer is released.

The up-event may have different names on different platforms, such as "touchend" or "mouseup".

3.1.55 Used in an Unusual or Restricted Way — Words used in such a way that requires users to know exactly which definition to apply in order to understand the content correctly.

3.1.56 UserAgent — Any software that retrieves and presents Web content for users.

3.1.57 *User-controllable* — *Data that is intended to be* accessed by users.

3.1.58 User Interface Component — A part of the content that is perceived by users as a single control for a distinct function.

3.1.59 User Inactivity — Any continuous period of time where no user actions occur. The method of tracking will be determined by the web site or application.

3.1.60 Video — The technology of moving or sequenced pictures or images.

3.1.61 Video-only — A time-based presentation that contains only video (no audio and no interaction).

3.1.62 Visually Customized — The font, size, colour, and background can be set.

3.1.63 Web Page — A non-embedded resource obtained from a single URI using HTTP plus any other resources that are used in the rendering or intended to be rendered together with it by a user agent.

3.1.64 Web Page States — Dynamically generated web pages sometimes provide significantly different content, functionality, and appearance depending on the user, interaction, device, and other parameters. In the context of this methodology, such web page states can be treated as an cillary to web pages (recorded as an additional state of a web page in a web page sample) or as individual web pages.

3.2 Abbreviations and Acronyms

ACR	Accessibility Conformance Report			
CEN	European Committee Standardization			for
CENELEC	European Electrotechnica		mittee lardization	for
EN	European Norn	ı		
ETSI	European Standards Instit		ecommunicat rance)	ions
ICT	Information Technology	and	Communica	tion
IEC	International Commission		Electrotechr	nical
ISL	Indian Sign La	nguage		
ISO	International Standardization	0	anization	for
PDF	Portable Docum	nent Fo	ormat	
TR	Technical Repo	ort		

VPAT	Voluntary Product Accessibility Template
W3C	World Wide Web Consortium
WAI	Web Accessibility Initiative
WCAG	Web Content Accessibility Guidelines
QVGA	Quarter Video Graphics Array

4 ICT PRODUCTS AND SERVICES

4.1 Type of ICT Products and Services

4.1.1 The ICT market is continuously and rapidly evolving. Furthermore, it is characterized by a great diversity:

- a) ICT consists of many products and services Hardware such as desktop or laptop or tablet or smartphone or e-book reader devices for personal use; peripherals such as printers and scanners; kiosks and PoS terminals - including touch-based and contactless, display boards, non-web contents, documents, office software or accounting software or other specialized software; websites and portals other on-line services, mobile apps, support and emergency services.
- b) *ICT is developed, produced and sold by a variety of* companies — Product developers, manufacturers, system integrators, service providers, software developers, web designers, retailers, payment system participants etc. Most products and services pass through many links of a value chain before they reach their final design and are delivered to the customer.
- c) Many business models are applied Selling off-the-shelf products over the counter, bundling of hardware and services such as cloud-based services, Software as a Service (SaaS), Anything as a Service (XaaS) etc.

4.1.2 Since an ICT product or service is presumed to pass through a number of stages in a value chain and has functions, characteristics and other value added during this process, characteristics and features providing accessibility may be created and added during several stages. Since it is in the supplier's responsibility to demonstrate the fulfilment of given functional accessibility requirements of the complete offered solution, conformity assessment of accessibility should be made at the stage when the final delivery and use happens.

4.1.3 The nature of ICT could be of any one of the following types:

- a) Off-the-shelf products;
- b) Customized products;

- c) Integrated products or systems;
- d) Proprietary software;
- e) Open-source software and open standards;
- f) Services;
- g) Web sites;
- h) Cloud-based and distributed application platforms and services (including SaaS and XaaS); and
- j) Development of bespoke applications.

4.1.4 A few ICT categories and its set of applicable clauses for conformance are given in Annex A (*Informative*).

4.2 Maturity of the Technology

IS 17802 (Part 1) covers requirements for functions relating to all kinds of ICT products and services; therefore, the conformity assessment of the diverse ICT products and services in the procurement process can be very different. Maturity of the technology can be a factor affecting the procurement of accessible ICT products and services. While mature products (such as computers, web sites, mobile phones) could imply an easier assessment of accessibility, newer products and bespoke applications or those involving innovation or cutting-edge technology (AI/ML, Robotics, NLP, Blockchain, IoT, AR/VR and the like) would generally require more knowledge to be able to carry out an efficient conformity assessment.

5 CONFORMITY IN THE CONTEXT OF ICT ACCESSIBILITY

5.1 Success Criteria - Conformance in Respect of Accessibility as per WCAG 2.1

5.1.1 'Understanding conformance' is clearly stated in WCAG 2.0 and is applicable across the WCAG series, which includes WCAG 2.1. It states that the 'requirements' are the 'success criteria'. As such, to conform to clauses of WCAG 2.1 and to Web, Non-Web documents and software [refer to clasues **9**, **10** and **11** of IS 17802 (Part 1) respectively], one needs to satisfy the success criteria in respect of each clause, wherever stated, as it is. There is no content, non-web document (or) software which violates the success-criteria.

NOTE — This means that if there is no content to which a success criterion applies, the success criterion is satisfied.

5.1.2 Success criteria for each guideline are testable success criteria, provided to allow WCAG 2.0 conformity principles to be used where requirements and conformance testing are necessary such as in design specification, purchasing, regulation, and contractual agreements. In order to meet the needs of different groups and different situations, three levels of conformance are defined in WCAG 2.0: A (lowest),

AA, and AAA (highest). (In this standard, though, only level AA has been made applicable for the purpose of conformity).

5.1.3 Success criteria are written as testable criteria for objectively determining if content satisfies them. Testing the success criteria can involve a combination of automated testing and human evaluation. The testing should be able to determine if a success criterion has been satisfied with a high level of confidence. The content should be tested by those who understand how people with different type of disabilities use the web.

5.1.4 Testing and testable in this context refer to functional testing, that is, verifying that the content functions as expected, or in this case, that it satisfies the success criteria. Although content may satisfy all success criteria, the content may not always be usable by people with multiple disabilities. Therefore, usability testing is recommended, in addition to the required functional testing. Usability testing aims to determine how well people can use the content for its intended purpose. It is recommended that users with disabilities be included in test groups when performing usability testing.

5.1.5 There are a number of conditions that must be met for a success criterion to be included at all. These include **5.1.5.1** and **5.1.5.2**.

5.1.5.1 All success criteria must be important access issues for people with disabilities that address problems beyond the usability problems that might be faced by all users. In other words, the access issue must cause a proportionately greater problem for people with disabilities than it causes people without disabilities in order to be considered an accessibility issue (and covered under these accessibility guidelines).

5.1.5.2 In order to accommodate different situations that may require or allow greater levels of accessibility than others, WCAG 2.0 has three levels of conformance and, therefore, three levels of Success Criteria. Accordingly, Success Criteria have one of the respective levels of conformance. This standard specifies normative conformance criteria for Level as AA [IS 17802 (Part 1)]. Conformity to AAA is encouraged, wherever possible.

5.2 Conformance of a Web Page

In order for a web page to conform to WCAG 2.1, all of the following conformance requirements(Success Criteria) must be satisfied. [Source: WCAG 2.1: 2018].

5.2.1 Full Pages

Conformance (and conformance level) is for full web page(s) only and cannot be achieved if part of a web page is excluded.

5.2.2 Complete Processes

When a web page is one of a series of web pages presenting a process (that is, a sequence of steps that need to be completed in order to accomplish an activity), all web pages in the process conform to the specified level or better. (Conformance is not possible at a particular level if any page in the process does not conform at that level or better.)

5.2.3 Only Accessibility-supported Ways of Using Technologies

Only accessibility-supported ways of using technologies are relied upon to satisfy the success criteria. Any information or functionality that is provided in a way that is not accessibility supported is also available in a way that is accessibility supported. (See understanding accessibility support).

5.2.4 Non-interference

If technologies are used in a way that is not accessibility supported, or if they are used in a non-conforming way, then they do not block the ability of users to access the rest of the page. In addition, the web page as a whole continues to meet the conformance requirements under each of the following conditions:

- a) when any technology that is not relied upon is turned on in a user agent,
- b) when any technology that is not relied upon is turned off in a user agent, and
- c) when any technology that is not relied upon is not supported by a user agent.

In addition, the following success criteria apply to all content on the page, including content that is not otherwise relied upon to meet conformance, because failure to meet them could interfere with any use of the page:

- 1) Audio control;
- 2) No keyboard trap;
- 3) Three flashes or below threshold; and
- 4) Pause, stop, hide.

5.3 Statement of Partial Conformance - Language

An example of partial compliance will be: "statement of partial conformance due to language" may be made when the page does not conform, but would conform if accessibility support existed for (all of) the language(s) used on the page. The form of that statement would be, "This page does not conform, but would conform to WCAG 2.1 at level X if accessibility support existed for the following language(s)". In the light of the above discussion, requirements for other ICT products and services have been covered in IS 17802 (Part 1).

6 DETERMINATION OF CONFORMANCE

6.1 Conformance to the requirements specified in IS 17802 (Part 1) is achieved by meeting all the applicable requirements, these are clauses containing the word "shall". Those clauses containing the word "should" are recommendations and are not required for conformance.

6.2 All clauses except those in clause **12** of IS 17802 (Part 1) are self-scoping — in the sense that the test procedure and/or success criteria is met when the specified function/feature is supported and the concerned inputs/outputs are made available and the corresponding test is passed. When one of the functions/features is not supported or concerned inputs/outputs are not made available, the requirement is to be deemed as not applicable.

6.3 ICT is often an assembly of two or more items of ICT. In some cases, two or more interoperable items of ICT may together meet more requirements of the standard when one item complements the functionality of the other and the sum together meets more of the accessibility requirements. However, combining two items of ICT, both of which fail to meet any particular requirement, will not lead to a combined ICT system that meets that requirement.

6.4 This standard does not prioritize requirements.

NOTES

1 Conformance with the accessibility requirements could be affected by subsequent implementation or maintenance.

2 Sampling is frequently required on complex ICT when there are too many instances of the object to be tested. This standard cannot recommend specific ICT evaluation sampling techniques as these are context specific.

6.5 The inherent nature of certain situations makes it impossible to make reliable and definitive statements that accessibility requirements have been met. In those situations, therefore, the requirements in this standard are not applicable:

- a) when the product is in a failure, repair or maintenance state where the ordinary set of input or output functions are not available; and
- b) during those parts of start-up, shutdown, and other state transitions that can be completed without user interaction.

NOTE — Even in the above situations, it is best practice to apply requirements in this standard wherever it is feasible and safe to do so.

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6.6 Determination of conformance and success criteria for various requirements specified in clause **5** to clause **13** of IS 17802 (Part 1) are given as below:

- a) For generic requirements, refer to Table 1(a);
- b) For ICT with two-way voice communication, refer to Table 1(b);
- c) For ICT with video capabilities, refer to Table 1(c);
- d) For hardware, refer to Table 1(d);
- e) For web, refer to Table 1(e);
- f) For non-web documents, refer to Table 1(f);

- g) For software, refer to Table 1(g);
- h) For documentation and support services, refer to Table 1(h); and
- j) For ICT providing relay or emergency service access, refer to Table 1(i).

6.7 The requirements mentioned in clause **9**, **10** and **11** of IS 17802 (Part 1) refers to 'WCAG 2.1 Success Criteria'. WCAG 2.1 provides 'sufficient and advisory techniques' to meet the success criteria. 'Other techniques' may also be sufficient if they meet the success criterion.

IS 17802 (Part 2) : 2022

Table 1 (a) Generic Requirements

(<i>Clause</i> 6.6)				
For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria		
5.1.1 Introduction		Clause 5.1.1 of IS 17802 (Part 1) is informative and does not contain requirements that require testing		
5.1.2 General				
5.1.2.1 Closed functionality	NIL	See Table 1(a) to table 1(i), as applicable.		
5.1.2.2 Assistive technology	Testing	 Check that the ICT has closed functionality. Determine the closed functions of the ICT. 1. Check that the tests for 5.1.3 to 5.1.6 mentioned in Table 1(a) can be carried out without the attachment or installation of any assistive technology except personal headsets or inductive loops. 		
5.1.3 Non-Visual Access				
5.1.3.1 Non-visual output of visual information	Testing	Check that the ICT needs Visual information to enable the use of those functions of the ICT (such as operating instructions and orientation, transaction prompts, user input verification, error messages and non-text content) that are closed to assistive technology such as screen reading.		
		1. Check that atleast one alternative mode, such as audio, or haptic or tactile form (such as braille), is provided for each function.		
		2. Check that the functions are operable using the provided alternative mode, such as audioor haptic or tactile form (such as braille).output access.		
		3. *Check that same Indian language chosen by the user is supported.		
5.1.3.2 Auditory output delivery including speech	Inspection	Check that the ICT delivers auditory output in respect of closed functions by a mechanism included in or provided with the ICT (Mechanisms included in or provided with ICT may be, but are not limited to, a loudspeaker, a built-in handset/headset, or other industry standard coupled peripheral).		
		1. Check that the auditory output is delivered by a personal headset that can be connected through a 3.5 mm audio jack or an industry standard connection (could be a wireless connection or inductive loop) without requiring the use of vision.		
		2. *Choose an Indian language. Check that auditory output is also in the same language.		
5.1.3.3 Auditory output correlation	Inspection	Check that the ICT provides auditory output as non-visual access to closed functionality, and information is displayed on the screen.		
		1. Enable a representative set of diverse information to be displayed on the screen during operation.		
		Check that the ICT provides auditory information that allows the user to correlate the audio with the information displayed on the screen.		
5.1.3.4 Speech output user control	Inspection	Check that the ICT provides speech output as non-visual access to closed functionality.		
		1. Check that the speech output is capable of being interrupted or paused and rewound (by a few steps or fully) when requested by the user.		
		2. Check that the speech output is capable of being repeated when requested by the user.		
5.1.3.5 Speech output automatic interruption	Inspection	Check that the ICT provides speech output as non-visual access to closed functionality.		
		1. Determine the closed functions of the ICT.		
		2. Check that the current speech output happens on a user function.		
		3. Before that completes, undertake a new user action.		
		4. Check that the current speech output for each single function is interrupted when new speech output begins.		
		 *Check that the interrupt to speech output does not occur when safety instruction or warning messages are being read out and new user actions is blocked. 		

* These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to respective clauses of IS 17802 (Part 1)	Assessment	
5.1.3.6 Speech output for non-text	Testing	Check that the ICT presents for Non-text content to users via speech output.
content		1. Check that speech is provided as an alternative to each non-text content.
		2. Check whether the non-text content is not pure decoration or used only for visual formatting.
		3. Check that the speech output follows the guidance for "text alternative" described in WCAG 2.1 Success Criterion 1.1.1.
		4. *Check that the speech output is in the same language chosen by the user.
5.1.3.7 Speech output for video information	Testing	Check that the ICT needs Pre-recorded video content to enable the use of closed functions of ICT.
		Check ICT whether Speech output is provided as output to closed functionality.
		1. Check that the speech output presents an equivalent information for the pre-recorded video content.
		2. *Check that the speech output is in chosen or supported Indian language.
5.1.3.8 Masked entry	Testing	Check that the ICT provides auditory output as non-visual access to closed functionality.
		Check that the characters displayed are masking characters.
		Check that the ICT has not activated the option to allow non-private auditory output.
		 Enter masking characters. Check that the auditory output is not a spoken version of the characters entered or the auditory output is delivered only to a mechanism for private listening.
5.1.3.9 Private access to personal data	Testing	Check that the ICT provides auditory output as non-visual access to closed functionality.
		Check that the output contains data that is deemed private.
		 Check that the auditory output of the private data is delivered only to a mechanism for private listening.
		2. Check that the mechanism for private listening can be connected without requiring the use of vision.
		3. *Check that the privacy preserving output is in the same language chosen by the user and warning highlighting privacy is also in the same language.
5.1.3.10 Non-interfering audio output	Testing	Check that the ICT provides auditory output is as non-visual access to closed functionality and the ICT automatically plays interfering audible output.
		1. Check that the interfering audible output lasts no longer than three seconds.
5.1.3.11 Private listening volume	Inspection	Check that the ICT provides auditory output as non-visual access to closed functionality.
		Check that the ICT delivers whether auditory output through a mechanism for private listening.
		1. Check that there is at least one non-visual mode of operation for controlling the volume.
5.1.3.12 Speaker volume	Inspection and measurement	Check that the ICT provides auditory output as non-visual access to closed functionality.
		Check that the ICT delivers auditory output through speakers.
		1. Check that a non-visual incremental volume control is provided.
		2. Check that output amplification up to a level of at least 65 dBA (-29 dBPaA) is available.
5.1.3.13 Volume reset	Inspection and measurement	Check that the ICT provides auditory output as non-visual access to closed functionality.
		Check that the ICT is not dedicated to a single user.
		 Check that a function is provided to automatically reset the volume to be at a level of 65 dBA or less after every use.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cas

For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to respective clauses of IS 17802 (Part 1)	Assessment	
5.1.3.14 Spoken languages	Testing	Check that the ICT provides speech output as non-visual access to closed functionality.
		Check that the speech output is not proper name, technical term, words of indeterminate language or words or phrases that have become part of the vernacular of the immediately surrounding text.
		Check that the content is not generated externally and is under the control of the ICT vendor.
		Check that the ICT languages of the display can selected using non-visual access.
		Check the user has not selected a speech language that is different from the language of the displayed content.
		1. Check that the speech output is in the same human language of the displayed content provided.
5.1.3.15 Non-visual error identification	Testing	Check ICT Whether Speech output is provided as non-visual access to closed functionality.
		Check ICT Whether an input error is automatically detected.
		1. Check that speech output identifies the item that is in error.
		2. Check that the speech output describes the item that is in error.
		 *Check that the error indication is described by the speech output in the same Indian language chosen by the user.
5.1.3.16 Receipts, tickets, and transactional outputs	Testing	Check that the ICT is closed to visual access and provides receipts, tickets, or other outputs as a result of a self-service transaction.
		Check that the information being checked is not printed copies of itineraries and maps.
		1. Check that speech output is provided which includes all information necessary to complete or verify the transaction.
		2. *Check that the speech output is in the same Indian language chosen by the user, immaterial of the language in which the tickets etc. are printed.
		3. Make payment for a transaction through a mechanism provided by the system which involves payment gateways. Check whether the transaction is completed, ticket issued, and speech output is provided containing all the necessary information.
5.1.4 Functionality closed to text enlargement	Inspection and measurement	Check that the ICT offers functionality closed to the text enlargement features of platform or assistive technology and viewing distance is specified by the supplier.
		1. Check that the ICT provides a mode of operation where the text and images of text necessary for all functionality is displayed in such a way that the height of a non-accented capital 'H' subtends an angle of at least 0.7 degrees at the specified viewing distance.
5.1.5 Visual output for auditory information	Inspection	Check that the ICT needs Pre-recorded auditory information to enable the use of closed functions of ICT.
		1. Check that the ICT provides visual information equivalent to the auditory output.
		2. *Check that the visual output is in the same language as the auditory information.
5.1.6.1 Operation without keyboard	Inspection	Check that the ICT functionality is closed to keyboard or keyboard interfaces.
interface (closed functionality)		1. Check that all functionalities are operable without vision.
5.1.6.2 Operation without	Inspection	Check that the ICT functionality is closed to keyboards or keyboard interfaces.
keyboard interface (Input focus)		Check that the ICT's Input focus can be moved to a user interface element.
		1. Check that it is possible to move the input focus away from that element using the same mechanism.

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For Requirements,	Type of Assessment	Inspection, Test Procedure and Success Criteria
refer to respective clauses of IS 17802 (Part 1)	Assessment	
5.1.7 Access without speech	Inspection	Check that the ICT needs speech to enable the use of closed functions of ICT.
		1. Check that the closed functions can be enabled by an alternative input mechanism that does not require speech.
		2. *Check that the alternate mechanism is also in the same Indian language as the one chosen by the user or in the language in which speech is used to enable the functions.
5.2 Activation of accessibility	Inspection	Check that the ICT has documented accessibility features to meet a specific need.
features		1. Check that it is possible to activate those accessibility features, that do not rely on a method that does not support that need.
5.3 Biometrics (a)	Test 1	Check that the ICT uses biological characteristic for user identification.
		1. Check that more than one biological means can be used for user identification.
Biometrics (b)	Test2	Check that the ICT uses biological characteristic for control of ICT.
		1. Check that more than one means can be used for control of ICT.
5.4 Preservation of accessibility information during conversion	Inspection	Check that the ICT provides documentation fornon-proprietary information on accessibility.
		Check that the ICT converts information or communication.
		1. Check that the non-proprietary information provided for accessibility is preserved, to the extent supported by the destination format.
5.5 Operable parts		
5.5.1 Means of operation	Testing	Check ICT Whether there are operable parts that require grasping, pinching or twisting of the wrist to operate actions.
		1. Check if there are accessible alternative means of operation that do not require grasping, pinching or twisting of the wrist to operate these actions.
5.5.2 Operable part discernibility	Testing	Check that the ICT has operable parts.
		1. Check that there is a means to discern each operable part without vision.
		2. Check that the action associated with the operable part has not been performed when using the means to discern each operable part of step 1.
5.6 Locking or Toggle controls		
5.6.1 Tactile or auditory status	Testing	Check that the ICT has a locking or toggle control.
		Check that the locking or toggle control is visually presented to the user.
		1. Check that there is at least one mode of operation where the status of all locking or toggle controls can be determined through touch or through sound without operating the control.
5.6.2 Visual status	Testing	Check that the ICT has a locking or toggle control.
		Check Whether locking or toggle control is presented to the user.
		1. Check that there is at least one mode of operation where the status of all locking or toggle controls can be visually determined when the control is presented.
5.7 Key repeat	Testing	Check that the ICT has a key repeat function.
		1. Check that the delay before key repeat can be adjusted to at least 2 s.
		2. Check that the key repeat rate can be adjusted to 2 s per character.
5.8 Double-strike key acceptance	Testing	Check that the ICT has a keyboard or keypad.
		Check that there is a mechanism that allows adjustment of the delay after any keystroke, during which an additional key-press
		will not be accepted if it is identical to the previous keystroke.
		1. Adjust that mechanism to its maximum setting and press any key. After delay of 0.5 s press the same key and observe whether the keystroke has been accepted.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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Table 1(a) (Concluded)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
5.9 Simultaneous user actions	Inspection	Check that ICT has a mode of operation requiring simultaneous user actions.
		Determine all the user controllable functions of the ICT.
		1. Check that there is a mode of operation that does not require simultaneous user actions.
		2. Check that each user controllable function can be operated with a mode of operation not requiring simultaneous user actions.
5.10.1 Indian Language Requirements	Inspection/ Testing/	Check that the ICT offers features, content or operations in one or more Indian languages.
	Measurement	Check the list of Indian languages it offers support to in respect of the features, content or operations.
		Choose each language setting, one at a time and check the following:
		1. Check whether Unicode is supported as per ISO/IEC 10646.
		2. Check whether display in supported for Indian languages as per IS/ISO/IEC 14496-22 : 2015.
		 Check whether inputting is enabled through keyboard (hard or soft) in the concerned Indian language, as per IS 16333-3 for mobile keyboard layout.
		 Check whether inputting is enabled through keyboard (hard or soft) for desktop or Laptop as per IS 16350 : 2016.
		5. Check Indian language inputs and fonts are provided as per MeitY eGovernance Standard on Character Encoding: 01 : 2009.
		 *Check whether auditory outputs are given in the chosen Indian language (in closed systems) and screen reader supports the same Indian language (in open systems).
		7. *Check whether voice command is supported in the chosen Indian language.
5.11 Indian Sign Language	Inspection/ Testing/	 Check whether ICT (such as TV, Set-top box and remote control) support sign language.
	Measurement	 *Check whether they offer ready options for the user to access sign language output setting.
		3. *Choose a content that provides Sign language.
		4. *Check whether sign language is shown in a picture-in-picture mode.
		5. *Check whether the sign language is as per ISL Dictionary released by ISLRC, is accurate and conveys clear message to the hearing impaired.
		6. *Check online/internet TV/Television/Video programs through Internet and Internet platforms.
		 *Check compliance to Accessibility Standards for PwDs, MoI&B Accessibility standard 2019.
5.12 Captioning and Subtitling	Inspection/ Testing/	1. Check Whether ICT (such as TV, Set-top box and remote control) support Captioning (closed and open) and subtitling.
	Measurement	2. *Check the list of Indian languages it offers support to in respect of the features, content or operations.
		3. *Choose each language setting, one at a time and check the following:
		3.1 *Choose a content that provides Captioning.
		3.2 *Check whether the captioning is accurate, synchronized, complete and free from errors of spelling and grammar.
		3.3 *Check the positioning of captioning, case, italics and underlining, colour and font for easy visibility and readability of hearing impaired.
		3.4. *Check online/internet TV/Television/Video programs through offered through Internet and Internet platforms.
		3.5. *Check compliance as per Accessibility Standards for PwDs, MoI&B Accessibility standard, 2019.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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Table 1 (b) ICT with Two-way Voice Communication

(*Clause* 6.6)

For Requirements, Type of Inspection, Test Procedure and Success Criteria		
Refer to Respective Clauses of IS 17802 (Part 1)	Assessment	Inspection, rest i foccuire and Success Criteria
6.1 Audio bandwidth for speech	Measurement	Check that the ICT can provide two-way communication.
		 Check that the ICT can encode and decode audio with a frequency range with an upper limit of at least 7000 Hz.
6.2 Real-Time Textv (RTT) function	ality	
6.2.1 RTT provision		
6.2.1.1 RTT communication	Inspection	Check that ICT has a mode and is in a mode that provides two-way voice communication.
		Check "RTT reference terminal" is available as it is essential for testing.
		 Check that the ICT allows two-way RTT communication with the "reference" ICT.
		NOTE 1 — Feature phones may not be able to support RTT capabilities.
		NOTE 2 — An "RTT reference terminal" is a terminal specifically designed for testing RTT capable devices in a manner that would confirm their functionality and interoperability. These are generally created by a national or international standards entity so that all testing is done with a consistent "RTT reference terminal".
		NOTE 3 — For support to Indian languages, UNICODE, a character set which is 16-bit ISO/IEC 10646-1 level 3 is to be mandatorily supported [<i>see</i> clause 5.10 of IS 17802 (Part 1)].
		NOTE 4 — Where this requirement would require design changes to add input or output hardware to the ICT are exempted.
6.2.1.2 Concurrent voice and text	Inspection	Check that the ICT provides a means for two-way voice and RTT communication.
		1. Check if it allows concurrent use of voice and RTT through a single user connection.
		NOTE 1 — For multiparty communication, as in a conference system, check that Step 1 is supported by a typical protocol that allows voice and RTT on a 'one at a time' basis among participants, even as chat may support concurrent submission of messages by all participants.
		NOTE 2 — Where both server-side software and local hardware and software are required to provide voice *communication, where neither part can support voice communication without the other and are sold as a unit for the voice communication function, the local and server-side components are considered a single product.
6.2.2 Display of RTT		
6.2.2.1 Visually distinguishable display	Inspection	Check that the ICT under test has RTT send and receive capabilities. Check that the "RTT reference terminal" is available for testing.
		1. The ICT under test is connected to the "RTT reference terminal".
		2. The different elements of the ICT are in an operational status (the connection is active and the terminals are in the relevant RTT mode) and the two terminals are communicating with each other.
		3. A Short text sequence is sent by the ICT under test.
		4. A Short text sequence is sent by the "RTT reference terminal".
		Check, on the ICT under test, that displayed sent text is visually differentiated from and separated from received text.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

For Requirements, Refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
6.2.2.2 Programmatically determinable send and receive direction	Inspection	 Check that the ICT under test has RTT send and receive capabilities and has open functionality. Check "RTT reference terminal" is available for testing. 1. The ICT under test is connected to the "RTT reference terminal". 2. Check that the different elements of the ICT are in an operational status (the connection is active and the terminals are in the relevant RTT mode) and the two terminals are communicating with each other. 3. Send a short text sequence by the ICT under test. 4. Send a short text sequence by the "RTT reference terminal". 5. Check that the send/receive direction of text sequences are programmatically determinable.
6.2.2.3 Speaker identification	Inspection	 *Repeat steps 3 to 5 by sending the short text in Indian languages. Check that the ICT has RTT and speaker identification capabilities. Check "RTT reference terminal" is available for testing The ICT under test is connected to the "RTT reference terminal". Send RTT from the "RTT reference terminal" to the ICT under test. Check by observation whether the ICT under test provides speaker identification of voice. Check that the incoming RTT text also provides speaker identification. *Repeat 3 to 4 by sending RTT in Indian languages.
6.2.2.4 Visual indicator of Audio with RTT	Inspection	 Check that the ICT is providing two-way voice communication and has RTT capabilities. 1. ICT under test is connected to another ICT providing two-way voice communication that is compatible with the voice communication on the ICT under test. 2. A person speaks into the other ICT. 3. Check by observation whether there is a real-time visual indicator of audio activity.
6.2.3.a Interoperability (a)	Test	 Check that the ICT provides a means for two-way voice communication over the Public Switched Telephone Network (PSTN). Check that the ICT provides a means for two-way RTT communication. Check availability of A "V.18 reference terminal" for testing. 1. Check that the ICT interoperates over the Public Switched Telephone Network (PSTN), with the V.18 reference terminal connected to the PSTN as described in Recommendation ITU-T V.18 or any of its annexes for text telephony signals at the PSTN interface. NOTE — A "V.18 reference terminal" is a terminal specifically designed for testing V.18 capable devices in a manner that would confirm their functionality and interoperability. These are generally created by a national or international standards entity so that all testing is done with a consistent reference terminal.
6.2.3.b Interoperability (b)	Test	 Check that the ICT provides a means for two-way voice communication using VOIP with Session Initiation Protocol (SIP). Check that the ICT provides a means for two-way RTT communication. Check that an "RTT reference terminal" is available as it is essential for testing for testing. 1. Check that the ICT interoperates with the "RTT reference terminal" using VOIP with Session Initiation Protocol (SIP) and using RTT that conforms to IETF RFC 4103. 2. If the ICT interoperates with other ICT using the IP Multimedia Subsystem (IMS) to implement VOIP, check that it follows the set of protocols in ETSI TS 126 114, ETSI TS 122 173 and ETSI TS 134 229 that specify how IETF RFC 4103 applies.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
Refer to Respective Clauses of IS 17802 (Part 1)	Assessment	
6.2.3.c Interoperability (c)	Test	Check that the ICT provides a means for two-way voice communication using technologies other than PSTN or VOIP with Session Initiation Protocol (SIP). Check that the ICT provides a means for two-way RTT communication.
		Check that an "RTT reference terminal" is available for the mode of RTT communication for testing.
		1. Check that the ICT interoperates with the "RTT reference terminal" using a relevant and applicable common specification for RTT exchange that is published and available for the environment in which the ICT will be operating.
		2. Check that the common specification in check 1 includes a method for indicating loss or corruption of characters.
6.2.3.d Interoperability (d)	Test	Check that the ICT provides a means for two-way voice communication and RTT. Check an "RTT reference terminal" is available using the new RTT Standard for testing.
		 Check that the ICT under test interoperates with the "RTT reference terminal" for the new RTT standard that has been introduced for use.
		2. Check that the new RTT standard is supported by all of the other active ICT that support voice and RTT in the same environment.
6.2.4 RTT responsiveness	Inspection of Measurement data or Test	Check that the ICT under test utilises RTT input. Check that the ICT under test is connected to a device or software that can determine when characters are transmitted by the ICT under test.
		1. Enter single characters to the terminal under test.
		2. Check the time at which input entry has occurred (for example, characters appear up on the local screen).
		Check the period between input entry to the ICT under test and the time when the text is transmitted to the ICT network or platform.
		4. Check that it is less than or equal to 500ms.
		NOTE — As described in the notes to clause 6.2.4 of IS 17802 (Part 1), the identification of when input entry has occurred may vary according to the type of RTT system under test.
6.3 Caller ID	Inspection	Check that the ICT terminal provides caller identification or similar telecommunications functions and the functionality is open.
		 Check that the information delivered by each function is available in text form.
		2. Check that the information delivered by each function is programmatically determinable.
		3. *Repeat Steps 1 to 2 by setting Indian language option.
6.4 Alternatives to voice-based services	Inspection	Check that the ICT provides real-time voice-based communication. Check ICT provides voice mail, auto-attendant, or interactive voice response facilities.
		1. Check that the ICT offers users a means to access the information without the use of hearing or speech.
		2. Check that a user can carry out the tasks provided by the system without the use of hearing or speech.
		3. *Check that the information displayed is in the same Indian language chosen by the user and the operation is supported with the use of the chosen Indian language.
6.5 Video Communication		
6.5.1 General	NIL	Clause 6.5.1 of IS 17802 (Part 1) is informative only and contains no requirements requiring test.
6.5.2 Resolution	Inspection	Check that the ICT provides two-way voice communication that includes real-time video functionality.
		1. Check that the video communication resolution is QVGA resolution or better.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

For Requirements, Refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
6.5.3 Frame rate	Inspection	Check that the ICT provides two-way voice communication that includes real-time video functionality.
		1. Check that the video communication frame rate is equal to or higher than 20 frames per second (FPS).
6.5.4 Synchronization between audio and video	Measurement	Check that the ICT provides two-way voice communication that includes real-time video functionality.
		1. Check that the time difference between the speech and video presented to the user is equal to or less than 100 ms.
6.5.5 Visual indicator of audio with video	Inspection	Check that the ICT provides two-way voice communication and includes real-time video functionality.
		 Check that ICT under test is connected to another ICT providing two-way voice communication that is compatible with the voice communication on the ICT under test.
		2. Let a person speak into the other ICT.
		3. Check by observation whether there is a real-time visual indicator of audio activity.
6.5.6 Speaker identification with video (sign language)	Measurement	Check that the ICT provides two-way voice communication and includes real-time video.
communication		1. Check that a person communicates in sign language from the other compatible terminal.
		Check by observation whether the ICT under test provides a means for speaker identification for the sign language users.
6.6 Alternatives to video based services	NIL	Advisory only and contains no testable requirements

Table 1 (b) (Concluded)

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Table 1 (c) ICT with Video Capabilities

(*Clause* 6.6)

For Requirements, Refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
7.1 Caption processing technology		
7.1.1 Captioning playback	Inspection	Check that the ICT displays video with synchronized audio.1. Check that there is a mechanism in the ICT to display the captions.2. Check that the ICT has a mechanism to display the captions and
		sub-titling in supported languages.3* Check that the captioning and sub-titling is in the same Indian language chosen by the user or in the language agreed to by all participants
		 *Check that the captions follow MoI&B Accessibility standard as regards timing, colour, positioning and other parameters. NOTE — If a Braille device is connected, the ICT should provide an
		option to display captions on the Braille device.
	Test	Check that the ICT displays or processes video with synchronized audio.
		Check that Closed captions are provided as part of the content.
		1. Check that there is a mechanism for the user to choose to display the captions.
7.1.2 Captioning synchronization	Inspection	Check that the ICT has a mechanism to display captions.
		1. Check that the mechanism to display the captions preserves the synchronization between the audio and corresponding captions within 100 ms of the time stamp of the caption, or the availability of the caption to the player if a live caption.
7.1.3 Preservation of captioning	Inspection	Check when ICT transmits, converts or records video with synchronized audio.
		1. Check it preserves caption data such that it can be displayed in a manner consistent with clauses 7.1.1 and 7.1.2 of IS 17802 (Part 1).
		2. Check the captioning is consistent with the guidelines of MoI&B accesibility standard
7.1.4 Captions characteristics	Inspection	Check that the ICT displays captions and the captions under display are modifiable characters.
		 Check whether the ICT provides a way for the user to adapt the displayed characteristics of captions - background and foreground colour of subtitles, font type, size opacity of the background box of subtitles, and the contour or border of the fonts, to suit his/her requirements.
		NOTE — Characteristics of Captions shall be consistent with MoI&B TV Accessibility standard.
7.1.5 Spoken subtitles	Inspection	Check that the ICT displays video with synchronized audio.
		1. *Check that the content of the displayed captions are programmatically determinable.
		2. Check that there is a mode of operation to provide a spoken output of the available captions.
7.2 Audio description technology		
7.2.1 Audio description playback	Inspection	Check that the ICT displays video with synchronized audio.
		1. Check that there is an explicit and separate mechanism for audio description.
		2. Check that there is a mechanism to select and play the audio description to the default audio channel.
		3. Check that the ICT enables the user to select and play several audio tracks.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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Table 1 (c) (Concluded)

For Requirements, Refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
7.2.2 Audio description synchronization	Inspection	Check that the ICT has a mechanism to play audio description.1. Check that the synchronization between the audio and-visual content and the corresponding audio description is preserved.
7.2.3 Preservation of audio description	Inspection	 Check that the ICT transmits converts or records video with synchronized audio. 1. Check that the ICT preserves audio description data such that it can be played in a manner consistent with clauses 7.2.1 and 7.2.2 of IS 17802 (Part 1).
7.3 User controls for captions and audio description	Inspection	 Check that the ICT primarily display materials containing video with associated audio content. 1. Check that user controls to activate subtitling and audio descriptions are provided to the user at the same level of interaction (that is, the number of steps to complete the task) as the primary media controls.

Table 1 (d) Hardware

(*Clause* 6.6)

For Requirements,	Type of Assessment	Inspection, Test Procedure and Success Criteria
refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, fest riocedure and Success Criteria
8.1 General		l
8.1.1 Generic requirements	Inspection	Check that the ICT Supports Indian Language(s). Check that the ICT system is a mobile.
		1. * Check that the mobile supports UNICODE as per ISO/IEC 10646.
		 *Check that the mobile keyboard supports one type of Indian language keyboard layout as per IS 16333 (Part 3).
		3. Check that the mobile has the ability to display Indian language content as per IS/ISO/IEC 14496-22 : 2015. Check that the ICT Supports Indian Language(s).
		Check that the ICT system is a desktop or a laptop.
		1. *Check that the desktop/laptop supports UNICODE as per ISO/IEC 10646.
		 *Check that the desktop/laptop keyboard supports one type of Indian language keyboard as per IS 16350 : 2016.
		3. *Check that the desktop/laptop has the ability to display Indian language content and as per IS/ISO/IEC 14496-22 : 2015.
		*For website, SAKAL BHARATI font or similar font having same height and stem width for all Indian script is recommended.
		NOTE — The "generic requirements" of clause 5 of IS 17802 (Part 1) apply to all ICT hardware.
8.1.2 Standard connections	Inspection	Check that the ICT provides user input or output device connection points.
		1. Check that one type of connection conforms to an industry standard non-proprietary format.
		 Check that one type of connection conforms to an industry standard non-proprietary format and through the use of commercially available adapters.
		NOTE — The connections may be physical or wireless connections.
8.1.3 Colour	Inspection	Check that the hardware aspects of the ICT conveys visual information using colour coding as a means to indicate an action, to prompt a response, or to distinguish a visual element.
		1. Check that an alternative form of visual coding is provided.
8.2 Hardware products with speech	output	
8.2.1 Speech volume gain		
8.2.1.1 Speech volume range	Inspection based on	Check that the ICT hardware has a speech output.
	measurement data	1. Check that the ICT is certified to meet ANSI/TIA-4965.
		2. Measure the level (in dB) of the speech output at the lowest volume setting.
		3. Measure the level (in dB) of the speech output at the highest volume setting.
		4. Check that the range between 1 and 2 is greater than or equal to 18 db.
8.2.1.2 Incremental volume control	Inspection based on measurement data	Check that the ICT hardware has speech output and its volume control is incremental.
		1. Measure the level (in dB) of the speech output at the lowest volume setting.
		2. Check that there is at least one intermediate step that provides a level 12 dB above the lowest volume level measured in step1.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
8.2.2.1 Fixed-line devices	Inspection based on measurement data	Check that the ICT hardware is a fixed-line communication device with speech output and which is normally held to the ear.
		 Check that the measurements are made according to ETSI ES 200 381-1 which prove that the requirements defined in that standard are fulfilled (or) Check ICT is certified to meet TIA-1083-A. The ICT carries the "T" symbol specified in ETSI ETS 300 381.
8.2.2.2 Wireless communication devices	Inspection based on measurement data	Check that the ICT hardware is a wireless communication device with speech output which is normally held to the ear.
		1. Check that the ICT provides a means of magnetic coupling to hearing technologies which meets the requirements of ETSI ES 200 381-2 (or) Check that the ICT is certified to meet ANSI/IEEE C63.19.
8.3 Stationary ICT		
8.3.0 General (informative	Inspection based on	Check that the ICT has operable parts
recommendation)	measurement data	1. Ensure while installing that minimum and maximum heights of operable parts: 800 mm and 1 100 mm respectively.
	Inspection based on	Check that the ICT has displays units
	measurement data	 Ensure while installing that minimum and maximum heights of displays: 1 200 mm and 1 400 mm respectively.
8.3.1 Forward or side reach	Inspection and	Check that the ICT is stationary ICT.
	measurement	1. Check that they confirm to either 8.3.2 or 8.3.3 .
8.3.2 Forward reach		
8.3.2.1 Unobstructed high forward reach	Inspection and measurement	Check that ICT is Stationary ICT and no part of the stationary ICT obstructs the forward reach.
		1. Check that at least one of each type of operable part is located no higher than 1 200 mm above the floor of the access space.
8.3.2.2 Unobstructed low forward reach	Inspection and measurement	Check that ICT is Stationary ICT and that no part of the stationary ICT obstructs the forward reach.
		1. Check that at least one of each type of operable part is located no lower than 380 mm above the floor of the access space.
8.3.2.3.1 Obstructed forward reach-Clear space	Inspection	Check that the ICT is a tationary ICT and an integral part of the stationary ICT forms an obstruction which hinders to any type of operable part.
		1. Check that the ICT provides a clear space which extends beneath the obstructing element for a distance not less than the required reach depth over the obstruction.
8.3.2.3.2 Obstructed (< 500 mm) forward reach	Inspection and measurement	Check that the ICT is Stationary ICT and an integral part of the stationary ICT forms an obstruction which is less than 500 mm deep.
		1. Check that the forward reach to at least one of each type of operable part is no higher than 1 000 mm above the floor contact of the ICT.
8.3.2.3.3 Obstructed (< 600 mm) forward reach	Inspection and measurement	Check that the ICT is stationary ICT and an integral part of the stationary ICT forms an obstruction which is not less than 500 mm but is less than 600 mm deep.
		1. Check that the forward reach to at least one of each type of operable part is no higher than 1 100 mm above the floor contact of the ICT.
8.3.2.4 Knee and toe clearance width	Inspection and measurement	Check that the ICT is stationary ICT and the space under an obstacle that is an integral part of the stationary ICT is part of access space.
		1. Check that the width of the knee and toe clearance is greater than 900 mm.

For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
8.3.2.5 Toe clearance (a)	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a toe clearance space under any obstacle that is an integral part of the ICT that is less than 230 mm above the floor.
		1. Check that the toe clearance does not extend more than 635 mm under the obstacle.
8.3.2.5 Toe clearance (b)	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a toe clearance space under any obstacle that is an integral part of the ICT that is less than 230 mm above the floor
		1. Check that the toe clearance is at least 430 mm deep and 230 mm above the floor under the obstacle.
8.3.2.5 Toe clearance (c)	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a toe clearance space under any obstacle that is an integral part of the ICT that is less than 230 mm above the floor.
		1. Check that the toe clearance extends no more than 150 mm beyond any obstruction at 230 mm above the floor.
8.3.2.6 Knee clearance (a)	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a knee clearance space under the obstacle between 230 mm and 685 mm above the floor.
		1. Check that there is a knee clearance that extends less than 635 mm under the obstacle at a height of 230 mm above the floor.
8.3.2.6 Knee clearance (b)	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a knee clearance space under the obstacle between 230 mm and 685 mm above the floor.
		1. Check that there is a knee clearance that extends at least 280 mm under the obstacle at a height of 230 mm above the floor.
8.3.2.6 Knee clearance (c)	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a knee clearance space under the obstacle between 230 mm and 685 mm above the floor.
		1. Check that there is a knee clearance that extends more than 205 mm under the obstruction at a height of 685 mm above the floor.
8.3.2.6 Knee clearance (d)	Inspection and measurement	Check that the ICT is Stationary ICT and has an obstacle is an integral part of the ICT.
		Check that there is a knee clearance space under the obstacle between 230 mm and 685 mm above the floor.
		1. Check that the reduction in depth of the knee clearance is no greater than 25 mm for each 150 mm in height.
8.3.3 Side each		
8.3.3.1 Unobstructed high side reach	Inspection and measurement	Check that the ICT is stationary ICT and has an obstacle is an integral part of the ICT
		Side reach is unobstructed or is obstructed by an element that is an integral part of the stationary ICT which is less than 510 mm.
		1. Check that the high side reach to at least one of each type of operable part is no higher than 1220 mm above the floor of the access space.

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For Requirements,	Type of Assessment	Inspection, Test Procedure and Success Criteria
refer to Respective Clauses of IS 17802 (Part 1)	••	
8.3.3.2 Unobstructed low side reach	Inspection and measurement	Check that the ICT is stationary ICT and the side reach is unobstructed or obstructed by an element that is an integral part of the stationary ICT and which is less than 510 mm.
		1. Check that the low side reach to at least one of each type of operable part is greater than or equal to 380 mm above the floor of the access space.
8.3.3.3.1 Obstructed (≤ 255 mm) side reach	Inspection and measurement	Check that the ICT is stationary ICT and there is an obstruction, less than or equal to 255 mm in depth, that is an integral part of the ICT.
		1. Check that the high side reach to at least one of each type of operable part is no higher than 1 220 mm above the floor of the access space.
8.3.3.3.2 Obstructed (≤ 610 mm) side reach	Inspection and measurement	Check that the ICT is stationary ICT and there is an obstruction, greater than 255 mm and no more than 610 mm in depth, that is an integral part of the ICT.
		1. Check that the high side reach to at least one of each type of operable part is no higher than 1 170 mm above the floor of the access space.
8.3.4 Clear floor or ground space		
8.3.4.1 Change in level	Inspection and measurement	Check that the ICT is stationary ICT and there is a floor within the ICT that has a change in level.
		1. Check if the change in level is ramped, check that it has a slope less than 1:12. (or)
		2. If there is a vertical change of floor level, check that it is less than or equal to 6.4 mm. (or)
		3. If there is a vertical or sloped change in floor level, check that the slope is not greater than 1:2.
8.3.4.2 Clear floor or ground space	Inspection and	Check that the ICT is stationary ICT and there is an operating area within it.
	measurement	 Check that there is a clear floor area with minimum rectangular dimensions of 900 mm on one edge and 1200 mm on the other edge.
8.3.4.3 Approach		
8.3.4.3.1 General	Inspection	Check that the ICT is stationary ICT has an access space inside it.
		1. Check that it has at least one full side of the space that is unobstructed.
8.3.4.3.2 Forward approach	Inspection and measurement	Check that the ICT is stationary ICT containing an alcove and the operating area is within the alcove.
		Check that the depth of the alcove is greater than 610 mm where a forward approach is necessary.
		1. Check that the dimension of the access space is a minimum of 915 mm wide.
8.3.4.3.3 Parallel approach	Inspection and measurement	Check that the ICT is stationary ICT containing an alcove and the operating area is within the alcove.
		Check that the depth of the alcove is greater than 380 mm and a parallel approach is possible.
		1. Check that the dimension of the access space is a minimum of 1525 mm wide.
8.3.5 Visibility	Inspection and measurement	Check that the ICT is stationary ICT and one or more display screens are provided.
		1. Check that at least one of each type of display screen is positioned such that the information on the screen is legible from a point located 1015 mm above the centre of the floor of the operating area.

Table 1(d) (Concluded)

For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
8.3.6 Installation instructions	Inspection and	Check that The ICT is stationary ICT.
	measurement	1. Check that installation instructions are made available.
		2. Check that the instructions give guidance on how to install the ICT in a manner that ensures that the dimensions of the installed ICT conform to clauses 8.3.2 to 8.3.4 of IS 17802 (Part 1).
		3. Check that the instructions say that the installers should also take into account applicable requirements for accessibility of the built environment as they apply to the installation of the ICT.
8.4 Mechanically operable parts		
8.4.1 Numeric keys	Inspection	Check that the ICT has physical numeric keys arranged in a 12 key telephone keypad layout.
		1. Check that the number five key is tactilely distinct from the other keys of the keypad.
		Check that the ICT has softkey based keyboard (like PoS).
		 *Check for available provision for an alternate way of location and navigation within the key board space to assist the user about the keys such as through provision of audio-also ensuring privacy through headphone support while entering privacy respecting input.
8.4.2 Operation of mechanical parts		
8.4.2.1 Means of operation of mechanical parts	Inspection	Check that the ICT has a control that requires grasping, pinching, or twisting of the wrist to operate.
		1. Check that an accessible alternative means of operation is provided that does not require these actions.
8.4.2.2 Force of operation of mechanical parts	Inspection and measurement	Check that the ICT has a control that requires a force greater than 22.2 N to operate it.
		1. Check that an accessible alternative means of operation is provided that requires a force less than or equal to 22.2 N.
8.4.3 Keys, tickets and fare cards	Inspection and measurement	Check that ICT provides keys, tickets or fare cards, and their orientation is important for further use.
		1. Check that keys, tickets or fare cards have an orientation that is tactilely discernible.
8.5 Tactile indication of speech	Inspection and	Check that the ICT is designed for shared use and speech output is available.
mode	measurement	1. Check that a tactile indication of the means to initiate the speech mode of operation is provided.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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Table 1 (e) Web

(*Clause* 6.6)

For Requirements, refer to	Type of	Inspection, Test Procedure and Success Criteria
respective clauses of IS 17802 (Part 1)	Assessment	
9.1 Perceivable		
9.1.1 Text alternatives		
9.1.1.1 Non-text content	Inspection	Check that the ICT is a web page then,
		1. Identify any non text content present on the page. Examples of non-text content are images, graphs, figures etc.
		2. Using an assistive technology like screen reading software, verify that there is text alternative present for these non-text content.
		 Note that not all non-text content needs text alternative to be present as in the case of decorative images. Any non-text element present which already has a text equivalent present doesn't have to be exposed to screen reader users.
		4. When the text alternative is needed for the image, then check that the text alternative present for the image is meaningful and descriptive of the image that is present.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.1.1 Non-text content Success Criterion 1.1.1 Non-text Content
9.1.2 Time-based media		
9.1.2.1 Audio-only and	Inspection	Check that the ICT is a web page then,
video-only (pre-recorded)		if it has has multimedia [audio/ video] present in the content check the following:
		1. If the content is only audio, check if the audio content is repetitive and describes the content in text elsewhere in the same page. Then the following tests are not required.
		a. Identify the text transcript present for the audio.
		b. If text transcript is present, then ensure that it has all the essential dialogs, identifies speakers and describes all essential sound effects for the audio only content.
		If the content is a video, check if the video content is repetitive and describes the content in text elsewhere in the same page. Then the following tests are not required.
		a. Identify the video content.
		b. For the unique video content, text description is mandatory. Verify that either an audio description or text description is provided for the essential visual content in the video.
		c. In either case of audio description or text description, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired user.
		Check that the web page does not fail WCAG 2.1 Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded)
9.1.2.2 Captions (prerecorded)	Inspection	Check that the ICT is a web page then,
		if it has video in the content,
		1. Check for the presence of captions in the Video.
		2. When captions are present, check that
		a. Captions are visible with the required colour contrast between the text and the background.
		b. Identify speakers and any background noises
		c. Captions are in sync with the video content.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.2 Captions (Prerecorded)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.1.2.3 Audio description or media alternative (prerecorded)	Inspection	Check that the ICT is a web page then,
		1. Identify the video content.
		2. If the video content does not provide additional information where sight is needed to understand the content then audio description is not a mandate for this requirement.
		If the video content contains additional information which needs sight to perceive it then ensure the following:
		 a. Verify that an audio description is provided for the essential visual content in the video that requires sight to understand.
		b. In case of audio description being present, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired users.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.3 Audio Description or Media Alternative (Prerecorded)
9.1.2.4 Captions (live)	Inspection	Check that the ICT is a web page then,
		1. Identify the live video content present on the page.
		2. Check for the presence of captions in the live video.
		3. When captions are present, check that:
		a. Captions are visible with the required colour contrast between the text and the background;
		b. Identifies speakers and any background noises; and
		c. Captions are in sync with the video content.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.4 Captions (Live)
9.1.2.5 Audio description	Inspection	Check that the ICT is a web page then,
(pre-recorded)		1. Identify the video content.
		2. If the video content does not provide additional information where sight is needed to understand the content then audio description is not a mandate for this requirement.
		3. If the video content contains additional information which needs sight to perceive it then ensure the following:
		a. Verify that an audio description is provided for the essential visual content in the video that requires sight to understand.
		b. In case of audio description being present, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired users.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.5 Audio Description (Prerecorded)
9.1.3 Adaptable		
9.1.3.1 Info and relationships	Inspection	Check that the ICT is a web page then,
	_	1. Check that all the visual elements like tables, lists, form fields should be programmatically conveyed to the screen reader.
		2. Identify each form field like option button, dropdown list, checkbox, edit box on the page and test that associated label along with role/ state is read for each control.
		3. Identify any table on the screen and read the column header, row details using screen reader.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.1 Info and Relationships

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.1.3.2 Meaningful sequence	Inspection	Check that the ICT is a web page then,
		1. Using a screen reader, go over the content present on the page.
		Check that all the content present is announced to screen reader users in a meaningful and appropriate order.
		Check that no content is being missed by screen reader software AND that no content that is visually hidden is being announced to screen reader users.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.2 Meaningful Sequence
9.1.3.3 Sensory characteristics	Inspection	Check that the ICT is a web page then,
		1. Go over the content present on the page.
		 Check for any instructions related to understanding or operating content. If any of those instructions refer to visual characteristics such as shape, colour, size, visual location, orientation or sound cue then check that alternative non-sensory characteristics instruction is present.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.3 Sensory Characteristics
9.1.3.4 Orientation	Inspection	Check that the ICT is a web page then,
		1. Ensure that orientation lock is disabled on the device or software.
		2. Check the web page is in the default orientation of portrait mode.
		3. Now change the orientation of the page by turning the device to change its orientation from portrait to landscape mode.
		Note that the changes to design or to the content is permissible to be different in different orientations as long as the content and functionality is present in both the orientations. Note: this can be tested on mobile phone or tablet computers.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.4 Orientation
9.1.3.5 Identify input purpose	Inspection	Check that the ICT is a web page then,
		1. Turn on the screen reader.
		2. Identify the form fields on the page.
		 Check if screen reader is giving any information about the input field, for e.g. Enter telephone number without STD code, e-mail id field.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.5 Identify Input Purpose
9.1.4 Distinguishable		
9.1.4.1 Use of colour	Inspection	Check that the ICT is a web page then,
		 Check the content present on the page for scenarios where colour is being used alone to convey information. Examples are charts, graphs where colour is used to distinguish different elements being presented in the graph.
		a. When content is presented using colour alone, then check to ensure that the same information is presented in text so that colour blind users would still be able to get all the information. If graphs are accompanied with tabular data of the content that is being presented in the graph, then this requirement is met.
		Another scenario to look for are links being present in between blocks of text in paragraphs. When colour alone is used as the only means to differentiate links and text then colour-blind users would not even know the existence of the same.
		a. When links are using colour alone to distinguish themselves, then ensure that an additional visual indicator like underline or any other indicator OR if the colour contrast between the link text and the surrounding non-link text is 3 : 1 then this requirement is met.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.1 Use of Colour

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.1.4.2 Audio control	Inspection	 Check that the ICT is a web page then, 1. Identify the multimedia elements on the page. 2. If the multimedia automatically starts playing audio when you visit the page or anytime during the operation that lasts for more than three seconds, then: a. The audio can be paused, stopped, or muted. b. Check there is a mechanism to adjust the volume (independent of overall device volume). Check that the document does not fail WCAG 2.1 Success Criterion 1.4.2 Audio Control
9.1.4.3 Contrast (minimum)	Inspection	 Check that the ICT is a web page then, 1. Check for text on the page that may have poor colour contrast. Identify the text that is not easily readable by users. examples are light grey text over white background etc. 2. Using an automated tool, pick the colours of the text and the background. Test the codes for colour contrast of 4.5:1 for regular text and 3:1 for large text. a. Regular text is anything below 12 point. b. Large text is 14 point bold and anything above 18 point. Check that the document does not fail WCAG 2.1 Success Criterion 1.4.3 Contrast (Minimum)
9.1.4.4 Resize text	Inspection	 Check that the ICT is a web page then, Check that text resizing mechanism is provided and it works with and without assistive technology. Check that the page does not lose any text or features. Check that the document does not fail WCAG 2.1 Success Criterion 1.4.4 Resize text
9.1.4.5 Images of text	Inspection	 Check that the ICT is a web page then, 1. Change the font size of the page using provided option or through the browser. 2. If this change is applicable to all the text on the page, then there are no images of text present. 3. If the font size doesn't respond to the changes, then that particular element could be an image of text. Check that the document does not fail WCAG 2.1 Success Criterion 1.4.5 Images of Text
9.1.4.6 Void 9.1.4.7 Void 9.1.4.8 Void 9.1.4.9 Void		
9.1.4.10 Reflow	Inspection	 Check that the ICT is a web page then, 1. Turn on the magnification software. 2. Zoom/magnify the user interface by 400 percent. 3. Check that page is navigable and readable without losing any text and features. Check that the document does not fail WCAG 2.1 Success Criterion 1.4.10 Reflow

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For Requirements, refer to	Type of	Inspection, Test Procedure and Success Criteria
respective clauses of IS 17802 (Part 1)	Assessment	
9.1.4.11 Non-text contrast	Inspection	Check that the ICT is a web page then,
		1. Identify non-text elements like icons, graphs, interactive elements present on the page.
		2. Ensure that icons, graphical elements do not have a text alternative present, and they are the only means via which the meaning of the content is being communicated to users.
		3. For icons and graphs:
		a. take a screenshot of the icons and graph and using colour picker choose the value of the element and the adjacent colour. Adjacent colours are the ones that are right next to them.
		b. Using those values, check the colour contrast to be 3:1 between the element colour and the adjacent element colour.
		4. For interactive elements:
		a. Trigger different states that an element may have. For ex, focused, selected, hovered etc.
		b. Take a screenshot of the elements in those triggered states and using colour picker choose the colour codes of the element and the adjacent colour of the element.
		c. Using those values, check the colour contrast to be 3:1 between them.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.11 Non-text Contrast
9.1.4.12 Text spacing	Inspection	Check that the ICT is a web page then,
		1. Check that the text on the page does not overlap or wrap after adjusting the text spacing between two lines.
		 *Check that, for Indian languages, text spacing is as per the font standard specified in IS/ISO/IEC 14496-22 : 2019.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.12 Text spacing
9.1.4.13 Content on hover or focus	Inspection	Check that the ICT is a web page then,
		1. Identify the element on the page which displays additional information when hovered or focused.
		2. Make sure that this additional content is dismissible without moving the focus.
		3. Check that this newly displayed content is hoverable.
		4. Check that this content remains visible until the hover or focus trigger is removed.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.13 Content on Hover or Focus
9.2 Operable		
9.2.1 Keyboard accessible		
9.2.1.1 Keyboard	Inspection	Check that the ICT is a web page then,
		1. using a keyboard, voice or switch, this requirement can be tested.
		In case of the keyboard, using tab key or arrow key, ensure that all the content and functionality is usable by keyboard alone.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.1.1 Keyboard

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.2.1.2 No keyboard trap	Inspection	Check that the ICT is a web page then:
		1. Turn on the screen reader.
		2. swipe or tab through all the elements on the page.
		 Ensure that the screen reader focus doesn't get trapped on any element. Meaning, user is able to swipe in and out of the elements present on the page.
		4. Now, turn off the screen readers and repeat step 3 to ensure that there are no swipe or keyboard traps present.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.1.2 No Keyboard Trap
9.2.1.3 Void	1	
9.2.1.4 Character key shortcuts	Inspection	Check that the ICT is a web page then,
	_	1. Identify any element on the page which has character key shortcut.
		2. Check if it allow user to enable/disable this shortcut.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.1.4 Character Key Shortcuts
9.2.2 Enough Time	T	
9.2.2.1 Timing adjustable	Inspection	Check that the ICT is a web page then
		1. Turn on the screen reader.
		2. Leave the web page idle for the time which is needed to trigger the session extension functionality if present.
		3. Once the session time out functionality is triggered, ensure that a user can do the following:
		a. Turn off the session extension functionality OR
		b. Before you encounter the time out, you can adjust the time limit to at least 10 times the length of the default setting.
		c. You are warned before the time limit expires, are given at least 20 seconds to extend the time limit, and then can extend the time limit at least 10 times longer than the default.
		4. Turn off the screen readers and repeat step to ensure that mobility users are able to access the session time out functionality as well."
		Check that the web page does not fail WCAG2.1 Success Criterion 9.2.2.1 Timing Adjustable
9.2.2.2 Pause, stop, hide	Inspection	Check that the ICT is a web page then,
		1. Identify all the moving, scrolling, blinking or autoupdating content present on the page. Ensure that these should last for more than 5 seconds and is presented along with other essential information.
		2. Check that the moving, blinking, scrolling or autoupdating content is provided with pause, stop or hide mechanism.
		3. This is applicable to all the content of the page including informative and decorative. "
		Check that the document does not fail WCAG 2.1 Success Criterion 2.2.2 Pause, Stop, Hide
9.2.3 Seizures and physical reaction	ons	

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.2.3.1 Three flashes or below threshold	Inspection	Check that the ICT is a web page then,
		1. Identify any element on the page which flashes or blinks (general flash or red flash).
		2. Count the number of times an element flashes or blinks (general flash or red flash) in any one-second period, or
		 Count the number of flashes or blinks (general flash or red flash) in 10 s, and divide by 10, to verify no more than three flashes or blinks occur per second.
		4. This is applicable to all the elements on the page including informative and decorative."
		Check that the document does not fail WCAG 2.1 Success Criterion 2.3.1 Three Flashes or Below Threshold
9.2.4 Navigable		
9.2.4.1 Bypass blocks	Inspection	Check that the ICT is a web page then,
		 Check whether the users can bypass blocks of content that are repeated on multiple Web pages.
		2. Identify the link on the web page to bypass the repeated content.
		3. Ensure that provided link is operable only using the keyboard.
		4. Ensure that once this provided link is activated the focus is moving to main content area.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.1 Bypass Blocks
9.2.4.2 Page titled	Inspection	Check that the ICT is a web page then,
		1. Ensure that web page displays the title on the title bar of the user agent.
		2. Ensure that title of the web page is meaningful and descriptive.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.2 Page Titled
9.2.4.3 Focus order	Inspection	Check that the ICT is a web page then,
	_	1. Turn on the screen reader.
		2. Ensure that the focus moves from element to element in an order that preserves the meaning and operability of the web page.
		 Interact with dynamic content such as modals, adding or deleting content, etc. Ensure that focus is managed appropriately as content is added or removed from the page.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.3 Focus Order
9.2.4.4 Link purpose (in context)	Inspection	Check that the ICT is a web page then,
	-	1. Using a screen reader navigate through each link element.
		 Listen that the link texts are meaningful by themselves, meaning when the user listens to link text, user must be made aware of the link purpose or destination.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.4 Link Purpose (In Context)
9.2.4.5 Multiple ways	Inspection	Check that the ICT is a web page then,
		1. Check if the web page has more than one way provided to locate a Web page within a set of Web pages except where the Web Page is the result or a step in a process.
		2. Ensure there is more than one way to access a webpage, for example, by using a search function, site map, standard navigation, etc.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.5 Multiple Ways

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.2.4.6 Headings and labels	Inspection	Check that the ICT is a web page then,
		 Using the screen reader navigate to each heading element on the screen. Check that it provides enough description about its content and surrounding text. Navigate to each form field which has label element. Check that this label described the usage of the form field.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.6 Headings and Labels
9.2.4.7 Focus visible	Inspection	Check that the ICT is a web page then,
		1. Identify all the interactive elements on the web page.
		2. Using the tab key on the keyboard, tab through all the interactive elements on the web page.
		Check that all the interactive elements have some form of identification of focus available. Browser default focus indicator is acceptable to meet this requirement.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.7 Focus Visible
9.2.5 Input modalities		
9.2.5.1 Pointer gestures	Inspection	Check that the ICT is a web page then,
		1. Check for any functionality that can be triggered by:
		a) Path-based gestures (see description of path-based gestures below) OR
		b) Multipoint gestures (see description of multipoint gestures below)
		c) For each functionality that can be triggered by path-based gestures or multipoint gestures, verify that the functionality can also be operated with the use of single-pointer actions that are not path-based (such as taps, double taps, long presses, clicks, click and holds, double clicks, or dragging actions that are not path-based).
		d) Exceptions exist if the functionality is essential.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.5.1 Pointer Gestures
9.2.5.2 Pointer cancellation	Inspection	Check that the ICT is a web page then,
		1. Identify all controls on the page with actions that are irreversible.
		2. If that control (with an irreversible action) can be triggered by a single-pointer touch, make sure that at least one of the following is true:
		a. No Down-Event-The action triggers on the up event. (The action is not triggered on the down event).
		 b. Abort/Undo-The action triggers a confirmation dialogue, giving the user an option to abort/undo.
		c. Up Reversal - The action that would be triggered on the down event (for example, placing your finger on the screen) can be reversed by releasing the pointer outside the trigger area (for example, sliding the finger off the control and then lifting it off the screen).
		Check that the document does not fail WCAG 2.1 Success Criterion 2.5.2 Pointer Cancellation

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.2.5.3 Label in name	Inspection	Check that the ICT is a web page then,1. Identify all controls in the web page that have a visible text label.2. Using screen reader, put focus on the control.
		a. Ensure the entire onscreen visible text label is EITHER:
		b. An exact match to the label announced by screen reader OR
		c. Is contained within the label announced by screen reader (in the same order presented visually)
		Check that the document does not fail WCAG 2.1 Success Criterion 2.5.3 Label in Name
9.2.5.4 Motion actuation	Inspection	Check that the ICT is a web page then,
		1. Identify any functionality that can be triggered by:
		a. Device motion (such as shaking or tilting the device) OR
		b. User motion detected by a device.
		For each functionality that can be triggered by motion actuation verify that both of the following are true:
		a. Motion actuation can be disabled AND
		b. The functionality can be operated without using motion
		Check that the document does not fail WCAG 2.1 Success Criterion 2.5.4 Motion Actuation
9.3 Understandable		
9.3.1 Readable		
9.3.1.1 Language of page	Inspection	Check that the ICT is a web page then,
	_	1. Inspect the page source code to check that lang attribute is present AND the provided lang attribute is valid to the default page language.
		2. In case the lang attribute is missing or inaccurate or wrong, this requirement is not met.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.1.1 Language of Page
9.3.1.2 Language of parts	Inspection	Check that the ICT is a web page then,
		 Identify any section/paragraph on the page which is not in the default page language. For example web page is in English and there is one section is having Hindi text.
		2. Check that lang attribute is properly defined for this section.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.1.2 Language of Parts
9.3.2 Predictable		
9.3.2.1 On focus	Inspection	Check that the ICT is a web page then,
	-	1. Turn on the screen reader.
		2. Swipe or tab through the page from top to bottom.
		3. Check that no unexpected change of context as any of the components receive focus.
		 Under change of context we can consider focus moving to different area or opening up a new modal dialog.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.2.1 On Focus

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.3.2.2 On Input	Inspection	Check that the ICT is a web page then,
		1. Turn on the screen reader.
		2. Interact with any of the input control on the screen, for example entering text in a input box, opening a dropdown.
		3. Check that no unexpected change of context as you interact with any control.
		 Under change of context we can consider focus moving to different area or opening up a new modal dialog.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.2.2 On Input*
9.3.2.3 Consistent navigation	Inspection	Check that the ICT is a web page then,
		 Check that users who interact with repeated content across Web pages to be able to predict the location of the content they are looking for and find it more quickly when they encounter it again.
		Check that use of consistent presentation and layout throughout the web site for users who interact with repeated content within a set of Web pages and need to locate specific information or functionality more than once.
		3. Check that repeated components occur in the same order on each page of a page or site.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.2.3 Consistent Navigation
9.3.2.4 Consistent identification	Inspection	Check that the ICT is a web page then:
		1. Check that the web page ensures consistent identification of functional components that appear repeatedly within a set of Web pages.
		$\label{eq:constraint} 2. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
		Check that the document does not fail WCAG 2.1 Success Criterion 3.2.4 Consistent Identification
9.3.3 Input assistance		
9.3.3.1 Error identification	Inspection	Check that the ICT is a web page then:
		1. Identify if any user form presents on the web page.
		Complete every form control, deliberately entering user input that falls outside the required format or values or leaving required fields blank and submit the form.
		3. If an input error is detected, verify that BOTH of the following are true:
		a. The form control that is in error is identified in text. Options include:
		i) Visible text on page
		ii) Alternative text on an image (using screen reader, listen to the alternative text)
		 iii) Text that is programmatically associated with the control (Using screen reader, move to the control and ensure that the error message is read along with the control type and label)
		b) The error is described to the user in text. Options include:
		i) Visible text on screen
		ii) Alternative text on an image (using screen reader, listen to the alternative text)
		Using screen reader, ensure each error message can be read with screen reader.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.3.1 Error Identification

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.3.3.2 Labels or instructions 9.3.3.3 Error suggestion	Inspection	 Check that the ICT is a web page then, 1. visually identify each form control on the page. 2. Verify that each form control has a label that is always visible 3. required fields are identified visually and programmatically or via error text 4. Any input that requires specific data or format is provided for all users and not only to users without disabilities Check that the document does not fail WCAG 2.1 Success Criterion 3.3.2 Labels or Instructions. Check that the ICT is a web page then, 1. Identify any form on the page. 2. Complete every form control, deliberately entering user input that falls outside the required format or values and submit the form.
		 3. If an input error is automatically detected, verify that the error message gives a suggestion about how to fix it. 4. Using screen reader, ensure each error message with the suggestion can be read properly. Check that the document does not fail WCAG 2.1 Success Criterion 3.3.3 Error Suggestion
9.3.3.4 Error prevention (legal, financial, data)	Inspection	 Check that the ICT is a web page then, 1. Identify any module on the page where a user action can cause an important legal, financial, test/exam or unrecoverable/unchangeable user data transaction to occur. 2. Confirm that AT LEAST ONE of the following is true: a. Reversible: Instructions are provided explaining how to reverse or cancel the transaction. b. Verified: Data entered by the user is provided for review before final submission, and the user is able to make changes to this data. c. Confirmed: A mechanism (such as a checkbox) is provided for the user to confirm the transaction. Check that the document does not fail WCAG 2.1 Success Criterion 3.3.4 Error Prevention (Legal, Financial, Data)
9.4 Robust		
9.4.1 Compatible		
9.4.1.1 Parsing	Inspection	 Check that the ICT is a web page then, Use any HTML validator tool and type in the URL of the webpage. Identify any start or end tags issue or presence of duplicate attributes or id's not being unique. If there are issues around those areas then this requirement fails. Semi-automated tools are recommended to perform this test procedure. Check that the document does not fail WCAG 2.1 Success Criterion 4.1.1 Parsing

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Table 1(e) (Concluded)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
9.4.1.2 Name, role, value	Inspection	Check that the ICT is a web page then
		1. Using screen reader, navigate through each user interface component.
		2. Make sure the screen reader correctly conveys (see expectations detailed below) the following information about each component:
		a. Its role: For example, button, link, switch, picker, slider, stepper, switch, text field, alert, tab, etc.
		b. Its name: For example, a label for a form control or button, the name of the tab, the label of a switch, etc.
		3. If applicable, its value or state: for example, on/off, selected, dimmed, adjustable, expanded/collapsed, slider's value, textfield's value, "tab _ of _", etc.
		Check that the web page does not fail WCAG2.1 Success Criterion 4.1.2 Name, Role, Value
9.4.1.3 Status messages	Inspection	Check that the ICT is a web page then,
		1. Identify any status messages that can appear on the page. Status messages are:
		a. Defined as a message that provides information to the user on the success or results of an action (confirmation message, updated shopping cart, etc), on the waiting state of an application, on the progress of a process, or on the existence of errors.
		b. Added to the page but do not receive focus.
		 Using screen reader, trigger each status message and confirm that the newly added status message is automatically announced by the screen reader without moving focus to the message.
		Check that the document does not fail WCAG 2.1 Success Criterion 4.1.3 Status Messages
9.5 WCAG 2.1 AAA Success Crite	ria(informative)	
9.6 WCAG Conformance requirements	Inspection	Check that following five WCAG 2.1 conformance requirements meet in the web pages:
		1. Conformance level: One of the following levels of conformance is met in full.
		Level A: For level A conformance (the minimum level of conformance)
		Level AA: For level AA conformance.
		2. Full pages: Conformance (and conformance level) is for full Web page(s) only and cannot be achieved if part of a Web page is excluded.
		3. Complete processes: When a web page is one of a series of web pages presenting a process (that is, a sequence of steps that need to be completed to accomplish an activity), all Web pages in the process conform at the specified level or better.
		 Only accessibility-supported ways of using technologies: Only accessibility-supported ways of using technologies are relied upon to satisfy the success criteria.
		5. Non-interference: If technologies are used in a way that is not accessibility supported, or if they are used in a non-conforming way, then they do not block the ability of users to access the rest of the page.

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Table 1 (f) Non-web Documents

(*Clause* 6.6)

For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.0 General (Informative)		
10.1 Perceivable		
10.1.1 Text alternatives		
10.1.1.1 Non-text content	Inspection	Check that the ICT is a non-web document and there is presence of non-text content.
		1. Locate any non-text content present on the document. Examples of non-text content are images, graphs, figures etc.
		2. Using a screen reader software, verify that there is text alternative present for these non-text content.
		3. Not all non-text content needs text alternative to be present. Any non-text element which already has a text equivalent present doesn't have to be exposed to screen reader users.
		4. When the text alternative is needed for the image, check that it is meaningful and descriptive of the image that is present.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.1.1 Non-text content
10.1.2 Time-based media		
10.1.2.1 Audio-only and video-only (pre-recorded)	Inspection	Check that the ICT is a non-web document and has multimedia [audio/video] present in the content.
		1. If the content is only audio, check if the audio content is repetitive and describes the content in text elsewhere in the same document. Then the following tests are not required.
		a. Identify the text transcript present for the audio.
		b. If text transcript is present, then ensure that it has all the essential dialogs, identifies speakers and describes all essential sound effects for the audio only content.
		2. If the content is a video, check if the video content is repetitive and describes the content in text elsewhere in the same document. Then the following tests are not required.
		a. Identify the video content.
		b. For the unique video content, text description is mandatory. Verify that either an audio description OR text description is provided for the essential visual content in the video.
		c. In either case of audio description or text description, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired user.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded)
10.1.2.2 Captions	Inspection	Check that the ICT is a non-web document and has video in the content then,
(pre-recorded)		1. Check for the presence of captions in the video.
		2. When captions are present, check that
		a. Captions are visible with the required colour contrast between the text and the background.
		b. Identify speakers and any background noises.
		c. Captions are in sync with the video content.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.2 Captions (Prerecorded)

For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.1.2.3 Audio description	Inspection	Check that the ICT is a non-web document and has video in the content.
or media alternative (pre- recorded)		1. If the video content does not provide additional information where sight is needed to understand the content then audio description is not a mandate for this requirement.
		2. If the video content contains additional information which needs sight to perceive it, then ensure the following:
		a. Identify the video content.
		b. Verify that either an audio description OR text description is provided for the essential visual content in the video.
		c. If text transcript is present then ensure that it has all the essential dialogs, identifies speakers and describes all essential sound effects for the audio only content.
		d. In case of audio description being present, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired users.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.3 Audio Description or Media Alternative (Prerecorded)
10.1.2.4 Captions (live)	Inspection	Check that the ICT is a non-web document and has live video in the content then:
		1. Check for the presence of captions in the live video.
		2. When captions are present, check that :
		a. Captions are visible with the required colour contrast between the text and the background.
		b. Identifies speakers and any background noises.
		c. Captions are in sync with the video content.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.4 Captions (Live)
10.1.2.5 Audio description	Inspection	Check that the ICT is a non-web document and has video in the content then,
(pre-recorded)		1. If the video content does not provide additional information where sight is needed to understand the content, then audio description is not a mandate for this requirement.
		2. If the video content contains additional information which needs sight to perceive it then ensure the following:
		a. Verify that an Audio Description is provided for the essential visual content in the video that requires sight to understand.
		b. In case of audio description being present, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired users.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.2.5 Audio Description (Prerecorded)

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For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.1.3.1 Info and relationships	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then,
		1. Identify content that is conveying information and relation via visual representation of the content such as headings being big and bold, data presented in table to convey the relationship, form fields presented with labels to convey the intent of the form fields and representing content in chronological order.
		2. To ensure that headings are programmatically being announced to screen reader users, use the below testing steps:
		a. Navigate through the content that appears like a heading using screen reader
		b. Listen to the role or trait of heading being announced for all the content that appears like a heading.
		2. To ensure that relationship between content in the tables is being announced to screen reader users, use the below testing steps:
		a. Navigate through the content that appears like tables, content present in rows and columns, using screen reader
		b. Listen to header text being read for each individual text present in the data cell of the table.
		3. To ensure that the form fields information is being announced to the screen reader appropriately, use the below testing steps:
		a. Navigate through the form fields present on the document using the screen reader
		b. Listen to the form label being announced along with the form field role or trait. Requirement for this requirement is to hear the label being present for the form fields being present programmatically.
		4. To insure that the content represented as a list is being announced appropriately to screen reader users, use the below testing steps:
		a. Navigate through the content that appears like a list using screen reader
		b. Listen to "in and out of list" or number of number for each list items announcement being present for the list content.*
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.1 Info and Relationships
10.1.3.2 Meaningful sequence	Inspection	Check that the ICT is a non-web document then,
		1. Using screen reader go over the content present in the document.
		2. Check that all the content present is announced to screen reader users in a meaningful and appropriate order.
		3. Check that no content is being skipped by screen reader software AND that no content that is visually hidden is being announced to screen reader users.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.2 Meaningful Sequence
10.1.3.3 Sensory	Inspection	Check that the ICT is a non-web document then,
characteristics		1. Go over the content present on the document.
		 Check for any instructions related to understanding content or operating content. If any of those instructions refer to visual characteristics, such as shape, colour, size, visual location, orientation or sound cue then check that there is a non- sensory characteristic instruction is present.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.3 Sensory Characteristics

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For Requirements, refer to Respective Clauses	Type of Assessment	Inspection, Test Procedure and Success Criteria
of IS 17802 (Part 1)	1 1990 99110110	
10.1.3.4 Orientation	Inspection	Check that the ICT is a non-web document then:
		1. Check to ensure that device lock is disabled on the devices.
		 Check the application and or document in the default orientation of portrait mode.
		3. Now change the orientation of the application and or document by turning the device to change its orientation from portrait to landscape mode. Note that the changes to design or to the content is permissible to be different in different orientations as long as the content and functionality is present in both the orientations.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.4 Orientation
10.1.3.5 Identify input purpose	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then:
		1. Turn on the screen reader.
		2. Identify the form fields on the document.
		 Check if screen reader is giving any information about the input field, for example Enter telephone number without STD code, e-mail id field.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.3.5 Identify Input Purpose
10.1.4 Distingishable		
10.1.4.1 Use of colour	Inspection	Check that the ICT is a non-web document then,
		 Check the content present on the document for scenarios where colour is being used alone to convey information. Examples are charts, graphs where colour is used to distinguish different elements being presented in the graph.
		a. When content is presented using colour alone, then check to ensure that the same information is presented in text so that colour blind users would still be able to get all the information. If graphs are accompanied with tabular data of the content that is being presented in the graph then this requirement is met.
		Another scenario to look for are links being present in between blocks of text in paragraphs. When colour alone is used as the only means to differentiate links and text then colour blind users would not even know the existence of the same.
		a. When links are using colour alone to distinguish themselves, then ensure that an additional visual indicator like underline or any other indicator OR if the colour contrast between the link text and the surrounding non-link text is 3:1 then this requirement is met.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.1 Use of Colour
10.1.4.2 Audio control	Inspection	Check that the ICT is a non-web document and has multimedia [audio/ video] in the content then,
		1. If the multimedia automatically starts playing audio when you open the document or anytime during the operation that lasts for more than three seconds, then:
		a. The audio can be paused, stopped, or muted.
		b. Check there is a mechanism to adjust the volume (independent of overall device volume).
		Check that the document does not fail 'document success criterion for audio control' given in clause 10.1.4.2 of IS 17802 (Part 1).

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For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to Respective Clauses of IS 17802 (Part 1)	Assessment	
10.1.4.3 Contrast (minimum)	Inspection	Check that the ICT is a non-web document then:
		1. Check for text on the document that may have poor colour contrast. Identify the text that is not easily readable by users. examples are light grey text over white background etc.
		2. Using an automated tool, pick the colours of the text and the background. Test the codes for colour contrast of 4.5:1 for regular text and 3:1 for large text.
		a. Regular text is anything below 12 point.
		b. Large text is 14 point bold and anything above 18 point.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.3 Contrast (Minimum)
10.1.4.4 Resize text	Inspection	Check that the ICT is a non-web document then,
		1. Check that text resizing mechanism is provided and it works with and without assistive technology.
		2. Check that the document does not lose any text or feature after resizing up to 200 percent.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.4 Resize text
10.1.4.5 Images of text	Inspection	Check that the ICT is a non-web document then:
		1. Use CTRL + A or CMD + A to select all the text on the page/document, check whether any information is not selected.
		2. If there is such content, then it could be an image of text.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.5 Images of text
10.1.4.7 Void 10.1.4.8 Void 10.1.4.9 Void		
10.1.4.10 Reflow	Inspection	Check that the ICT is a non-web document then,
		1. Turn on the magnification software.
		2. Zoom/magnify the user interface by 400 percent.
		3. Check that document is navigable and readable without losing any text and features.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.10 Reflow given in clause 10.1.4.10 of IS 17802 (Part 1).
10.1.4.11 Non-text contrast	Inspection	Check that the ICT is a non-web document then:
		1. Identify non-text elements like icons, graphs, interactive elements present on the page.
		 Ensure that icons, graphical elements do not have a text alternative present, and they are the only means via which the meaning of the content is being communicated to users.
		3. For icons and graphs:
		a. Take a screenshot of the icons and graph and using colour picker choose the value of the element and the adjacent colour. Adjacent colours are the ones that are right next to them.
		b. Using those values, check the colour contrast to be 3:1 between the element colour and the adjacent element colour.
		4. For interactive elements:
		a. Trigger different states that an element may have. For example, focused, selected, hovered etc.
		b. Take a screenshot of the elements in those triggered states and using colour picker choose the colour codes of the element and the adjacent colour of the element.
		c. Using those values, check the colour contrast to be 3:1 between them.
		Check that the document does not fail WCAG 2.1 Success Criterion 1.4.11 Non-text Contrast

For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.1.4.12 Text spacing	Inspection	 Check that the ICT is a non-web document then, 1. Check that the text on the page does not overlap or wrap after adjusting the text spacing between two lines Check that the document does not fail WCAG 2.1 Success Criterion 1.4.12 Text spacing.
10.1.4.13 Content on hover or focus	Inspection	 Check that the ICT is a non-web document and has interactive elements in the content then, 1. Identify the element on the document which displays additional information when hovered or focused. 2. Make sure that this additional content is dismissible without moving the focus. 3. Check that this newly displayed content is hoverable. 4. Check that this content remains visible until the hover or focus trigger is removed. Check that the document does not fail WCAG 2.1 Success Criterion 1.4.13 Content on Hover or Focus
10.2 Operable		
10.2.1 Keyboard accessible		
10.2.1.1 Keyboard	Inspection	 Check that the ICT is a non-web document and has interactive elements in the content then 1. Using an external keyboard, this requirement can be tested. 2. If using external keyboard: a. Connect the external keyboard with the ICT. b. Using tab key or arrow key, ensure that all the content and functionality is usable by keyboard alone. Check that the document does not fail WCAG 2.1 Success Criterion 2.1.1 Keyboard
10.2.1.2 No keyboard trap	Inspection	 Check that the ICT is a non-web document and has interactive elements in the content then, 1. Turn on the screen reader 2. Now swipe or tab through the document. 3. Ensure that the screen reader focus doesn't get trapped on any element. Meaning, user is able to swipe in and out of the elements present on the page. 4. Now, turn off the screen reader and repeat step 3 to ensure that there are no swipe or keyboard traps present. Check that the document does not fail 'Document success criterion for No keyboard trap' given in clause 10.2.1.2 of IS 17802 (Part 1).
10.2.1.3 Void		
10.2.1.4 Character key shortcuts	Inspection	 Check that the ICT is a non-web document and has interactive form controls then: 1. Identify any element on the document which has character key shortcut. 2. Check if it allows user to enable/disable this shortcut. Check that the document does not fail WCAG 2.1 Success Criterion 2.1.4 Character Key Shortcuts

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For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to Respective Clauses of IS 17802 (Part 1)	Assessment	
10.2.2 Enough time		
10.2.2.1 Timing adjustable	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then:
		1. Turn on the screen reader.
		2. Leave the document idle for the time which is needed to trigger the session extension functionality if present.
		3. Once the session time out functionality is triggered, ensure that a user can do the following:
		a. Turn off the session extension functionality.
		b. Before you encounter the time out, you can adjust the time limit to at least 10 times the length of the default setting.
		c. You are warned before the time limit expires, are given at least 20 s to extend the time limit, and then can extend the time limit at least 10 times longer than the default.
		4. Turn off the screen reader and repeat step to ensure that mobility users are able to access the session time out functionality as well.
		Check that the document does not fail 'Document success criterion for Timing adjustable', given in clause 10.2.2.1 of IS 17802 (Part 1).
10.2.2.2 Pause, stop, hide	Inspection	Check that the ICT is a non-web document and has moving, scrolling, blinking or autoupdating elements in the content then,
		1. Ensure that these should last for more than 5 s and is presented along with other essential information.
		2. Check that the moving, blinking, scrolling or autoupdating content is provided with pause, stop or hide mechanism.
		Check that the document does not fail 'Document success criterion: Pause, stop, hide', given in clause 10.2.2.2 of IS 17802 (Part 1).
10.2.3 Seizures and physical rea	ctions	
10.2.3.1 Three flashes or	Inspection	Check that the ICT is a non-web document and has flashing element in the content then:
below threshold		 Count the number of times an element flashes or blinks(general flash or red flash) in any one-second period, or
		 Count the number of flashes or blinks(general flash or red flash) in 10 s, and divide by 10, to verify no more than three flashes or blinks occur per second.
		Check that the document does not fail 'Document success criterion for Three flashes or below threshold' given in clause 10.2.3.1 of IS 17802 (Part 1).
10.2.4 Navigable		
10.2.4.1 Void		
10.2.4.2 Document titled	Inspection	Check that the ICT is a non-web document then,
		1. With screen reader turned on, open the document.
		2. When the document loads, ensure that one of the following is announced:
		a. A descriptive document title.
		b. *The first content element (that serves as a descriptive heading).
		c. *An element within the navigation bar (such as a back or menu button) AND you can swipe to a descriptive heading or title.
		Check that the document does not fail 'Document success criterion for Document titled' given in clause 10.2.4.2 of IS 17802 (Part 1).

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to Respective Clauses of IS 17802 (Part 1)	Assessment	
10.2.4.3 Focus order	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then:
		1. Turn on the screen reader.
		2. Ensure that the focus moves from element to element in an order that preserves the meaning and operability of the document.
		3. Interact with dynamic content such as modals, adding or deleting content, etc. Ensure that focus is managed appropriately as content is added or removed from the document.
		Check that the document does not fail 'Document success criterion for Focus order' given in clause 10.2.4.3 given in IS 17802 (Part 1).
10.2.4.4 Link purpose	Inspection	Check that the ICT is a non-web document and has hyperlinks in the content then:
(in context)		1. Turn on the screen reader and move through the links in the document.
		2. Listen that the link texts are meaningful by themselves, meaning when the user listens to link text, user must be made aware of the link purpose or destination.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.4 Link Purpose (In Context)
10.2.4.5 Void		
10.2.4.6 Headings and labels	Inspection	Check that the ICT is a non-web document then:
		1. Go over each heading and label on the document that are present.
		2. Check to ensure that heading and labels are:
		a. Provides a clear description of the content in that section or form field.
		b. Gives users an effective overview of the content and its organization.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.6 Headings and Labels
10.2.4.7 Focus visible	Inspection	Check that the ICT is a non-web document and has interactive form controls then:
		1. Using the tab key on the keyboard, tab through all the interactive elements on the document.
		2. Check that all the interactive elements have some form of identification of focus
		available. Browser default focus indicator is acceptable to meet this requirement.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.4.7 Focus Visible
10.2.5 Input modalities		
10.2.5.1 Pointer gestures	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then:
		1. Check for any functionality that can be triggered by:
		a. Path-based gestures (see description of path-based gestures below); or
		b. Multipoint gestures (see description of multipoint gestures below).
		2. For each functionality that can be triggered by path-based gestures or multipoint gestures, verify that the functionality can also be operated with the use of single-pointer actions that are not path-based (such as taps, double taps, long presses, clicks, click and holds, double clicks, or dragging actions that are not path-based).
		3. Exceptions exist if the functionality is essential.
		Check that the document does not fail 'Document success criterion for Pointer gestures' given in clause 10.2.5.1 of IS 17802 (Part 1).

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For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.2.5.2 Pointer cancellation	Inspection	Check that the ICT is a non-web document and has interactive controls with actions that are irreversible then:
		1. If that control (with an irreversible action) can be triggered by a single-pointer touch, make sure that at least one of the following is true:
		a. No down-event — The action triggers on the up event. (The action is not triggered on the down event).
		b. Abort/undo — The action triggers a confirmation dialogue, giving the user an option to abort/undo.
		c. Up reversal — The action that would be triggered on the down event (for eample, placing your finger on the screen) can be reversed by releasing the pointer outside the trigger area (for example, sliding the finger off the. control and then lifting it off the screen).
		Check that the document does not fail 'Document success criterion for Pointer cancellation' given in clause 10.2.5.2 of IS 17802 (Part 1).
10.2.5.3 Label in name	Inspection	Check that the ICT is a non-web document and has interactive controls that have a visible text label then:
		1. Using screen reader, put focus on the control.
		a. Ensure the entire onscreen visible text label is EITHER:
		b. An exact match to the label announced by screen reader OR
		c. Is contained within the label announced by screen reader (in the same order presented visually).
		Check that the document does not fail WCAG 2.1 Success Criterion 2.5.3 Label in Name
10.2.5.4 Motion actuation	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then,
		1. Identify any functionality that can be triggered by:
		a. Device motion (such as shaking or tilting the device) OR
		b. User motion detected by a device.
		2. For each functionality that can be triggered by motion actuation verify that both of the following are true:
		a. Motion actuation can be disabled AND.
		b. The functionality can be operated without using motion.
		Check that the document does not fail WCAG 2.1 Success Criterion 2.5.4 Motion Actuation
10.3. Understandable		
10.3.1 Readable		
10.3.1.1 Language of	Inspection	Check that the ICT is a non-web document then:
document	1	1. Check the language of the document is programmatically determinable by reading the content using a screen reader.
		2. If screen reader has the support for that language, then it should read the content of the document. Check that the document does not fail 'Document success criterion for Language of document' given in clause 10.3.1.1 of IS 17802 (Part 1).
10.3.1.2 Language of parts	Inspection	Check that the ICT is a non-web document and has text in multiple languages then:
		1. Identify text that is in a language different from the language of the rest of the document.
		2. Using screen reader, ensure that the text is read using the appropriate language library (that is, accent). Check that the document does not fail 'Document success criterion for Language of parts' given in clause 10.3.1.2 of IS 17802 (Part 1).
10.3.2 Predictable		

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For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to Respective Clauses of IS 17802 (Part 1)	Assessment	
10.3.2.1 On focus	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then:
		1. Turn on the screen reader.
		2. Swipe or tab through the document from top to bottom.
		3. Check that no unexpected change of context as any of the components receive focus.
		Change of context is defined as change in focus. It means focus moving away from the element which has focus or opening a new modal or screen.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.2.1 On Focus
10.3.2.2 On input	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then,
		1. Turn on the screen reader.
		2. Interact with all input controls on the document.
		3. Ensure you do not unexpectedly encounter a change of context as you interact with the controls, for example:
		a. Leaving the last field does not submit the form and trigger a change of context.
		b.User can enter text in a text field, toggle switches, select checkboxes, and move through a picker control without triggering a context change.
		c. New screens or dialogs do not automatically launch.
		Change of context is defined as change in focus. It means focus moving away from the element which has focus, or opening a new modal or screen.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.2.2 On Input
10.3.3 Input assistance		
10.3.3.1 Error identification	Inspection	Check that the ICT is a non-web document and has form controls in the content then:
	-	1. Complete every form control, deliberately entering user input that falls outside the required format or values or leaving required fields blank and submit the form.
		2. If an input error is detected, verify that both of the following are true:
		a. The form control that is in error is identified in text.
		b. The error is described to the user in text. Options include: ensure each error message can be read with screen reader.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.3.1 Error Identification.
10.3.3.2 Labels or instructions	Inspection	Check that the ICT is a non-web document and has form controls in the content then,
		1. visually identify each form control on the document.
		2. Verify that each form control has a label that is always visible.
		3. required fields are identified visually and programmatically or via error text.
		4. Any data that requires specific data or format is provided for all users and not only to users without disabilities.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.3.2 Labels or Instructions
10.3.3.3 Error suggestion	Inspection	Check that the ICT is a non-web document and has form controls in the content then,
		1. Complete every form control, deliberately entering user input that falls outside the required format or values and submit the form.
		2. If an input error is automatically detected, verify that the error message gives a suggestion about how to fix it.
		3. Using screen reader, ensure each error message can be read.
		Check that the document does not fail WCAG 2.1 Success Criterion 3.3.3 Error Suggestion

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For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.3.3.4 Error prevention (legal, financial, data)	Inspection	Check that the ICT is a non-web document and has interactive form controls in the content then,
		1. Identify any section in the document where a user action can cause an important legal, financial, test/exam or unrecoverable/unchangeable user data transaction to occur.
		2. Confirm that AT LEAST ONE of the following is true:
		a. Reversible: Instructions are provided explaining how to reverse or cancel the transaction.
		b. Verified: Data entered by the user is provided for review before final submission, and the user is able to make changes to this data.
		c. Confirmed: A mechanism (such as a checkbox) is provided for the user to confirm the transaction.
		Check that the document does not fail 'Document success criterion for Error prevention (legal, financial, data)', given in clause 10.3.3.4 of IS 17802 (Part 1).
10.4 Robust		
10.4.1 Compatible		
10.4.1.1 Parsing	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then,
		1. Using screen reader, navigate through each user interface component.
		2. Make sure the screen reader correctly conveys (see expectations detailed below) the following information about each component:
		a. Its role: For example, button, link, switch, picker, slider, stepper, switch, text field, alert, tab, etc.
		b. Its name: e.g. a label for a form control or button, the name of the tab, the label of a switch, etc.
		c. If applicable, its value or state: For example, on/off, selected, dimmed, adjustable, expanded/collapsed, slider's value, textfield's value, "tab _ of _", etc.
		Check that the document does not fail 'Document success criterion for Parsing', given in clause 10.4.1.1 of IS 17802 (Part 1).
10.4.1.2 Name, role, value	Inspection	Check that the ICT is a non-web document and has interactive elements in the content then:
		1. Using screen reader, navigate through each user interface component.
		2. Make sure the screen reader correctly conveys (<i>see</i> expectations detailed below) the following information about each component:
		a. Its role: For example, button, link, switch, picker, slider, stepper, switch, text field, alert, tab, etc.
		b. Its name: For example, a label for a form control or button, the name of the tab, the label of a switch, etc.
		3. If applicable, its value or state: For example, on/off, selected, dimmed, adjustable, expanded/collapsed, slider's value, textfield's value, "tab _ of _", etc.
		Check that the document does not fail 'Document success criterion for Name, role, value', given in clause 10.4.1.2 of IS 17802 (Part 1).

Table 1 (f) (Concluded)

For Requirements, refer to Respective Clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
10.4.1.3 Status messages	Inspection	Check that the ICT is a non-web document and has any status messages added to the content then:
		1. Identify any status messages that can appear on the document. Status messages are:
		a. Defined as a message that provides information to the user on the success or results of an action (confirmation message, updated shopping cart, etc), on the waiting state of an application, on the progress of a process, or on the existence of errors
		b. Added to the screen but do not receive focus
		 Using screen reader, trigger each status message and confirm that the newly added status message is automatically announced by the screen reader without moving focus to the message.
		Check that the document does not fail WCAG 2.1 Success Criterion 4.1.3 Status Messages
10.5 Caption positioning	Advisory only and contains no testable requirements	
10.6 Audio description timing	Advisory only and contains no testable requirements*	

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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Table 1 (g) Software

(*Clause* 6.6)

For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to respective clauses of IS 17802 (Part 1)	Assessment	
11.1 Perceivable		
11.1.1 Text alternatives		
11.1.1 Non-text content		
11.1.1.1 Non-text content (open functionality)	Inspection	Check that the ICT is non-web software that provides a user interface, is open for assistive technologies and there is presence of non-text.
		 Identify any non-text images present on any screen. Examples of non-text content are images, graphs, figures etc.
		2. Using an assistive technology like screen reader software, verify that there is text alternative present for these non-text content.
		 Note that not all non-text content needs text alternative to be present. Any non-text element presents which already has a text equivalent present doesn't have to be exposed to screen reader users.
		4. When the text alternative is needed for the image, then check that the text alternative present for the image is meaningful and descriptive of the image that is present.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.1.1 Non-text content
11.1.1.2 Non-text content (closed functionality)	Testing	Check that the ICT is non-web software that provides a user interface, is closed to assistive technologies and there is presence of non-text:
		1. Check that speech output is provided as an alternative for non-text content.
		2. Check that if the non-text content is not pure decoration.
		3. Check that the non-text content is not used only for visual formatting.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.1.1 Non-text content
11.1.2 Time-based media	-	
11.1.2.1 Audio-only and video-only	y (pre-recorded)	
11.1.2.1.1 Audio-only and video-only (pre-recorded-open	Inspection	Check that the ICT is non-web software which is open for assistive technologies and there is presence of audio/video.
functionality)		 If the content is only audio, then ensure the following: note that if the audio content is repetitive and describes the content in text elsewhere in the same software, then the following tests are not required.
		a. Identify the text transcript is present for the audio.
		b. If text transcript is present, then ensure that it has all the essential dialogs, identifies speakers and describes all essential sound effects for the audio only content.
		If the content is a video, then ensure the following: note that if the video content is repetitive and describes the content in text elsewhere on the same document then the following tests are not required.
		a. Identify the video content.
		b. For the unique video content, text description is mandatory. Verify that either an audio description OR text description is provided for the essential visual content in the video.
		c.In either case of audio description or text description, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired users.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.2.1 Audio-only and Video-only (Prerecorded)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.1.2.1.2.1 Pre-recorded audio-only (closed functionality)	Inspection	Check that the ICT is non-web software that provides a user interface which is closed to assistive technologies for screen reading. Pre-recorded auditory information is needed to enable the use of closed functions of ICT.
		1. Check that the visual information is equivalent to the pre-recorded auditory output.
11.1.2.1.2.2 Pre-recorded video-only (closed functionality)	Inspection	Check that the ICT is non-web software that provides a user interface which is closed to assistive technologies for screen reading. Pre-recorded video information must enable the use of closed functions of ICT. Speech output is provided as non-visual access to non-text content displayed on closed functionality.
		1. Check that the speech output equivalent information for the pre-recorded video content.
11.1.2.2 Captions (pre-recorded)	Inspection	Check that the ICT is non-web software which provides a user interface and there is presence of video.
		1. Identify the video content present on the screen.
		2. Check for the presence of captions in the audio, video.
		3. When captions are present, check that:
		a. Captions are visible with the required colour contrast between the text and the background, refer clause 11.1.4.3 contrast (minimum) of IS 17802 (Part 1) for the same.
		b. Identifies speakers and any background noises.
		c. Captions are in sync with the audio, video content.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.2.2 Captions
11.1.2.3 Audi description or media	a alternative (pre-recor	rded)
11.1.2.3.1 Audio description or	Inspection	Check that the ICT is non-web software and has video content in user interface.
media alternative (pre-recorded-	Ĩ	1. Identify the video content.
open functionality)		2. If the video content does not provide additional information where sight is needed to understand the content, then audio description is not a mandate for this requirement.
		3. If the video content contains additional information which needs sight to perceive it then ensure the following:
		a. Verify that an Audio Description is provided for the essential visual content in the video that requires sight to understand.
		b. In case of audio description being present, check that important scenes and any other visual information that is not being conveyed via dialogues is being presented to visually impaired users.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.2.3 Audio Description (Prerecorded)
11.1.2.3.2 Audio description or media alternative (pre-recorded- closed functionality)	Inspection	Check that the ICT is non-web software that provides a user interface and user interface is closed to assistive technologies for screen reading. Speech output is provided as non-visual access to non-text content displayed on closed functionality.
		1. Check that the speech output presents equivalent information for the (pre-recorded) video content.

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.1.2.4 Captions (live)	Inspection	Check that the ICT is non-web software and has video in its user interface.
		1. Identify the live video content present on the screen.
		2. Check for the presence of captions in the live video.
		3. When captions are present, check that:
		a. Captions are visible with the required colour contrast between the text and the background, refer clause 11.1.4.3 contrast (minimum) of IS 17802 (Part 1) for the same.
		b. Identifies speakers and any background noises.
		c. Captions are in sync with the video content.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.2.4 Captions (Live)
11.1.2.5 Audio description	Inspection	Check that the ICT is non-web software and has video in user interface.
(pre-recorded)		1. Identify the video content.
		If the video content does not provide additional information where sight is needed to understand the content, then audio description is not a mandate for this requirement.
		3. If the video content contains additional information which needs sight to perceive it then ensure the following:
		a. Verify that an audio description is provided for the essential visual content in the video that requires sight to understand.
		b. In case of audio description being present, check that important scenes and any other visual information that is not being conveyed via dialogues is presented to visually impaired users.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.2.5 Audio Description (Prerecorded)
11.1.3 Adaptable		·
11.1.3.1 Info and relationships		
11.1.3.1.1 Info and relationships (open functionality)	Inspection	Check that the ICT is non-web software and open for assistive technologies like screen reader.
		1. Check that all the visual elements like tables, lists, form fields are programmatically conveyed to the screen reader.
		 Identify each form field like option button, dropdown list, checkbox, edit box, slider on the screen and test that associated label along with role/state is read for each control.
		3. Identify any table on the screen and read the column header, row details using screen reader.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.3.1 Info and Relationships
11.1.3.1.2 Info and relationships (closed functionality)	Inspection	Clause 11.1.3.1.2 of IS 17802 (Part 1) is advisory only and contains no testable requirements.

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.1.3.2 Meaningful sequence		
11.1.3.2.1 Meaningful sequence	Inspection	Check that the ICT is non-web software and it is open for assistive technologies.
(open functionality)		1. Using the screen reader, go over the content present in the native application and any screen.
		 Check that all the content present is announced to screen reader users in a meaningful and appropriate order.
		 Check that no content is being missed by screen reader software AND that no content that is visually hidden is being announced to screen reader users.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.3.2 Meaningful Sequence.
11.1.3.2.2 Meaningful sequence (closed functionality)	Inspection	Clause 11.1.3.2.2 of IS 17802 (Part 1) is advisory only and contains no testable requirements.
11.1.3.3 Sensory characteristics	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Go over the content present on the screen of the native application.
		 Check for any instructions related to understanding or operating content. If any of those instructions refer to visual characteristics such as shape, colour, size, visual location, orientation or sound cue then check that alternative non-sensory characteristic instruction is present.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.3.3 Sensory Characteristics
11.1.3.4 Orientation	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Ensure that orientation lock is disabled on the device or software.
		2. Check the application is in the default orientation of portrait mode.
		 Now change the orientation of the application by turning the device to change its orientation from portrait to landscape mode.
		Note that the changes to design or to the content is permissible to be different in different orientations as long as the content and functionality is present in both the orientations.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.3.4 Orientation*
11.1.3.5 Identify input purpose		
11.1.3.5.1 Identify input purpose (open functionality)	Inspection	Check that the ICT is non-web software which supports assistive technology and there is presence of form element.
		1. Turn on the screen reader.
		2. Identify the form fields on the user interface.
		 Check if screen reader is giving any information about the input field, for e.g. Enter telephone number without STD code, e-mail id field.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.3.5 Identify Input Purpose
11.1.3.5.2 Identify input purpose (closed functionality)	Inspection	Check that the ICT is non-web software that provides a user interface and user interface is closed to assistive technologies for screen reading. Auditory output is provided as non-visual access to closed functionality.
		1. Check that the auditory output is delivered by a mechanism included in or provided with the ICT.
		 Check that the auditory output is delivered by a personal headset that can be connected through a 3.5 mm audio jack or an industry standard connection without requiring the use of vision.
		Check that the auditory output comprises of purposes from the Input Purposes for User Interface Components section.
11.1.4 Distinguishable		

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.1.4.1 Use of colour	Inspection	Check that the ICT is non-web software which provides a user interface.
		 Check the content present on the screen or page for scenarios where colour is being used alone to convey information. Examples are charts, graphs where colour is used to distinguish different elements being presented in the graph. When content is presented using colour alone, then check to ensure that
		the same information is presented in text so that colour blind users would still be able to get all the information. If graphs are accompanied with tabular data of the content that is being presented in the graph then this requirement is met.
		3. Another scenario to look for are links being present in between blocks of text in paragraphs. When colour alone is used as the only means to differentiate links and text then colour blind users would not even know the existence of the same.
		4. When links are using colour alone to distinguish themselves, then ensure that an additional visual indicator like underline or any other indicator OR if the colour contrast between the link text and the surrounding non-link text is 3:1 then this requirement is met.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.1 Use of Colour
11.1.4.2 Audio control	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Identify the multimedia elements on any screen of the software.
		2. If the multimedia automatically starts playing audio when you launch the software or anytime during the operation that lasts for more than three seconds, then:
		a. Check that the audio can be paused, stopped.
		b. Check there is a mechanism to adjust the volume (independent of overall device volume)
		Check that the software does not fail 'software success criterion for audio control' contained in clause 11.1.4.2 of IS 17802 (Part 1).
11.1.4.3 Contrast (minimum)	Inspection	Check that the ICT is non-web software which provides a user interface.
		 Check for text that may have poor colour contrast. Identify the text that is not easily readable by users. examples are light grey text over white background etc.
		2. For mobile applications, take a screenshot of the screen and using an automated tool, pick the colours of the text and the background. Test the codes for colour contrast of 4.5:1 for regular text and 3:1 for large text.
		a. Regular text is anything below 12 point.
		b. Large text is 14 point bold and anything above 18 point.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.3 Contrast (Minimum)
11.1.4.4 Resize text		
11.1.4.4.1 Resize text (open functionality)	Inspection	Check that the ICT is non-web software which provides an user interface and it is open for assistive technologies.
		1. Text resizing mechanism is provided and it works with and without assistive technology.
		2. Check that the software does not lose any text and features after resizing up to 200 percent.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.4 Resize text

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.1.4.4.2 Resize text (closed functionality)	Inspection and measurement	Check that the ICT is non-web software that provides a user interface and user interface is closed to enlargement features of platform or assistive technology and when even viewing distance is specified by the supplier.
		1. Measure the height of a capital letter H.
		2. Check that it subtends an angle of at least 0.7 degrees at the specified viewing distance.
11.1.4.5 Images of text		
11.1.4.5.1 Images of text (open functionality)	Inspection	Check that the ICT is non-web software and it is open for assistive technologies. 1. Change the font size of the software/user interface.
		2. If this change is applicable to all the text on the screen, then there are no images of text present.
		3. If the font size doesn't respond to the changes, then that particular element could be an image of text.
		There is no straight or sure way to test this requirement when it comes to native applications.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.5 Images of Text
11.1.4.5.2 Images of text (closed functionality)	Testing	Check that the ICT is non-web software that provides a user interface and user interface is closed to assistive technologies for screen reading. When the non-text content is presented to users via speech output.
		1. Check that speech output is provided as an alternative for non-text content.
		2. Check that the non-text content is not pure decoration.
		3. Check that the non-text content is not used only for visual formatting.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.5 Images of Text.
11.1.4.6 Void		
11.1.4.7 Void		
11.1.4.8 Void		
11.1.4.9 Void		
11.1.4.10 Reflow	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Turn on the magnification software provided by platform.
		2. Zoom/magnify the user interface by 400 percent.
		3. Check that user interface is navigable and readable without losing any text and features.
		Check that the software does not fail 'software success criterion for reflow' given in clause 11.1.4.10 of IS 17802 : (Part 1).

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.1.4.11 Non-text contrast	Inspection	Check that the ICT is non-web software which provides an user interface and there is presence of non-text elements like icon or graphs.
		1. Identify non-text elements like icons, graphs, interactive elements present on any screen of the software.
		2. Ensure that icons, graphical elements do not have a text alternative present and they are the only means via which the meaning of the content is being communicated to users.
		3. For icons and graphs:
		a. take a screenshot of the icons and graph and using colour picker choose the value of the element and the adjacent colour. Adjacent colours are the ones that are right next to them.
		b. Based on those values, check the colour contrast to be 3:1 between the element colour and the adjacent element colour.
		4. For interactive elements:
		a. Trigger different states that an element may have. For ex, focused, selected, hovered etc.
		b. Take a screenshot of the elements in those triggered states and using colour picker choose the colour codes of the element and the adjacent colour of the element.
		c. based on those values, check the colour contrast to be 3:1 between them.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.11 Non-text Contrast
11.1.4.12 Text spacing	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Check that the text of the user interface does not overlap or wrap after adjusting the text spacing between two lines.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.12 Text spacing.
11.1.4.13 Content on hover or	Inspection	Check that the ICT is non-web software which provides a user interface.
focus		1. Identify the element which displays additional information when hovered or focused.
		2. Make sure that this newly displayed information is dismissible without moving the focus.
		3. Check that this newly displayed content is hoverable.
		4. Check that this content remains visible until the hover or focus trigger is removed.
		Check that the software does not fail WCAG 2.1 Success Criterion 1.4.13 Content on Hover or Focus
11.2 Operable		
11.2.1 Keyboard accessible		
11.2.1.1 Keyboard		
11.2.1.1.1 Keyboard (open functionality)	Inspection	Check that the ICT is non-web software which is open for assistive technologies.
		1. Using an external keyboard, this requirement can be tested.
		2. Using external keyboard:
		a. Connect the external keyboard with the device.
		b. Using tab key or arrow key, ensure that all the content and functionality is usable by keyboard alone.
		Check that the software does not fail WCAG 2.1 Success Criterion 2.1.1 Keyboard

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.2.1.1.2 Keyboard (closed functionality)	Inspection	Check that the ICT is non-web software that provides a user interface and the user interface is closed to keyboards or keyboard interfaces.
		1. Check that all functionality of the user interface is operable without vision.
11.2.1.2 No keyboard trap	Inspection	Check that the ICT is non-web software which is open for assistive technologies.
		1. Turn on the screen reader.
		2. Using screen reader, swipe or tab through the complete user interface of the software.
		 Ensure that the screen reader focus doesn't get trapped on any element. Meaning, user is able to swipe in and out of the elements present on the page.
		 Now, turn off the screen reader and repeat step 3 to ensure that there are no swipe or keyboard traps present.
		Check that the software does not fail 'Software success criterion for No keyboard trap' given in clause 11.2.1.1.3 of IS 17802 (Part 1).
11.2.1.3 Void		
11.2.1.4 Character key shortcuts		
11.2.1.4.1 Character key shortcuts (open functionality)	Inspection	Check that the ICT is non-web software that provides user interface and it support at least one assistive technology.
		1. Check for the presence of shortcut keys.
		2. Review the list of shortcuts and determine if any shortcuts can be triggered by typing only one printable character.
		 If a single character key shortcut exists, ensure that they can be turned off OR remapped OR are active only on focus.
		Check that the software does not fail WCAG 2.1 Success Criterion 2.1.4 Character Key Shortcuts
11.2.1.4.2 Character key shortcuts (closed functionality)	Inspection	Check that the ICT is non-web software that provides a user interface and the user interface is closed to keyboards or keyboard interfaces.
		1. Check that all functionality is operable without vision.
11.2.2 Enough time		
11.2.2.1 Timing adjustable	Inspection	Check that the ICT is non-web software which provides user interface.
		1. Turn on the screen reader.
		2. Leave the application idle for the time which is needed to trigger the session extension functionality if present.
		 Once the session time out functionality is triggered, ensure that a user can do the following:
		a. Turn off the session extension functionality OR.
		b. Before you encounter the time out, you can adjust the time limit to at least 10 times the length of the default setting.
		c. You are warned before the time limit expires, are given at least 20 s to extend the time limit, and then can extend the time limit at least 10 times longer than the default.
		Turn off the screen readers and repeat step to ensure that mobility users are able to access the session time out functionality as well."
		Check that the software does not fail 'software success criterion for timing adjustable' given under clause 11.2.2.1 of IS 17802 (Part 1).

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.2.2.2 Pause, stop, hide	Inspection	Check that the ICT is non-web software that provides an user interface and there is presence of moving, scrolling, blinking or autoupdating element.
		1. Identify all the moving, scrolling, blinking or autoupdating content present on thesoftware. Ensure that these should last for more than 5 s and is presented along with other essential information.
		2. Check that the moving, blinking, scrolling or autoupdating content is provided with pause, stop or hide mechanism.
		3. This is applicable to all the content of the software including informative and decorative.
		Check that the software does not fail 'Software success criterion for Pause, stop, hide' given under clause 11.2.2.2 of IS 17802 (Part 1).
11.2.3 Seizures and physical react	ions	
11.2.3.1 Three flashes or below threshold	Inspection	Check that the ICT is non-web software that provides a user interface and there is presence of flashing element.
		1. Identify any element in the user interface which flashes or blinks (general flash or red flash).
		 Count the number of times an element flashes or blinks (general flash or red flash) in any one-second period, or
		 Count the number of flashes or blinks (general flash or red flash) in 10 s, and divide by 10, to verify no more than three flashes or blinks occur per second.
		4. This is applicable to all the elements of the software including informative and decorative.
		Check that the software does not fail 'software success criterion for three flashes or below threshold' given under clause 11.2.3.1 of IS 17802 (Part 1).
11.2.4 Navigable		
11.2.4.1 Void		
11.2.4.2 Void	I	
11.2.4.3 Focus order	Inspection	Check that the ICT is non-web software that provides a user interface.
		1. Turn on the screen reader.
		2. Ensure that the focus moves from element to element in an order that preserves the meaning and operability of the interface.
		 Interact with dynamic content such as modals, adding or deleting content, etc. Ensure that focus is managed appropriately as content is added or removed from the screen.
		Check that the software does not fail 'Software success criterion for focus order' given under clause 11.2.4.3 of IS 17802 (Part 1).
11.2.4.4 Link purpose (in context)	Inspection	Check that the ICT is non-web software that provides a user interface and there is presence of link element.
		1. Using the screen reader navigate through each link element.
		2. Listen that the link texts are meaningful by themselves, meaning when the user listens to link text, user must be made aware of the link purpose or destination.
		Check that the software does not fail WCAG 2.1 Success Criterion 2.4.4 Link Purpose (In Context)
11.2.4.5 Void		

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.2.4.6 Headings and labels	Inspection	Check that the ICT is non-web software that provides a user interface.
		1. Using the screen reader navigate to each heading element on the software.
		2. Check that it provides enough description about its content and surrounding text.
		3. Navigate to each form field which has label element.
		4. Check that this label described the usage of the form field.
		Check that the software does not fail WCAG 2.1 Success Criterion 2.4.6 Headings and Labels
11.2.4.7 Focus visible	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Navigate through all the interactive elements of the software.
		Check if currently selected element is highlighted with surrounding border and different colour so that user can easily identify the active element on the screen.
		Check that the software does not fail WCAG 2.1 Success Criterion 2.4.7 Focus Visible.
11.2.5 Input modalities		
11.2.5.1 Pointer gestures	Inspection	Check that the ICT is non-web software that provides a user interface.
		1. Check for any functionality that can be triggered by:
		a. Path-based gestures (see description of path-based gestures below) OR.
		b. Multipoint gestures (see description of multipoint gestures below).
		2. For each functionality that can be triggered by path-based gestures or multipoint gestures, verify that the functionality can also be operated with the use of single-pointer actions that are not path-based (such as taps, double taps, long presses, clicks, click and holds, double clicks, or dragging actions that are not path-based).
		3. Exceptions exist if the functionality is essential.
		Check that the software does not fail 'Software success criterion for Pointer gestures' given under clause 11.2.5.1 of IS 17802 (Part 1).
11.2.5.2 Pointer cancellation	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Identify all controls in the software with actions that are irreversible.
		2. If that control (with an irreversible action) can be triggered by a single-pointer touch, make sure that at least one of the following is true:
		a. No Down-event — The action triggers on the up event. (The action is not triggered on the down event).
		b. Abort/undo — The action triggers a confirmation dialogue, giving the user an option to abort/undo.
		c. Up reversal — The action that would be triggered on the down event (for example, placing your finger on the screen) can be reversed by releasing the pointer outside the trigger area (for example, sliding the finger off the control and then lifting it off the screen).
		d. Essential — Completing the function on the down-event is essential.
		Check that the software does not fail 'Software success criterion for pointer cancellation' given under clause 11.2.5.2 of IS 17802 (Part 1).
11.2.5.3 Label in name		

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.2.5.3.1 Label in name	Inspection	Check that the ICT is non-web software and it is open for assistive technologies.
(open functionality)		1. Identify all controls in the software that have a visible text label.
		2. Using screen reader, put focus on the control.
		a. Ensure the entire onscreen visible text label is EITHER:
		b. An exact match to the label announced by screen reader OR
		3. Is contained within the label announced by screen reader (in the same order presented visually).
		Check that the software does not fail WCAG 2.1 Success Criterion 2.5.3 Label in Name
11.2.5.3.2 Label in name (closed functionality)	Informative only and contains no requirements requiring test	Clause 11.2.5.3.2 of IS 17802 (Part 1) is informative only and contains no requirements requiring test.
11.2.5.4 Motion actuation	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Identify any functionality that can be triggered by:
		a. Device motion (such as shaking or tilting the device) OR
		b. User motion detected by a device.
		2. For each functionality that can be triggered by motion actuation verify that both of the following are true:
		a. Motion actuation can be disabled AND
		b. The functionality can be operated without using motion.
		Check that the software does not fail WCAG 2.1 Success Criterion 2.5.4 Motion Actuation
11.3 Understable		
11.3.1 Readable		
11.3.1.1 Language of software		
11.3.1.1.1 Language of software	Inspection	Check that the ICT is non-web software and it is open for assistive technologies.
(open functionality)	1	1. Turn on the screen reader.
		2. Check if screen reader reads the user interface language with correct voice and accent. If multiple languages are used on any screen then check that screen reader switches to the correct voice and able to read the text.
		3. It must detect and read all the available Indian languages in the system.
		Check that the software does not fail 'Software success criterion for Language of software:' given in clause 11.3.1.1.1 of IS 17802 (Part 1).
11.3.1.1.2 Language of software (closed functionality)	Testing	Check that the ICT is non-web software that provides a user interface and the user interface is closed to assistive technologies for screen reading. The speech output is provided as non-visual access to closed functionality. The speech output is not proper names, technical terms, words of indeterminate. language, and words or phrases that have become part of the vernacular of the immediately surrounding text. The content is not generated externally and is under the control of the ICT vendor. The displayed languages can be selected using non-visual access. The user has not selected a speech language that is different from the language of the displayed.
		1. Check that the speech output is in the same human language of the displayed content provided.
11.3.1.2 Void		
11.3.2 Predictable		

For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to respective clauses of IS 17802 (Part 1)	Assessment	
11.3.2.1 On focus	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Turn on the screen reader
		2. Swipe or tab through the screen from top to bottom
		3. Check that no unexpected change of context as any of the components receive focus.
		 Under change of context we can consider focus moving to different area or opening up a new modal dialog.
		Check that the software does not fail WCAG 2.1 Success Criterion 3.2.1 On Focus.
11.3.2.2 On input	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Turn on the screen reader
		2. Interact with any of the input control on the screen, for example, entering text in a input box, opening a dropdown.
		3. Check that no unexpected change of context as you interact with any control.
		 Under change of context we can consider focus moving to different area or opening up a new modal dialog.
		Check that the software does not fail WCAG 2.1 Success Criterion 3.2.2 On Input.
11.3.3 Input assistance		
11.3.3.1 Error identification		
11.3.3.1.1 Error identification (open functionality)	Inspection	Check that the ICT is non-web software which is open for assistive technologies and there is presence of form element.
		1. Identify any forms on a software.
		Complete every form control, deliberately entering user input that falls outside the required format or values or leaving required fields blank and submit the form.
		3. If an input error is detected, verify that BOTH of the following are true:
		a. The form control that is in error is identified in text. Options include:
		i. Visible text on screen.
		ii. Alternative text on an image using screen reader, listen to the alternative text).
		b. Text that is programmatically associated with the control (using screen reader, swipe to the control and ensure that the error message is read along with the control type and label).
		Check that the software does not fail WCAG 2.1 Success Criterion 3.3.1 Error Identification
11.3.3.1.2 Error Identification (closed functionality)	Testing	Check that the ICT is non-web software that provides a user interface and the user interface is closed to assistive technologies for screen reading. Speech output is provided as non-visual access to closed functionality and when an input error is automatically detected.
		 Check that speech output identifies the item that is in error.
		 Check that the speech output describes the item that is in error.
		 Check that the speech output is provided in the same Indian language chosen by user.
		Check that the software does not fail WCAG 2.1 Success Criterion 3.3.1 Error Identification

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.3.3.2 Labels or instructions	Inspection	Check that the ICT is non-web software which provides an user interface and there is presence of form element.
		1. Visually identify each form control on the software.
		2. Verify that each form control has a label that is always visible.
		3. Required fields are identified visually and programmatically or <i>via</i> error text
		 Any input that requires specific data or format is provided for all users and not only to users without disabilities
		Check that the software does not fail WCAG 2.1 Success Criterion 3.3.2 Labels or Instructions*.
11.3.3.3 Error suggestion	Inspection	Check that the ICT is non-web software which provides an user interface and there is presence of form element.
		1. Identify any forms on a software.
		2. Complete every form control, deliberately entering user input that falls outside the required format or values and submit the form.
		3. If an input error is automatically detected, verify that the error message gives a suggestion about how to fix it.
		4. Using screen reader, ensure each error message with the suggestion can be read properly.
		5. *Ensure that this information is available in the Indian language chosen by the user.
		Check that the software does not fail WCAG 2.1 Success Criterion 3.3.3 Error Suggestion.
11.3.3.4 Error prevention	Inspection	Check that the ICT is non-web software which provides a user interface.
(legal, financial, data)		 Identify any screen/module where a user action can cause an important legal, financial, test/exam or unrecoverable/unchangeable user data transaction to occur.
		2. Confirm that AT LEAST ONE of the following is true:
		a. Reversible: Instructions are provided explaining how to reverse or cancel the transaction.
		b. Verified: Data entered by the user is provided for review before final submission, and the user is able to make changes to this data.
		c. Confirmed: A mechanism (such as a checkbox) is provided for the user to confirm the transaction.
		Check that the software does not fail 'Software success criterion for Error prevention (legal, financial, data)' given in clause 11.3.3.4 of IS 17802 (Part 1).
11.4 Robust		
11.4.1 Compatible		
11.4.1.1 Parsing		
11.4.1.1.1 Parsing (open functionality)	Inspection	Check that the ICT is non-web software that provides a user interface and it supports at least one assistive technology.
		1. Using the evaluation tool check the markup is having proper start and end tags, it is nested according to its specifications and it is not having any duplicate ids.
		Check that the software does not fail 'Software success criterion for Parsing' given in clause 11.4.1.1.1 of IS 17802 (Part 1).
11.4.1.1.2 Parsing (closed functionality)	Contains no requirements requiring test	Clause 11.4.1.1.2 of IS 17802 (Part 1) contains no requirements requiring test.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

For Requirements,	Type of	Inspection, Test Procedure and Success Criteria
refer to respective clauses of IS 17802 (Part 1)	Assessment	
11.4.1.2 Name, role, value		
11.4.1.2.1 Name, role, value	Inspection	Check that the ICT is non-web software and it is open for assistive technologies.
(open functionality)		1. Using screen reader, navigate through each user interface component.
		2. Make sure the screen reader correctly conveys (<i>see</i> expectations detailed below) the following information about each component:
		a. Its role: For example, button, link, switch, picker, slider, stepper, switch, text field, alert, tab, etc.
		b. Its name: For example, a label for a form control or button, the name of the tab, the label of a switch, etc.
		3. If applicable, its value or state: for example, on/off, selected, dimmed, adjustable, expanded/collapsed, slider's value, textfield's value, "tab_of_", etc.
		Check that the software does not fail 'Software success criterion for Name, role, value' given in clause 11.4.1.2.1 of IS 17802 (Part 1).
11.4.1.2.2 Name, role, value (closed functionality)	Contains no testable requirements	Clause 11.4.1.2.2 of IS 17802 (Part 1) contains no testable requirements.
11.4.1.3 Status messages		
11.4.1.3.1 Status messages	Inspection	Check that the ICT is non-web software and it is open for assistive technologies.
(open functionality)		1. Identify any status messages that can appear on the software. Status messages are:
		a. Defined as a message that provides information to the user on the success or results of an action (confirmation message, updated shopping cart, etc), on the waiting state of an application, on the progress of a process, or on the existence of errors.
		b. Added to the screen but do not receive focus.
		2. Using screen reader, trigger each status message and confirm that the newly added status message is automatically announced by the screen reader without moving focus to the message.
		Check that the software does not fail WCAG 2.1 Success Criterion 4.1.3 Status Messages.
11.4.1.3.2 Status messages (closed functionality)	No testable requirements	
11.5 Interoperability with assistive	e technology	
11.5.1 Closed functionality	Contains	If device or software is a closed functionality.
	no testable requirements	1. Check that the closed functionality conforms to clause 5.1 of IS 17802 (Part 1).
		2. Where the closed functionality of software conforms to clause 5.1 (Closed functionality) of IS 17802 (Part 1), it shall not be required to conform with clause 11.5.2 of IS 17802 (Part 1).
11.5.2 Accessibility services		
11.5.2.1 Platform accessibility	Inspection	Check that the ICT is platform software.
service support for software that provides a user interface		1. Check that the platform software documentation includes information about platform services that may be used by software that provides a user interface to interoperate with assistive technology.
11.5.2.2 Platform accessibility	Inspection	Check that the ICT is platform software.
service support for assistive technologies		 Check that the platform software documentation includes information about platform accessibility services that enables assistive technology to interoperate with software that provides a user interface running on the platform software.

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.5.2.3 Use of accessibility	Inspection	Check that the ICT is non-web software which provides a user interface.
services		1. Check that the software uses the applicable documented platform accessibility services.
		 Check that the software can meet the applicable requirements mentioned in clause 11.5.2.5 to 11.5.2.17 of IS 17802 (Part 1) whilst using the documented platform accessibility services.
		 Check that the software can meet requirements mentioned in clause 11.5.2.5 to 11.5.2.17 of IS 17802 (Part 1) whilst using the documented platform accessibility services and other documented services.
11.5.2.4 Assistive technology	Inspection	Check that the ICT is an assistive technology.
		1. Check that the assistive technology uses the documented platform accessibility services.
11.5.2.5 Object information	Inspection	Check that the ICT is non-web software which provides a user interface.
		1. Using screen reader, navigate through each user interface component.
		2. Make sure the screen reader correctly conveys (<i>see</i> expectations detailed below) the following information about each component:
		a. Its role: For example, button, link, switch, picker, slider, stepper, switch, text field, alert, tab, etc.
		b. Its name: For xample, a label for a form control or button, the name of the tab, the label of a switch, etc.
		 If applicable, its value or state: For example, on/off, selected, dimmed, adjustable, expanded/collapsed, slider's value, textfield's value, "tab_of_", etc.
11.5.2.6 Row, column, and headers	Inspection	Check that the ICT is non-web software which provides a user interface. If user interface of software has a data table.
		1. Using assistive technologies like screen reader navigate to the data table in which the tests are to be performed.
		2. Check that each cell's row is programmatically determinable by assistive technologies.
		3. Check that each cell's column is programmatically determinable by assistive technologies.
		4. Check that each cell's row header, if the row header exists, is programmatically determinable by assistive technologies.
		5. Check that each cell's column header, if the column header exists, is programmatically determinable by assistive technologies.
11.5.2.7 Values	Inspection	Check that the ICT is non-web software which provides a user interface. If user interface of software has any element with value.
		1. Using assistive technologies like screen reader navigate to a user interface element that can have a value.
		 Check that the current value is programmatically determinable by assistive technologies.
		3. If the user interface element conveys information about a range of values, check that the minimum value is programmatically determinable by assistive technologies.
		4. If the user interface element conveys information about a range of values, check that the maximum value is programmatically determinable by assistive technologies.

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.5.2.8 Label relationships	Inspection	Check that the ICT is non-web software which provides a user interface. If user interface of software has label.
		1. Obtain the information of each user interface element using assistive technologies like screen reader.
		2. Check that the user interface element's information includes the relationship with the user interface element that is its label, if the current user interface element has a label, and that this relationship is programmatically determinable by assistive technologies.
		3. Check that the user interface element's information includes the relationship with the user interface element that it is labelling, if the current user interface element is a label, and that this relationship is programmatically determinable by assistive technologies.
11.5.2.9 Parent-child relationships	Inspection	Check that the ICT is non-web software which provides a user interface. If user interface of software has some elements which are parent/child of another user interface element.
		1. For user interface elements that have a parent, check that the user interface element's information includes the relationship with the user interface element that is its parent.
		2. Check that the user interface elements that are parents of the user interface element selected in check include the relationship with the user interface elements that are its children in their information, and that this relationship is programmatically determinable by assistive technologies like screen reader.
		3. For user interface elements that are a parent of other user interface elements, check that the user interface element's information includes the relationship with the user interface elements that are its children, and that this relationship is programmatically determinable by assistive technologies.
		4. Check that the user interface elements that are a child of the user interface element selected in check include the relationship with the user interface elements that are its parents in their information, and that this relationship is programmatically determinable by assistive technologies.
11.5.2.10 Text	Inspection	Check that the ICT is non-web software which provides a user interface. If user interface of software has text rendered on the screen.
		1. Using the assistive technologies like screen reader check the text content is programmatically determinable.
		2. Check that all the attributes including its boundary are determinable by assistive technologies.
11.5.2.11 List of available actions	Inspection	Check that the ICT is non-web software which provides a user interface. If user interface of software has any executable elements.
		1. Using the assistive technologies like screen reader check that the user interface element's information includes the* list of actions that can be executed.
		2. Check that this list is programmatically determinable by assistive technologies.
11.5.2.12 Execution of available actions	Inspection and Testing	If user interface of software has executable elements and security requirement of that software permits the assistive technologies to execute the action.
		 Check that the user interface element's information includes the list of actions that can be executed by assistive technologies according to clause 11.5.2.11 of IS 17802 (Part 1).
		2. Check that all the actions in the list can successfully be executed by assistive technologies like screen reader.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.5.2.13 Tracking of focus and	Inspection and	If user interface of software has text editing elements.
selection attributes	Testing	1. Check that the user interface element's information includes mechanisms to track focus, text insertion point and selection attributes.
		2. Check that this information is programmatically determinable by assistive technologies.
		3. Activate those tracking mechanisms using assistive technologies like screen reader.
		4. As a user, use the text editing functionality in the evaluated software product.
		5. Check that the tracking of focus, text insertion points and selection attributes work properly with assistive technologies.
11.5.2.14 Modification of focus and selection attributes	Testing	Check that the ICT is non-web software which provides a user interface. If software has user interface elements that can receive focus or that enable text editing. If security requirements permit platform software to programmatically modify focus, text insertion point and selection attributes of user interface.
		1. For user interface elements that can receive focus and where the focus can be modified by a user without the use of assistive technology, check that the focus can be programmatically modified by assistive technologies.
		2. For user interface elements that enable text editing by a user without the use of assistive technology, check that the position of the text insertion point can be programmatically modified by assistive technologies like screen reader.
		3. For user interface elements that enable text editing, check that the selection attributes can be programmatically modified by assistive technologies where they can be modified by user without the use of assistive technology.
11.5.2.15 Change notification	Inspection and Testing	Check that the ICT is non-web software which provides a user interface. If software has user interface.
		1. Using assistive technologies like screen reader activate notifications of changes in the user interface elements.
		2. Check that notifications about changes in object information (role, state, boundary, name and description) are sent to assistive technologies, if this information changes in the software user interface.
		 Check that notifications about changes in row, column and headers of data tables are sent to assistive technologies, if this information changes in the software.
		 Check that notifications about changes in values (current value, minimum value and maximum value) are sent, if this information changes in the software.
		5. Check that notifications about changes in label relationships are sent to assistive technologies, if this information changes in the software.
		6. Check that notifications about changes in parent-child relationships are sent to assistive technologies, if this information changes in the software.
		7. Check notifications about changes in text (text contents, text attributes and the boundary of text rendered to the screen) are sent to assistive technologies, if this information changes in the software.
		8. Check that notifications about changes in the list of available actions are sent to assistive technologies, if this information changes in the software.
		 Check that notifications about changes in focus, text insertion point and selection attributes are sent to assistive technologies, if this information changes in the software.

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.5.2.16 Modifications of states and properties	Testing	Check that the ICT is non-web software which provides a user interface. If user interface of software has modifiable elements and security requirement of the software permits the assistive technologies to change the state or property of an element.
		1. Activate the assistive technology like screen reader and check that the state of user interface elements, whose state can be modified by a user without the use of assistive technology, can be programmatically modified by assistive technologies.
		 Check the properties of user interface elements, whose properties can be modified by a user without the use of assistive technologies, can be programmatically modified by assistive technologies.
11.5.2.17 Modifications of values and text	Testing	Check that the ICT is non-web software which provides a user interface. If user interface of software has text modification elements and security requirement of the software permits the assistive technologies to change the text or value of an element.
		1. Activate the assistive technology like screen reader and check that the values of user interface elements, whose values can be modified by a user without the use of assistive technology, can be modified by assistive technologies using the input methods of the platform.
11.6 Documented accessibility usa	ige	
11.6.1 User control of accessibility features	Testing	Check that the ICT is non-web software which provides a user interface. If software documentation has any feature defined as accessibility feature.
		1. Check that sufficient modes of operation exists where user control over platform features, that are defined in the platform documentation as accessibility features intended for users, is possible.
11.6.2 No disruption of accessibility features	Testing	Check that the ICT is non-web software which provides a user interface. If software documentation has any feature defined as accessibility feature.
		1. Check if software that provides a user interface disrupts normal operation of platform accessibility features.
		2. Check if the disruption was specifically requested or confirmed by the user.
11.7 User preferences	Inspection and Testing	If software which provides user interface has the settings for language, colour, contrast, font type, font size, or focus cursor, that correspond to platform settings. The software is not designed to be isolated from its underlying platforms.
		1. Check that the software provides a mode of operation that follows the platform settings.
11.8 Authoring tools		
11.8.1 Content technology	Inspection and Testing	Check that the ICT is non-web software which provides a user interface. If software is an authoring tool and output format of the authoring tool supports information required for accessibility.
		1. Check if the authoring tool conforms to clauses 11.8.2 to 11.8.5 to the extent that information required for accessibility is supported by the format used for the output of the authoring tool.
11.8.2 Accessible content creation	Inspection and Testing	Check that the ICT is non-web software which provides a user interface. If software is an authoring tool.
		1. Check if the authoring tool has features that enable and guide the production of content that conforms to Clauses 9 (Web) and 10 (non-web documents) of IS 17802 (Part 1).

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Table 1 (g) (Concluded)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
11.8.3 Preservation of accessibility information in	Inspection	If software is an authoring tool and it supports restructuring transformations or re-coding transformations.
transformations		1. For a restructuring transformation, check if the accessibility information is preserved in the output.
		2. For a restructuring transformation, check if the content technology supports accessibility information for the restructured form of the information.
		3. For a re-coding transformation, check if the accessibility information is preserved in the output.
		4. For a re-coding transformation, check if the accessibility information is supported by the technology of the re-coded output.
11.8.4 Repair assistance	Inspection	Check that the ICT is non-web software and is an authoring tool. The accessibility checking functionality of the authoring tool can detect that content which does not meet a requirement of clauses 9 (Web) or 10 (Non-web documents) of IS 17802 (Part 1) as applicable.
		1. The authoring tool provides repair suggestions when content does not meet requirement of clauses 9 or 10 (as applicable) of IS 17802 (Part 1).
11.8.5 Templates	Inspection	Check that the ICT is non-web software which provides a user interface. If software is an authoring tool and it provides the template for content creation.
		 Check that the authoring tool provides at least one template that supports the creation of content that conforms to requirements of clause 9 (Web content) or clause 10 (Documents) of IS 17802 (Part 1) as applicable.
		 Check that at least one template identified in step 1 is available and is identified as conforming to requirements of clauses 9 or 10 of IS 17802 (Part 1) (as applicable).

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Table 1 (h) Documentation and Support Services

(Clause 6.6)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
12.1 Product documentation		
12.1.1 Accessibility and compatibility features	Inspection	 Check that the ICT product documentation is supplied with ICT, separately or integrated within the ICT. 1. Check that it lists and explains adequately how to use the accessibility and compatibility features of the ICT Product. 2. *Check whether the product documentation is in the same Indian language
12.1.2 Accessible documentation	Inspection	 chosen by the user. Check that the product ICT documentation is provided in electronic format. 1. Check that it is in Web format that conforms to clause 9 of IS 17802 (Part 1). 2. Check that it is a non-Web format that conforms to clause 10 of IS 17802 (Part 1). 3. Check that it is offered in any one of the formats given in 2 and 3 above. 4. *Check whether the electronic format of the documentation is in the same Indian language chosen by the user.
12.2 Support Services		
12.2.1 General	No test	Clauses 12.2.1 of IS 17802 (Part 1) is informative and contains no requirements requiring test.
12.2.2 Information on accessibility and compatibility features	Inspection	 Check that the support services are provided. Check that the support services provide information on the accessibility and compatibility features that are included in the product documentation. Check that support services provide information contained in the product documentation and it explains adequately how to use the accessibility and compatibility features of the ICT.
12.2.3 Effective communication	Inspection	Check that the ICT support services are provided.1. Check that the ICT support services accommodate the communication needs of individuals with disabilities either directly or through a referral point.
12.2.4 Accessible documentation	Inspection	 Check that the documentation is provided by ICT support services. Check that the documentation provided by the ICT support services in electronic format conform to the requirements of clauses 9 or 10 of IS 17802 (Part 1) as appropriate. *Check that the documentation in other formats (printed or otherwise) are accessible.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

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Table 1 (i) ICT Providing Relay or Emergency Service Access

(*Clause* 6.6)

For Requirements, refer to respective clauses of IS 17802 (Part 1)	Type of Assessment	Inspection, Test Procedure and Success Criteria
13.1 Relay service requirements		
13.1.1 General	No test	Clause 13.1.1 of IS 17802 (Part 1) is informative and contains no requirements requiring test
13.1.2 Text relay services	Inspection	Check that the service is a text relay service.
		1. Check that the service enables text users and speech users to interact by providing conversion between the two modes of communication.
		 *Check that the text relay service supports Indian language users-text users in a given Indian language and speech users in the same language and between one Indian language text and speech users to another Indian language or English language users.
13.1.3 Sign relay services	Inspection	Check that the service is a sign relay service.
		1. Check that the service enables sign language users and speech users to interact by providing conversion between the two modes of communication.
		2. Check that the sign language relay services provide two-way translation between sign language users and speech users.
		3. *Check that the sign language users and various Indian language speech users interact between the two modes of communication.
13.1.4 Lip-reading relay	Inspection	Check that the service is a lip-reading relay service.
services		1. Check that the service enables lip-readers and voice telephone users to interact by providing conversion between the two modes of communication.
		2. *Check that translation between spoken word to Indian Sign language is facilitated.
13.1.5 Captioned telephony	Inspection	Check that the service is a captioned relay service.
services		1. Check that the service assists a deaf or hard of hearing user in a spoken dialogue by providing text captions, translating the incoming part of the conversation.
13.1.6 Speech to speech relay	Inspection	Check that the service is a speech relay service.
services		1. Check that the service enables telephone users who are speech impaired, or have limited cognitive, language and learning abilities, to communicate by providing assistance between them.
13.2 Access to relay services	Inspection	Check that the ICT system supports two-way communication.
		1. Check that a set of relay services for two-way communication is specified.
		2. Check that the system does not prevent access to those relay services for incoming and outgoing calls, relating to voice, RTT, or video, either individually or in combinations supported by both the relay service and the ICT system.
13.3 Access to emergency	Inspection	Check that the ICT system supports two-way communication.
services		1. Check that a set of emergency relay services for two-way communication is specified.
		 Check that the system does not prevent access to those emergency services for outgoing and incoming calls, relating to voice, RTT, or video, either individually or in combinations supported by both the emergency service and the ICT system.

^{*} These procedures are applicable in respect of informative requirements only and, as such, are not part of normative requirements. These may be included based on user requirement in applicable cases.

7 ACCESSIBILITY CONFORMANCE 8 REPORT

A supplier's declaration of conformity can be substantiated by supporting documentation for which the supplier is responsible. Anyone should be able to repeat the attestation and arrive at the same result using this information. An example is Voluntary Product Accessibility Template (VPAT), specified by the Information Technology Industry Council (ITI) for supplier's declaration of their products for accessibility - one that is widely used by industry and users in many countries. In declaration of conformance, the ACR can be used as reference that is mentioned in the Annex B (*Informative*).

8 TESTING AND TOOLS

Testing for conformity in respect of ICT accessibility requires good understanding of the needs of PwDs and the requirements spelt out in Part 1 of this standard. While it is necessary and possible for testing for full compliance of a sub-system based on 'determinants of compliance' and 'success criteria' specified in Table1, it may be too arduous to test all purely by manual testing. Hence, many fully automated and semi-automatic tools have become available in the market bothopen source and proprietary or commercial types. Again, these can be limited function types or more comprehensive for various functions. Most popular tools are in respect of websites and mobile apps. Automated testing tools are also valuable for software developers at various stages of the Software Development Life Cycle (SDLC). In no case, test tools are to be fully relied upon and they must be complemented by manual testing, especially from people with disabilities.

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ANNEX A

(Informative)

(Clause 4.1.4)

A-1 MAPPING OF REAL-WORLD ICT PRODUCTS AND SERVICES WITH REQUIREMENT CLAUSES

This annexure will guide the user to understand the different categories of ICT products and services around us. A few real-world examples are also provided. In the Table 2, the ICT categories are mapped with their applicable clauses of IS 17802 (Part 1).

NOTES

1 It is difficult to list all categories of ICT products and services; however, top priority categories are mentioned along with the suitable examples.

2 Respective clauses from the IS 17802 (Part 1) are mapped against the specific ICT category; however, it is recommended that all the clauses and their requirements are referred to for better results.

3 The reader may refer to the functional performance statements specified in clause **4** of IS 17802 (Part 1) before designing or supplying or procuring any ICT product and service. This will help to understand the different requirements of different disabilities and operating conditions.

Table 2 Representative Real-World ICT Products and Services with Requirement Clauses

ICT Category	Real-world Examples	Refer Clauses of IS 17802 (Part 1)
Computer hardware systems and peripherals	Desktop computers/all-in-one PC/workstation/notebooks/ptops/tablets/ printers/inputting systems/biometric access systems/networking devices/ storage	5, 8, 11
Computer/mobile Operating systems	Windows, Inux, mac, android, iOS	5, 11
Application software	Security and protective software including antivirus, office suite software, DBMS, accounting package, browser	5, 11
Self-service terminals	Payment terminals (swipe machines), automated teller machines (ATM), ticketing machines, check-in machines, interactive self-service terminals providing information	5, 8, 11
Consumer terminal equipment with interactive computing capability	Set-top-boxes, interactive TV's, smart home solutions, assisted living solutions	5, 8, 11
Electronic ticketing services	Electronic tickets (for example, metro cards/tokens/machines)	5, 8, 11
Non web documents	E-books, word processing documents, spreadsheets, presentations, PDFs, e-mails	5, 10
Navigational services	Online maps/mapping services	5, 11
Web based consumer services	E-commerce, net banking and other web-based banking services, payment gateways, e-governance, voice and text chat services, video conferencing, e-learning	5, 6, 7, 9, 11, 12
Mobile [smart phone] app-based consumer services	Mobile banking apps, payment solutions, cab aggregators, food delivery apps, e-commerce, instant messaging, video conferencing, OTT apps	5, 8, 9, 11
Support services	Helpdesk systems, help documentation	5, 12
Multimedia [audio/video]	T.V. programs, movies, documentaries, web series, OTT (Over-The-Top) platforms	5, 7
Real-time communication services	Real-time transcript [RTT] calls	5, 6
Emergency or relay services	Text relay services, sign relay services, speech to speech relay services	5, 13

(Clause A-1)

ANNEX B

(Informative)

(Clause 7)

GUIDANCE DOCUMENT FOR ACCESSIBILITY CONFORMITY REPORT

This Annexe can be used by stakeholders to assess and confirm, prima facie, the fulfilment of the accessible functionalities.

B-1 PROCEDURE FOR PREPARING THE ACR

B-1.1 Identify the product/service of interest.

B-1.2 Based on the product category, identify the clauses to be complied with. Annexure 1 can be used as a guidance to do the same.

B-1.3 Identify the user's acces5sibility requirement.

B-1.4 Map the product accessibility and functional requirements with the accessibility clauses in the Standard.

B-1.5 Suppliers to declare the compliance and compliance level of their products to the Standard, as per applicable clauses, in a standardized format.

B-2 ACCESSIBILITY CONFORMANCE REPORT (ACR)

An ACR can be prepared by evaluating and recording the conformance against each requirement by following the Inspection, Test Procedure and Success criteria steps mentioned in the Table 1.

The conformance report can be presented in the format given in Table 3(a) and in specific to the clause **5.10** Indian Language, the format under Table 3(b) may be preferred.

Table 3 (a): Sample Template for Filling ACR

(Clause B-2)

Requirement	Conformance	Remarks

Table 3 (b) Detailed Criteria for Clause 5.10

(Clause B-2)

Languages Supported	UNICODE	Display	Input Support, Font	Auditory Output	Voice Command
Language 1					
Language 2					
Language 3					

NOTE — For example, ITI VPAT®, which is a leading global reporting format can be used for creating the ACR. It is a self-disclosing document produced by the vendor which details each aspect of the Standards requirements and how the product supports each criterion. The most appropriate version "Accessibility requirements suitable for public procurement of ICT products and services in Europe" is VPAT 2.4 EU: EN 301 549 template may be used as reference in preparing the ACR to any ICT. (Voluntary Product Accessibility Template® (VPAT®) EN 301 549 Edition Version 2.4 which can be downloaded from https://www.itic.org/dotAsset/22d0c5ca-e78a-4b5d-bea3-3fad313ae924.doc).

The terms used in the Conformance Level information as per VPAT® are:

a) Supports — The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.

b) Partially Supports - Some functionality of the product does not meet the criterion.

c) Does Not Support — The majority of product functionality does not meet the criterion.

- d) Not Applicable The criterion is not relevant to the product.
- e) Not Evaluated The product has not been evaluated against the criterion. This can be used only in WCAG Level AAA criteria.

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ANNEX C

(Foreword)

COMMITTEE COMPOSITION

Active Assisted Living Sectional Committee, LITD 35

Organization

Representative(s)

In Personal Capacity	Prof Suptendranath Sarbadhikari (<i>Chairman</i>)
In Personal Capacity	Shri Srinivasan Ramakrishnan
Centre for Accessibility in Built Environment Foundation, New Delhi	Shri Subhash Chandra Vashishth
Centre for Development of Advanced Computing, Pune	Dr N. Subramanian Ms Lenali Singh (<i>Alternate</i> I) Mr Sai Darshan (<i>Alternate</i> II)
ERNET India, New Delhi	Naveen Choudhary
G3ict	Dr Nirmita Narasimhan
Kannur University, Department of Information Technology, Kannur	Dr N. S. Sreekanth
Price water house Coopers Private Limited, Gurugram	Mr Mohammed Asif Iqbal
Seconded European Standardization Expert for India (SESEI), New Delhi	Shri Dinesh Chand Sharma
Secure Meters Limited, Gurugram	Shri Puneet Khurana Shri Anil Mehta (<i>Alternate</i> I) Ms Asmita Goyal (<i>Alternate</i> II)
Standardization Testing and Quality Certification (STQC)	Shri Ankit Jain Shri A. Chakravarthy (<i>Alternate</i>)
Narnix Technolabs Private Limited, New Delhi	Shri Kishor N. Narang
In Personal Capacity	Ms Abha Khetarpal
In Personal Capacity	Shri Someshwar Singh
Other Contributors (CDAC)	Mr Shubanshu Gupta Ms Nobby Varghese (<i>Alternate</i>)
BIS Director General	Ms Reena Garg, Scientist 'F' and Head (Electronics and IT) [Representing Director General (<i>Ex-officio</i>)]

Member Secretary

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BIBLIOGRAPHY

- [b.1.] Guidelines for Indian Government Apps and Websites, v2.0, Feb, 2019, NIC, MeitY, GOI; Adopted by Department of Administrative Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances and Pension, GoI, ISBN-978-81-909457-0-7
- [b.2.] GIGW Compliance and Certification Handbook, https://cdnbbsr.s3waas.gov.in/ s3c92a10324374fac681719d63979d00fe/uploads/2020/03/20200326100.pdf
- [b.3.] ISO/IEC Guide 60 : 2004, Conformity assessment Code of good practice
- [b.4.] ISO/IEC 17050-1:2010, Conformity assessment Supplier's declaration of conformity Part 1: General requirements
- [b.5.] ISO/IEC 17050-2:2004, Conformity assessment Supplier's declaration of conformity Part 2: Supporting documentation
- [b.6.] ISO/IEC Guide 23:1982, Methods of indicating conformity with standards for third-party certification systems
- [b.7.] ISO/IEC Guide 28:2004, Conformity assessment Guidance on a third-party certification system for products
- [b.8.] ISO/IEC 17030:2009, Conformity assessment General requirements for third-party marks of conformity
- [b.9.] ISO/IEC 17011:2004, Conformity assessment General requirements for accreditation bodies accrediting conformity
- [b.10.] ISO/IEC Guide 68:2002, Arrangements for the recognition and acceptance of conformity assessment results
- [b.11.] W3C, Website Accessibility Conformance Evaluation Methodology (WCAG-EM) 1.0, 2014
- [b.12.] W3C, Understanding Conformance Understanding WCAG 2.0
- [b.13.] W3C, WCAG2ICT Task Force
- [b.14.] Section 508, Applicability and Conformance, https://www.section508.gov/develop/applicabilityconformance/
- [b.15.] Section 508, Test for Accessibility, https://www.section508.gov/test/
- [b.16.] Mandate M 376: new software accessibility requirements, Loïc Martíneza*, Michael Plukeb, Procedia Computer Science 27 (2014) 271 – 280, Elsevier, www.sciencedirect.com
- [b.17.] TR 101 550 V1.1.1 (2014-02), Documents relevant to EN 301 549 "Accessibility requirements suitable for public procurement of ICT products and services in Europe"
- [b.18.] TR 101 551 V1.1.1 (2014-02), Guidelines on the use of accessibility award criteria suitable for public procurement of ICT products and services in Europe
- [b.19.] Website Accessibility Conformance Evaluation Methodology (WCAG-EM) 1.0, W3, http://www.w3.org/TR/WCAG-EM/
- [b.20.] Essential Components of Web Accessibility, https://www.w3.org/WAI/fundamentals/components/
- [b.21.] How People with Disabilities Use the Web, https://www.w3.org/WAI/people-use-web/
- [b.22.] Easy Checks A First Review of Web Accessibility, https://www.w3.org/WAI/test-evaluate/ preliminary/
- [b.23.] Involving Users in Evaluating Web Accessibility, https://www.w3.org/WAI/test-evaluate/involvingusers/
- [b.24.] Selecting Web Accessibility Evaluation Tools, https://www.w3.org/WAI/test-evaluate/tools/selecting/

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- [b.25.] Web Accessibility Evaluation Tools List, https://www.w3.org/WAI/ER/tools/
- [b.26.] Using Combined Expertise to Evaluate Web Accessibility, https://www.w3.org/WAI/test-evaluate/ combined-expertise/
- [b.27.] Section 508.gov: Acquisition, Request Accessibility Information from Vendors & Contractors, https://www.section508.gov/buy/request-accessibility-information/#:~:text=Accessibility%20 Conformance%20Report%20%28ACR%29%20-%20A%20written%20ACR,be%20 complete%2C%20and%20submitted%20according%20to%20the%20instructions.
- [b.28.] Voluntary Product Accessibility Template® (VPAT®) EN 301 549 Edition V2.4

https://www.itic.org/policy/accessibility/vpat

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