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असाधारण  
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (i)  
PART II—Section 3—Sub-section (i)

प्राधिकार से प्रकाशित  
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सामाजिक न्याय और अधिकारिता मंत्रालय

(दिव्यांगजन सशक्तिकरण विभाग)

अधिसूचना

नई दिल्ली, 13 जुलाई, 2023.

**सा.का.नि. 504(अ).**—जबकि सामाजिक न्याय और अधिकारिता मंत्रालय, दिव्यांगजन सशक्तिकरण विभाग में भारत सरकार के दिव्यांगजन अधिकार अधिनियम, 2016 (2016 का 49) की धारा 100 की उप-धारा (1) द्वारा यथा अपेक्षित, दिनांक 10 मई, 2023 की अधिसूचना संख्या. सा.का.नि 357 (असा.) के माध्यम से दिव्यांगजन अधिकार नियम, 2017 के नियम 15 के उप-नियम (1) में संशोधन के लिए भारत के राजपत्र, असाधारण, भाग-II, खंड 3, उप-खंड (i) में कतिपय नियमों का एक मसौदा प्रकाशित किया गया था जिसमें आधिकारिक राजपत्र की उक्त अधिसूचना वाली प्रतियां जनता को जिस तारीख से उपलब्ध कराई गई थी, उस तारीख से तीस दिनों की समाप्ति से पहले, इससे प्रभावित होने की संभावना वाले सभी व्यक्तियों से आपत्तियां और सुझाव आमंत्रित किए गए थे।

और जबकि उक्त अधिसूचना की प्रतियां 10 मई, 2023 को जनता के लिए उपलब्ध कराई गई थीं;

और जबकि उक्त अधिसूचना के संबंध में जनता से प्राप्त आपत्तियों और सुझावों पर केंद्र सरकार द्वारा विचार किया गया था;

अब, इसलिए, दिव्यांगजन अधिकार अधिनियम, 2016 (2016 का 49) की धारा 100 की उप-धाराओं (1) और (2) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, केंद्र सरकार दिव्यांगजन अधिकार नियम, 2017 में संशोधन करने के लिए एतद्वारा आगे और निम्नलिखित नियम बनाती है, अर्थात्:-

(1) इन नियमों को दिव्यांगजन अधिकार (संशोधन) नियम, 2023 कहा जाएगा।

(2) ये आधिकारिक राजपत्र में उनके प्रकाशन की तारीख से लागू होंगे।

2. दिव्यांगजन अधिकार नियम, 2017 में, नियम (15) में, उप-नियम (1) में, खंड (ग) के पश्चात् निम्नलिखित खंड को अंतः स्थापित किया जाएगा, अर्थात्:-

“(घ) संस्कृति मंत्रालय में भारत सरकार द्वारा अधिसूचना संख्या जीएसआर 7 दिनांक 18 जनवरी, 2023 के माध्यम से समय-समय पर यथासंशोधित संस्कृति क्षेत्र विशिष्ट सुसंगत सुगम्यता मानक/दिशानिर्देश अधिसूचित किया गया है:”

[फा. सं. 38-03/2023-डीडी-III]

राजीव शर्मा, संयुक्त सचिव

**नोट:** दिव्यांगजन अधिकार नियम, 2017 को दिनांक 15 जून, 2017 की अधिसूचना संख्या. सा.का.नि. 591(अ) के माध्यम से भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (i) में प्रकाशित किया गया था और दिनांक 05 जून, 2023 की सा.का.नि. 413 (अ) के माध्यम से अंतिम बार संशोधित किया गया था।

## MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT

[Department of Empowerment of Persons with Disabilities(Divyangjan)]

### NOTIFICATION

New Delhi, the 13th July, 2023.

**G.S.R. 504(E).**—Whereas a draft of certain rules to amend sub-rule (1) of rule 15 of the Rights of Persons with Disabilities Rules, 2017 were published, as required by sub-section (1) of section 100 of the Rights of Persons with Disabilities Act, 2016 (49 of 2016), *vide* notification of the Government of India the Ministry of Social Justice and Empowerment, Department of Empowerment of Persons with Disabilities number G.S.R. 357(E), dated the 10<sup>th</sup> May, 2023 in the Gazette of India, Extraordinary, Part-II, section 3, sub-section (i) inviting objections and suggestions from all persons likely to be affected thereby, before the expiry of thirty days from the date on which the copies of the Official Gazette in which this notification is published are made available to the public;

And whereas copies of the said notification were made available to the public on the 10<sup>th</sup> May, 2023;

And whereas the objections and suggestions received from the public in respect of the said notification have been considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sub-sections (1) and (2) of section 100 of the Rights of Persons with Disabilities Act, 2016 (49 of 2016), the Central Government hereby makes the following rules further to amend the Rights of Persons with Disabilities Rules, 2017, namely:-

(1) These rules may be called the Rights of Persons with Disabilities (Amendment) Rules, 2023.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. In the Rights of Persons with Disabilities Rules, 2017, in rule (15), in sub-rule (1), after clause (c), the following clause shall be inserted, namely:-

“(d) culture sector specific harmonised accessibility standards/guidelines, notified by the Government of India in the Ministry of Culture, *vide* notification number G.S.R. 7 dated 18<sup>th</sup> January, 2023, as amended from time to time:”

[F. No. 38-03/2023-DD-III]

RAJEEV SHARMA, Jt. Secy.

**Note :** The Rights of Persons with Disabilities Rules, 2017 were published in the Gazette of India, Extraordinary, Part II, section 3, sub-section (i) *vide* notification number G.S.R. 591 (E), dated the 15<sup>th</sup> June, 2017 and was last amended *vide* G.S.R. 413 (E) , dated the 05<sup>th</sup> June, 2023.

If a Departmental Promotion Committee exists, what is its composition.	Circumstances in which Union Public Service Commission is to be consulted in making recruitment.
(12)	(13)
Group 'B' Departmental Promotion Committee (for considering promotion) consisting of :-  1. Director, National Atlas and Thematic Mapping Organisation - Chairman;  2. Director or Deputy Secretary concerned, Department of Science and Technology - Member;  3. Joint Director, National Atlas and Thematic Mapping Organisation - Member;  4. Deputy Director, National Atlas and Thematic Mapping Organisation. - Member.	Consultation with Union Public Service Commission is not necessary.

[F. No. SM/02/20/2018]

ANITA DHADRA, Under Secy.

## संस्कृति मंत्रालय

## (समन्वय अनुभाग)

नई दिल्ली, 18 जनवरी, 2023

सा.का.नि. 7.—सक्षम प्राधिकारी द्वारा यथा अनुमोदित, संलग्न संस्कृति क्षेत्र विशिष्ट सुसंगत सुगम्यता मानक/दिशानिर्देश भारत के राजपत्र में भाग-II, खंड-3, उप खंड (i) के अंतर्गत, आवश्यकता अनुसार प्रकाशित किए जाएं।

[फा. सं. 12/16/2019—सीडीएन]

संजुक्ता मुदगल, संयुक्त सचिव

## MINISTRY OF CULTURE

## (CDN SECTION)

New Delhi, the 18th January, 2023

**G.S.R. 7.**—The enclosed Culture Sector Specific Harmonized accessibility Standards/guidelines as approved by the competent authority be published, as required, under Part-II, Section-3, Sub Section (i) in the Gazette of India.

[F. No. 12/16/2019—CDN]

SANJUKTA MUDGAL, Jt. Secy.

**ACCESSIBLE INDIA CAMPAIGN**  
**ACCESSIBILITY STANDARDS AND GUIDELINES**  
**MINISTRY OF CULTURE**  
**(MONUMENTS/SITES, MUSEUMS, LIBRARIES)**



**GOVERNMENT OF INDIA**

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**INTRODUCTION**

United Nations Convention of Rights for Persons with Disabilities (UNCRPD) recognizes the Social Model of Disability which proposes that “Someone is disabled not due to the medical conditions, but due to the attitudes and structures of society, including inaccessible physical environments and transportation, unavailability of assistive devices & technologies, non-adapted means of communication, gaps in service delivery, and discriminatory prejudices & stigma in society”.

India has ratified the United Nations Convention on Rights of Persons with Disabilities which obligates all signatories to ensure access to physical environment, transportation and information and communication for Persons with Disabilities on an equal basis with others in both urban and rural areas. Building on this, the Accessible India Campaign or the Sugamya Bharat Abhiyan was launched by Hon’ble Prime Minister of India on 3<sup>rd</sup> December 2015 with the vision of creating a barrier free environment across the three components of build-up environment, the transportation system and ICT system.

The Mission of Accessible India Campaign is to create tangible assets of accessible infrastructure, through guided change in the society towards standardized, organic and intentional development of accessible facilities and services. To achieve this mission, the Campaign identifies its core principles as 1. Universal design (the

design of products, environments, programmes and services usable by all, to the greatest extent possible, without the need for adaptation or specialised design, applicable to assistive devices and advanced technologies); 2. Reasonable Accommodation (Necessary and appropriate modifications and adjustments, without imposing a disproportionate or undue burden in a particular case, to ensure to PwD the enjoyment or exercise of rights equally with others)

Accessible India Campaign also serves as a tool to actualize the provisions of 'accessibility' mentioned under the Rights for Persons with Disabilities Act, 2016 (RPwD Act). The RPwD Act, 2016 mandates accessibility through Sections 40 to 46 as under:

**Section 40:** The Central Government shall, in consultation with the Chief Commissioner, formulate rules for persons with disabilities laying down the standards of accessibility for the physical environment, transportation, information and communications, including appropriate technologies and systems, and other facilities and services provided to the public in urban and rural areas.

**Section 41:**(1) The appropriate Government shall take suitable measures to provide,

(a) facilities for persons with disabilities at bus stops, railway stations and airports conforming to the accessibility standards relating to parking spaces, toilets, ticketing counters and ticketing machines.

(b) access to all modes of transport that conform the design standards, including retrofitting old modes of transport, wherever technically feasible and safe for persons with disabilities, economically viable and without entailing major structural changes in design.

(c) accessible roads to address mobility necessary for persons with disabilities.

(2) The appropriate Government shall develop schemes programmes to promote the personal mobility of persons with disabilities at affordable cost to provide for, —

(a) incentives and concessions.

(b) retrofitting of vehicles; and

(c) personal mobility assistance

**Section 42:** The appropriate Government shall take measures to ensure that,—

(i) all contents available in audio, print and electronic media are in accessible format;

(ii) persons with disabilities have access to electronic media by providing audio description, sign language interpretation and close captioning.

(iii) electronic goods and equipment which are meant for everyday use are available in universal design.

**Section 43:** The appropriate Government shall take measures to promote development, production and distribution of universally designed consumer products and accessories for general use for persons with disabilities.

**Section 44:** (1) No establishment shall be granted permission to build any structure if the building plan does not adhere to the rules formulated by the Central Government under section 40.

(2) No establishment shall be issued a certificate of completion or allowed to take occupation of a building unless it has adhered to the rules formulated by the Central Government.

**Section 45:** (1) All existing public buildings shall be made accessible in accordance with the rules formulated by the Central Government within a period not exceeding five years from the date of notification of such rules:

Provided that the Central Government may grant extension of time to the States on a case to case basis for adherence to this provision depending on their state of preparedness and other related parameters.

(2) The appropriate Government and the local authorities shall formulate and publish an action plan based on prioritisation, for providing accessibility in all their buildings and spaces providing essential services such as all primary health centres, civil hospitals, schools, railway stations and bus stops

**Section 46:** The service providers whether Government or private shall provide services in accordance with the rules on accessibility formulated by the Central Government **under section 40 within a period of two years from the date of notification of such rules:**

Provided that the Central Government in consultation with the Chief Commissioner may grant extension of time for providing certain category of services in accordance with the said rules.

#### **Preparation of Accessibility Standards and Guidelines:**

Archaeological Survey of India (ASI) under the aegis of Ministry of Culture (MoC), Government of India was given the opportunity to prepare the accessibility standards and guidelines for the Culture sector (Monuments/Sites/Museums and Libraries). In this regard, a meeting was held under the Chairpersonship of DG, ASI on 17<sup>th</sup> June 2021 at Board Room, Dharohar Bhawan to discuss about preparation of comprehensive guidelines for each monument/site under the protection of AMASR Act, 1958. Subsequently, draft accessibility guidelines are submitted to MoC on 04.10.2021 for vetting by domain experts. The comments of domain experts are received vide email dated 02.12.2021. The revised accessibility guidelines after incorporating the comments of domain experts and subsequent approval by the competent authority were uploaded on the public portal/website of the MoC for mandatory wider consultations and comments. The comments of general public were examined, and necessary suggestions are incorporated in the draft accessibility guidelines. Final revised draft accessibility guidelines are submitted to Ministry of Culture for further necessary action vide email dated 13.12.2021. The same were sent to the office of Chief Commissioner of Persons with Disabilities (CCPD) seeking comments if any. The comments of CCPD are incorporated and final accessibility guidelines are submitted to DEPWD for notification

#### **DEFINITIONS**

As per the RPwD Act, 2016, unless the context otherwise requires,

- ‘barrier’ means any factor including communicational, cultural, economic, environmental, institutional, political, social, attitudinal or structural factors which hampers the full and effective participation of persons with disabilities in society.
- “Information and communication technology” includes all services and innovations relating to information and communication, including telecom services, web based services, electronic and print services, digital and virtual services.
- “person with benchmark disability” means a person with not less than forty per cent. of a specified disability where specified disability has not been defined in measurable terms and includes a person with disability where specified disability has been defined in measurable terms, as certified by the certifying authority.
- “person with disability” means a person with long term physical, mental, intellectual or sensory impairment which, in interaction with barriers, hinders his full and effective participation in society equally with others.
- “public building” means a Government or private building, used or accessed by the public at large, including a building used for educational or vocational purposes, workplace, commercial activities, public utilities, religious, cultural, leisure or recreational activities, medical or health services, law enforcement agencies, reformatories or judicial foras, railway stations or platforms, roadways bus stands or terminus, airports or waterways.
- “public facilities and services” includes all forms of delivery of services to the public at large, including housing, educational and vocational trainings, employment and career advancement, shopping or marketing, religious, cultural, leisure or recreational, medical, health and rehabilitation, banking, finance and insurance, communication, postal and information, access to justice, public utilities, transportation.
- “universal design” means the design of products, environments, programmes and services to be usable by all people to the greatest extent possible, without the need for adaptation or specialised design and shall apply to assistive devices including advanced technologies for particular group of persons with disabilities.

#### **MINISTRY OF CULTURE**

The mandate of the Ministry of Culture revolves around the functions like preservation and conservation of our cultural heritage and promotion of all forms of art and culture, both tangible and intangible. The Ministry’s task is to develop and sustain ways and means through which the creative and aesthetic sensibilities of the people remain active and dynamic. The functional spectrum of this Ministry is wide, ranging from generating cultural awareness at grassroots level to promoting cultural exchanges at international level. In order to achieve these objectives, the ministry undertakes the following activities.

- Maintenance and conservation of heritage, historic sites and ancient monuments
- Administration of libraries
- Promotion of literary, visual and performing arts

- Observation of centenaries and anniversaries of important national personalities and events
- Promotion of institutions and organizations of Buddhist and Tibetan studies
- Promotion of institutional and individual non-official initiatives in the fields of art and culture
- Entering into cultural agreements with foreign countries
- The functional spectrum of the Department ranges from creating cultural awareness from the grass root level to the international cultural exchange level.

### **Attached offices of MoC**

#### **Archaeological Survey of India**

The Archaeological Survey of India (ASI), under the Ministry of Culture, is the premier organization for the archaeological research and protection of the cultural heritage of the nation. Maintenance of ancient monuments and archaeological sites and remains of national importance is the prime concern of the ASI. Besides, it regulates all archaeological activities in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958. It also regulates Antiquities and Art Treasure Act, 1972.

For the maintenance of ancient monuments and archaeological sites and remains of national importance the entire country is divided into 36 Circles and One Mini Circle. The organization has a large work force of trained archaeologists, conservators, epigraphist, architects, and scientists for conducting archaeological research projects through its Circles, Museums, Excavation Branches, Prehistory Branch, Epigraphy Branches, Science Branch, Horticulture Branch, Building Survey Project, Temple Survey Projects and Underwater Archaeology Wing.



Fig.3.1: Dhrohar Bhawan, Archaeological Survey of India, New Delhi

#### **National Archives of India, New Delhi**

The National Archives of India is the custodian of the records of enduring value of the Government of India. Established on 11 March, 1891 at Calcutta (Kolkata) as the Imperial Record Department, it is the biggest archival repository in South Asia. It has a vast corpus of records viz., public records, private papers, oriental records, cartographic records and microfilms, which constitute an invaluable source of information for scholars-administrators and users of archives.

The Director General of Archives, heading the Department has been given the mandate for the implementation of the Public Records Act, 1993 and the rules made there under, the Public Records Rules, 1997 for the management, administration and preservation of public records in the Ministries, Departments, Public Sector undertakings etc. of the Central Government. Located at the heart of New Delhi, the Department functions as an Attached Office of the Ministry of Culture and has one Regional Office at Bhopal and three (3) Records Centres at Bhubaneswar, Jaipur and Puducherry. The Department celebrated its 125th year of the foundation during 2015-16.

### **Subordinate Offices of MoC**

- National Gallery of Modern Arts, New Delhi.
- National Museum, New Delhi.
- National Research Laboratory for Conservation of Cultural Property (NRLC), Lucknow.
- Central Reference Library, Kolkata.
- National Library, Kolkata.
- Anthropological Survey of India, Kolkata.
- National Monument Authority, New Delhi.

### **Autonomous Bodies of MoC**

#### **1. Akademies**

- Lalit Kala Akademi, New Delhi.
- National School of Drama, New Delhi.
- Sahitya Akademi, New Delhi.
- Sangeet Natak Akademi, New Delhi.

#### **2. Buddhist Institutes**

- Central Institute of Buddhist Studies, Leh.
- Central Universities of Tibetan Studies, Sarnath, Varanasi.
- Nava Nalanda Maha Vihara, Nalanda, Bihar.
- Central Institute of Himalayan Cultural Studies, Arunachal Pradesh.

#### **3. Libraries**

- Delhi Public Library, Delhi.
- Khuda Baksh Oriental Public Library, Patna.
- Nehru Memorial Museum and Library, New Delhi.
- Raja Ram Mohan Roy Library Foundation, Kolkata
- Rampur Raza Library, Rampur

#### **4. Museums**

- Allahabad Museum, Prayagraj.
- Indian Museum, Kolkata.
- Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal
- National Council of Science Museums, Kolkata
- National Museum Institute, New Delhi
- Salar Jung Museum, Hyderabad
- Victoria Memorial Hall, Kolkata.



**5. Zonal Cultural Centers**

- Eastern Zonal Cultural Centre, Kolkata
- North Central Zone Cultural Centre, Prayagraj
- North east Zone Cultural centre, Dimapur
- North Zone Cultural centre, Patiala
- South Central Zone Cultural Centre, Nagpur
- South Zone Cultural Centre, Thanjavur
- West Zone Cultural Centre, Udaipur.

**6. Others**

- Centre for Culture Resource and Training, New Delhi.
- Gandhi Smriti and Darshan Samiti, New Delhi
- Indira Gandhi National centre for Arts, New Delhi
- Kalashektra Foundation, Chennai
- MAKAIAS, Kolkata
- National Culture Fund
- The Asiatic Society, Kolkata

**ACCESSIBILITY FEATURES FOR MONUMENTS/SITES, MUSEUMS AND LIBRARIES**

Centrally Protected Monuments/Sites are protected and conserved as per the provisions mentioned in Ancient Monument and Archaeological Sites Remains Act, 1958 and Rules 1959. Therefore, provision of universal accessibility features is subject to the rules mentioned under the AMSAR Act, 1958. Wherever feasible and to the extent possible, custodians of the national heritage shall provide accessibility features. Therefore, providing universal accessibility is a challenging endeavour and requires continuous innovation in providing equal access to person with disabilities (PWDs).

**1. Centrally Protected Monuments/Sites:**

As per the Ancient Monuments and Archaeological Sites And Remains Act, 1958, the definition of the ancient **monument** is as below;

“**ancient monument**” means any structure, erection or monument, or any tumulus or place of interment, or any cave, rock sculpture, inscription or monolith, which is of historical, archaeological or artistic interest and which has been in existence for not less than one hundred years, and includes—

- (i) the remains of an ancient monument,
- (ii) the site of an ancient monument,
- (iii) such portion of land adjoining the site of an ancient monument as may be required for fencing or covering in or otherwise preserving such monument, and
- (iv) the means of access to, and convenient inspection of an ancient monument.

**Accessible Parking:**

- Provision of a large common parking lot at the entry point to the site as per site specific requirement.
- Restriction of vehicular movement within heritage site limits after the parking area, to create a vehicle and pollution free zone.
- Provision of accessible battery operated coaches and boarding points for transfer from parking lot to monument entrances especially for PwDs and elderly.
- The parking should be well demarcated; there should be clear information accessible to all, discouraging the misuse of accessible parking bays.

- The signs indicating that a bay is designated an accessible parking bay should not be only at ground level as this may create a problem finding the bays at popular sites in a busy high season or if misused.
- Each accessible parking bay should be of dimension (3600 x 5000 mm) including alighting space of 1200mm and should be clearly demarcated on floor and signposted as indicated in the adjoining detail.
- Signpost of international symbol of accessible parking should be provided at 2100mm height and of 600 x 600mm size for easy visibility from driver's seat. The parking bays should have firm and levelled surface.
- Accessible parking bays should have side and rear transfer zones for removal and set up of a wheelchair from the boot of a vehicle or for use of a rear-, or side-, mounted wheelchair hoist.
- Parking area should be well lit and, where practicable, covered/ shaded.
- There should be well defined step free and barrier free route with a tactile guiding path to the main accessible entrance or point of interest from the parking bays in keeping with the character of the site.
- All free barriers like signposts, light posts, electrical poles, trees, barricades etc. and level differences found in the parking areas should be preferably removed or guarded to enable safe access for visitors with vision impairment.
- Trees in parking to be provided with a grating cover and guardrails.
- Accessible directional, multilingual, braille and tactile signage to be provided as per standards on the floor and on the wall / post.
- All security guides/ guards should be sensitized and well informed about reserved parking for PWDs.

#### **Accessible Ticket Counter**

- Tactile guide path should lead from the entrance to the ticket / service counter, and from the counter to major circulation route.
- Audio aid should be provided at the counters for information transmission to hearing impaired persons. Two way mike system is ideal for effective communication in high noisy areas.
- An induction loop system should be installed at the service counters.
- Turnstiles if provided at the entry should have minimum one access route with openable gates and a clear space of min. 800mm in between for wheelchair users to pass through.
- A multi-media information panel and/ or tactile pictographic map and a tactile scaled model of the heritage site should be provided adjoining the ticket/ information counter at an accessible height.
- Information handouts with site map, in accessible formats (multilingual and braille) should be provided at the ticket/service counter or in accessible stands near them.
- An accessible drinking water fountain should be provided near the ticket counter.
- Accessible directional, multilingual, and tactile signage to be provided as per standards.
- Directional signage leading to basic visitor facilities like drinking water fountain, toilets, cafeteria (if available) must be provided at the ticket/service counter.
- Provision of a separate sheltered accessibility facilitation/service counter for PWDs/elderly visitors must be made, preferably attached to the main ticket/information counters.
- Accessibility facilitation counter should consist of a step free space which shall serve as a one- stop help desk for PWDs/elderly.
- Trained staff and guides/guides, assistive devices and mobility equipment shall be made available for PWDs on free/rental/chargeable basis from this counter.
- Assistive devices that can be provided can include assistive hearing systems like audio guides.
- Mobility equipment for internal movement of visitors, available at the counter must include sufficient number of wheelchairs and power sticks with suspension (depending on tourist footfall) to borrow or secure for the duration of their visit with a deposit refundable on leaving the site.

- Traditional mobility aids like *palkhi/dolican* can be made available near the accessibility facilitation counter for PWDs / elderly to negotiate the difficult terrain to reach the heritage site.
- Staff/guides at the heritage site should be formally trained for providing service to PWDs and preferably trained for sign language interpretation.
- Display and important information about the heritage site should be presented in tactile models/graphics, written text and braille and audio messages activated by large push buttons.



Fig 4.1: Accessible Ticket Counters at Qutub Minar Complex

### Accessible Pathways/Walkways

- Provision of continuous accessible pathways for PWDs throughout the external/ landscaped areas of the site.
- Improvements to existing ramps, addition of handrails to long ramps.
- The accessible path should preferably lead to all important attractions and vantage points in the site.
- All pathways should be firm and slip-resistant.
- Pathways and corridors should be wide enough for wheelchair users. Provision of Safety kerbs around unguarded fountains.
- Provision of gratings on open drains.
- Linkages and transitional spaces should not form obstacles to users.
- If a pathway leads to a spatial change or a change in level, directional cues such as signage, kerbs, handrails, fences, hedges, or other continuous elements etc. should be provided at strategic locations to maintain travel continuity for the user. This is particularly important for visually impaired users to continue along the travel path to reach their destination.
- Kerb ramps with tactile warning and color contrast to be provided to bridge level differences less than 150mm along pathways.
- Edges of pathways should be clearly defined by using different colours / textures. Street furniture, trees, lighting and dustbins should be located on one side of pathways.
- Texture, color and pattern of the change in floor surfaces, as well as the lighting effect on the floor surface, should not be too sudden as to cause hazard to users. Junction between the different floor surfaces should be levelled; any gaps or expansion joints between different materials should not exceed 13mm wide.

- Continuous tactile guide path should be provided on all the pathways right from the entrance to all major facilities, information counters, Braille maps/directories, ramps, steps and lifts, for independent navigation of PwDs.
- Grating provided if any at the entrance gate should have spaces not greater than 13 mm wide in one direction to avoid trapping of crutches or wheels, and be placed so that Channel grating slots should not be parallel to the traffic direction
- Provide a raised zebra crossing at the same height as that of accessible pathway to cross the vehicular road.
- Tapping rails should be provided for visually impaired visitors where tactile guiding path cannot be provided.
- Paths and routes should be monitored and maintained particularly in the high season.
- Alternatives to loose gravel can be sourced for paths and routes into the natural landscape. Access to rougher / undulating or less firm terrain can be provided over short distances with different types of board walk or rollable tactile mats.
- Boardwalks can be covered in wire mesh to reduce slipping in damp areas.
- If carpets or carpet tiles are used on a floor surface, they should be securely attached to it. Long, thick rugs should not be laid in areas likely to be frequented by persons with mobility and sight impairments.
- Low-level bollards are hazardous and should be avoided.
- Bollards if provided should have a colour or luminance contrast feature and should have clear distance of 1200mm between them.

#### Accessible Toilets

- A full range of user-friendly provisions should be made to reach the toilet blocks including tactile guide path, floor plan with illustrations in written text and Braille, and large information signs.
- Accessible toilets should have the universally adopted symbol for wheelchair access displayed outside.
- Improvement to existing General toilets.
- Location of general / accessible toilets to be marked on all tactile pictographic maps.
- Unisex accessible toilets are preferable for the caretaker to assist the wheelchair user. Recommended clear floor space -2000mm x 2200mm minimum.
- Where provision of independent unisex accessible toilet blocks is not feasible, Accessible toilet cubicles should be provided within the existing ladies and gents toilets by reconfiguring internal layout to achieve an ideal size of 2000mm x 2200mm.
- Drinking water fountains of two mounting heights should be provided and preferably located near the toilet blocks but away from the toilet entrances.
- A step free levelled tactile guiding path to be provided in the floor from corridors/ walkways leading to the accessible toilet blocks.
- The main entrance door/opening to the toilet and internal cubicles should be minimum 900mm in width.
- There should be no level differences inside all toilet blocks. Existing level differences to be removed or levelled to facilitate easy wheelchair movement.
- Facilities should have wide and level layouts with good colour contrasts providing enough space for wheelchairs and other mobility aids.
- Improvements to the existing toilets, including changing of damaged plumbing, sanitary, electrical and water supply fittings and appliances.
- There should be signage using the international symbol of accessibility to identify the accessible toilets. Signage should be multi lingual and tactile.

- Floor surface material must be non-slippery but should not trap dirt or water.
- Effective floor drainage should be provided to maintain a dry floor surface.
- Floor drain covers should be fixed flat on the floor surface without any projections to prevent people from tripping over.
- WC (Water closet) or toilet compartments should have enough floor space and 900 mm wide step-free doors for wheelchair users to enter and exit.
- The WC (Water closet) should be preferably wall hung and in a position as to permit easy approach by wheelchair users.
- The seat of the WC should be at the correct height for the wheelchair users.
- WC (Water closet) compartments should have support rails / grab bars at a position and height suitable for wheelchair users and other persons with physical disabilities. Upward- folding grab bars are recommended to allow lateral transfer from the wheelchair.
- WC should be mounted at a height between 450mm – 480mm.
- There should be 900mm of clear transfer space next to the WC.
- The WC should be installed in a corner with centreline of the WC at a distance of 450mm to 500mm from the adjacent wall.
- Flushing equipment should be easy to operate and lever type.
- A horizontal grab bar should be installed on the adjacent wall, at a height of 200mm from the WC seat.
- The grab bars should be installed near WC at the transfer side and for at least one urinal, at a height between 750 – 850 mm. Grab bars should be non-slippery.
- Platforms / level difference / steps near urinals to be removed.
- At-least 1 urinal height to be lowered to 650mm keeping children in mind.
- A switch near the WC (one at 300mm and the other at 900mm from the floor level), which activates an emergency audio alarm (at the attendant's desk, etc.)
- A toilet paper dispenser should be so installed as to be easily used by a person with physical impairments sitting on the toilet.
- Fittings, such as soap dispenser, electric hand dryer and mirror, should be low enough for a wheelchair user to use comfortably.
- The accessible Toilet cubicle/WC doors should have double swing (should open outside also) and lever handles.
- Locks to toilet doors or cubicle should be a type that can be opened from outside in case of emergency. Lock lever should be of the type that can be easily opened by person with weak grip power.
- Accessible directional, multilingual and tactile signage to be provided as per standards.
- The accessible washbasin should be mounted at a height between 750– 850mm. The washbasin should be installed at a distance of at least 400mm from the side wall. There should be clear knee space of at least 650-750mm height x 750mm width x 200mm depth under the wash basin.
- At-least 1 basin height to be lowered to 650mm keeping children in mind.
- The wash basin should have lever type taps. Basin taps should be placed at the centre of the basin.
- Mirror to be provided and installed at a height of 900 mm.
- Mirror inside accessible toilet should be slightly tilted towards the floor for use by the wheelchair users.
- Basins can be provided with counters or a flat surface for placing things.

- U-shaped folding grab bars are proposed on the both side of the wash basins.
- A braille map at entrance wall to the toilet is useful to tell the location of basins, cubicles, urinals, hand.
- Guidance should be provided to lead the **visually impaired** persons to get out of the toilet.
- At least one urinal can be floor-mounted to facilitate tapping by the visually impaired person's foot or guiding stick.
- At least one western WC to be provided in every general toilet block.
- Grab bars should be provided to one urinal, one basin and inside one toilet cubicle.
- At least one basin and mirror and one urinal should be mounted at a lower level.
- Baby care facilities should also be provided within the toilet blocks.
- At least one basin and mirror and one urinal should be mounted at a lower level for children.
- One water closet is preferably to be with a lower seat height for children.
- A basin, a small countertop, hooks or notches for holding handbags, and a waste bin should be within arm's reach from the nappy-changing mattress.
- **Baby Care Centres** should also be provided near but segregated from the toilets.
- **In Heritage sites with large expanse**, compact models of self-sufficient, self-cleaning, unisex Accessible toilet Cubicles should be provided at strategic locations within the site.

#### Accessible Drinking Water Facility

- Drinking fountains should have spouts positioned at the front of the unit. The spout shall direct the water flow in a path almost parallel to the front of the unit.
- For wheelchair users, spouts not higher than 800mm from the floor are recommended.
- Best practice is to provide a clear floor space at least 750mm by 1200mm for wheelchair users. Knee space and toe space should be provided underneath the fountain. A toe space of minimum 230mm from the floor and knee space of 700mm from the floor to the underside of fountain are required.
- Controls should be front mounted or side mounted near the front edge and easily operated with one hand.
- Flow of water should be at least 100mm high so as to allow the insertion of a cup or glass under the flow of water.
- For drinking fountain having a round or oval bowl, the spout must be positioned so the flow of water is within 75mm of the front edge of the fountain.

#### Accessible Publication Counter

- Publication counters should be at the suggested location in the Visitor's Facilitation Centre and in the museum. Existing Publication counter to be retained and modified as per standards given below.
- Tactile guide path should lead from the entrance to the publication counter and from the counter to major circulation route.
- The accessible approach pathway / route leading to the service counter should be without any platforms or steps or level differences. If level differences / steps to access the service counter are unavoidable, ramps / slopes / bevelled edges with tactile warning and color contrast should be provided as per standards.
- High and low counters should be provided. Counters should be provided with an upper writing surface for users in the standing position at 900mm high as well as a lower countertop with a maximum height of 750mm and knee space should be provided for wheelchair users. If feasible, the length of the lower countertop is recommended to be 900mm although the minimum requirement is 750mm.
- Space in front of the publication counter should be provided for queuing and waiting.
- A multi-media information panel to be provided adjoining the publication counter at an accessible height.

Information should be presented in tactile graphics, written text and Braille; audio messages activated by large push buttons.

- Accessible directional, multilingual, and tactile signage to be provided as per standards.

### Accessible Exhibitions

- Exhibitions must make exhibit content accessible at multiple intellectual levels and present it through more than one sensory channel.
- Offer a programmatic path for traveling through the exhibition. Present information to all the senses.
- Design cases and pedestals so they display objects within viewing distance of people who are short, seated, or standing.
- Design cases and vitrines so they are as shallow as possible, allowing all visitors to see objects up close and from above.
- Design wall-mounted cases so that their lower edges are at or below 685 mm above the floor.
- Long, horizontal cases that have legs only at the four corners (more than 305 mm apart) should be designed so they have a cane-detectable barrier at no higher than 685 mm (27 in.) above the floor.
- Maintain a predictable border on both sides of circulation routes.
- Design cases so they are distinguishable from wall openings.
- Design vitrines and plexiglass barriers so they are easily detectable.
- Seating must be provided in each exhibition. 50% of the seats must be accessible. Single-gallery exhibitions must have seating nearby, in a corridor or in an adjacent gallery space.
- Provide accessible seating in gallery spaces.
- Provide seats that are not tripping hazards or obstacles.
- Provide seating that can be used by people who use wheelchairs as well as by their companions.
- Provide seating areas that are accessible to people using wheelchairs.
- Locate spaces for wheelchair users so that they adjoin, but do not block, an accessible route that also serves as a means of egress in an emergency.
- Disperse seating for wheelchair users throughout the space.
- Spaces for wheelchair users can be filled temporarily by removable chairs when not needed by people with disabilities.
- Design areas so that floor surfaces at and around accessible seating areas are level, stable, firm, and slip-resistant.
- If a person enters the wheelchair location from the side, the spaces must be at least 1525 mm (60 in.) long.
- If a person using a wheelchair enters the space from the front or back, the spaces are at least 1220 mm (48 in.) long.
- The width of a space for one wheelchair user is at least 760 mm (30 in.). Space required for two wheelchair users together is at least 1675 mm (66 in.) wide. One such pairing is desirable; however, there is no requirement that spaces for wheelchair users be paired.
- Provide a permanent assistive listening system if the area seats 50 or more people or, if the number is smaller, either a permanent or a portable assistive listening system may be provided.
- Provide assistive listening receivers in number equal to 4% of the total number of seats (but no fewer than two receivers).

- Provide signs indicating the availability of the assistive listening system and the procedure for borrowing receivers. The signs must meet accessibility requirements.
- Design handrails and lighting so that they assist people in finding and following the route into and through a darkened program area.
- Design the space so that seating does not become a tripping or bumping hazard. Spaces.

## **2. Accessible Museums/Libraries**

- Items in exhibitions (e.g., artifacts, graphics, props) must be visually accessible to people.
- Mount small items (to centre line) at no higher than 1015 mm (40 in.) above the floor.
- Design simple backdrops for items.
- Construct the top of a case at a maximum of 915 mm (36 in.) above the finished floor for items that are mounted flat on a pedestal or deck. For larger items, maintain the minimum case height possible.
- Construct exhibition barriers (e.g., railings) at a maximum height of 915 mm
- Create colour contrast between the items and the background, particularly when the items are displayed in lower light levels.
- Place small items in the front portion of a case, with larger items behind.
- Avoid shadows falling directly on items.
- When not prohibited from doing so by conservation requirements, provide at least 100 lux of light on an object.

### **If displaying sensitive materials that require a maximum of 50 lux, then:**

- Position the items to allow the visitor to approach them as closely as possible
- Light the environment with even light (i.e., do not spotlight the object and provide low-level ambient light in the gallery)
- Provide the highest contrasting background to make objects stand out in the case
- Present the objects in an alternate format, such as a reproduction or a brochure, that can be viewed in a brighter location
- Provide photographs within an exhibition space to give accessibility to objects that require a high mounting position and/or low lighting
- When objects are being selected for inclusion in an exhibition, consider those that may be touched or reproduced for tactile examination.
- Select tactile objects so that they provide a coherent explanation of the exhibition topic
- Whenever possible allow objects to be touched by all visitors, not just those who have low vision or are blind.
- Include touchable objects, such as models and reproductions, within the actual exhibition space.
- Provide audio description for those objects that cannot be touched or that offer little information through touch.
- Items must not be placed in locations such that they create a hazard to visitors.
- Mount objects so that they are not tripping hazards.
- Ensure that platforms for objects are not tripping hazards.

### **With respect to label design and text:**

- Avoid the use of colloquial and complex English, jargon, and technical language in text panels unless such language is explained within the text or in supplementary handouts.
- Use the active voice in text panels; limit sentence label length.
- Use a line length for text that facilitates reading.



- Provide a short overview paragraph at the beginning of introductory and thematic labelpanels.
- Carefully link sentences and paragraphs.
- Provide line drawings, silhouettes, and photographs that complement label text to aid comprehension for those with reading difficulties.
- Use typefaces that are readily legible.
- Do not set text in all caps.
- Avoid use of script and italic type for essential information.
- Provide alternative forms of labels (e.g. Braille, audio, large print) within the exhibition space.
- Select type size appropriate to the viewing distance.
- Provide sufficient leading.
- Provide consistent letter spacing and word spacing. Justify the left margin and keep a ragged right margin.
- Provide high contrast between text and background.
- Print only on a solid background.
- Diminish glare on all label surfaces.
- Avoid distorting type.
- Mount labels so that visitors can get very close to read them.
- Keep in mind the natural line of sight when mounting labels.
- Define labels with color or a raised surface.
- Mount wall labels at a height that is comfortable for both those seated and standing.
- Mount label rails so that the top of the label is at approximately 1015 mm (40 in.) above the floor.
- Locate labels in consistent locations throughout an exhibition.
- Provide sufficient light to read labels.
- Avoid shadows on labels.

#### **Audio-visuals and Interactives**

- Provide all audio narration in a print format.
- For non-narrated audio programs, provide visitor-operated volume controls. People who are hard of hearing can hear music at above average volume. Interactives and audio-visuals that do not have soundtracks must carry labels stating that fact to assure deaf and hard of-hearing people that they are not missing information. Audio-visual programs and computer interactives that present information with images and print must be audio described.
- Present written instructions in 70% contrast, sans serif or simple serif type, type that has a minimum 4.5 mm x-height, lighting at a minimum of 100 lux.
- Present all instructions in both an audio and printed format.
- Interactives must be within reach range of people who are short or those who use wheelchairs as well as of those who are standing.
- Lower the reach height for controls that must be located over obstacles.
- Eliminate reflection and glare for those who are seated or short as well as for those who are standing.
- Provide tactile characters and Braille on or directly below the controls to indicate the function of the controls unless they form a standard computer keyboard (i.e., in QWERTY format).
- Provide touch-sensitive areas in predictable locations (e.g., on all the four corners of the screen).
- Provide touch-sensitive areas that are at least 75 mm in diameter.

- For activities that require speaking into a specific area, provide equipment that is adjustable for height.
- For activities that require listening at a specific area, provide equipment that is adjustable for height.
- For activities that require viewing in a specific area, provide equipment that is adjustable for height.
- Prevent sound from overlapping between interactive areas
- Interactive elements must be operable by people who have limited muscle and hand control and by those who have only one hand.
- For controls and operating mechanisms to be accessible, these devices must be fully operable with only one hand, require no tight grasping, pinching, or twisting of the wrist (e.g. lever handles), require no more than 5 lbs. of force to operate, be at least 75 mm in their smallest dimension, and be covered with non-slip surfaces (e.g. rubber or ridges on a trackball).

### Colours

- Choose colours so that floors are visually separated from the walls and furniture.
- Select light gallery colours if object conservation requires low lighting.
- Design well-lighted spaces with limited imagery and few objects in several places within an exhibition.
- Avoid patterned carpets and floor tiles on uneven surfaces and in low-lit areas.
- Select background colours that contrast with the items in a case.
- Select label colour combinations that provide sufficient contrast between print and background.

### Emergency Egress

- Provide areas of rescue assistance if the number of accessible exits is insufficient.
- Plan for emergency egress from areas where lifts have been used for access.
- Provide signs with the international symbol of access at accessible emergency exits. Inaccessible exits are required to provide directions to those that are accessible or to areas of rescue assistance.
- Make available at key points within the museum an exhibition floor plan that meets accessibility requirements for printed materials.

### Interpretive Information

- Addition of light and sound show at strategic location with accessible infrastructure.
- Accessible directional signage to be provided leading to the sound and light show.
- An accessible pathway of 1500mm width (min) with tactile guiding path to be provided leading to the sound and light show and should continue around the seating area thus giving access to each row.
- Space of 800mm x 1300mm to be reserved for a wheelchair user either in the bottom row or the top tier. If at the top, a ramp to be provided as per standards to reach the space.
- Provision of an interactive mobile App / website accessible by a QR code should be made available, containing a fully accessible self-guided tour (using ASL/LSQ, audio, images, text and video), interactive map, mood meter, online ticketing and information to help plan and execute a visit for smart phones users.
- The QR code must be printed on the entry ticket to the monument /site, on all tactile pictographic maps and interactive display panels.
- For those who don't use smart phones, portable audio guides should be designed for visitors particularly with visual impairment incorporating audio description along with the conventional narration. The audio guide should include the voices of the heritage site staff and guides who describe each gallery and provide highlights of exhibits and architecture.
- In addition to the above, on site audio-visual presentations should be available in accessible versions and should incorporate health and safety and accessibility information.
- On site interpretation resources should be integrated throughout the journey sequence and located where they are most accessible. It must be ensured the continuous tactile guiding path in the site also leads to all

the interpretive panels / resources.

- On site interpretation resources should be multi-faceted and provide opportunities for sensory interaction.
- Alternate formats for interpretive resources / panel should be readily available. The type of alternate format is dependent upon the type of exhibit and the preferred format of the requestor. Every attempt should be made to provide the type of alternate format requested.
- Alternate formats include but are not limited to: Braille, large print format (minimum 18 point sans serif), transcript, digital or web format, touchable objects, audio description of visual content, captioning, etc.
- Interpretive panels should be at an appropriate angle and height, have the correct script and should be designed with the necessary contrast between text and background.
- Interpretive resources should include signs, tactile models, sculptures, and interactive displays that can be approached and touched. Such provisions are particularly useful to visually impaired users in formulating a mental map of their surroundings.
- Table-top interpretive panels/exhibits (such as relief maps) featuring interactive components and/ or controls to manipulate shall include knee and toe clearance as per the requirements for the tables and counters. Controls must be within reach ranges and should be accessible.
- Where the historical, architectural or natural heritage of the site allows, there should be a good visual contrast between backgrounds and any interpretive resources attached to them or placed in front of them.
- Overall information about the heritage site should be preferably presented on a large directory mounted on a tilted plane near the accessible entrance / ticket counter of the site. The multimedia directory should have large colored map and picture plates, audio devices activated by large buttons, as well as information in large text and Braille. The directory should be designed to be accessible to all visitors.
- Where access is restricted or impossible to achieve, a virtual representation or virtual tour of the heritage site should be provided.
- Touch screen technology is not accessible to PWVI, hence should be avoided.
- Some staff and guides members and all guides should be trained in the use of Indian Sign Language interpretation for speech and hearing impaired.
- The maximum size of the scale model must be designed according to the space that the two hands can easily reach together. A comfortable hand position would include an area approximately the size of an A3 sheet, although maps may be bigger or smaller based on the different types of information to be represented. The distance separation between the elements represented, such as the symbols of a map, must be carefully designed. A minimum separation of 3 mm is needed between elements so they can be discriminated with the sense of touch.
- Provide magnifiers for visitors to examine photographs, artefacts and mounted exhibit items.

### **Emergency Evacuation**

- Heritage sites should have a plan in place, backed up by trained staff and guides, to cater for the safe egress of people with disabilities from the site and to assist them in the event of an emergency departure.
- Emergency evacuation strategies, that include provision for people with disabilities, should be developed for the entire site.
- Emergency evacuation strategies should consider the particular difficulties faced by people with disabilities – on recognition time, response time and movement time.
- There should be a step free or ramped accessible evacuation route minimum 1200mm wide, identified leading to the exit or the ramp or to the refuge area.
- Where the site covers more than one level, Evacuation Chairs should be provided with staff and guides trained in their correct use.
- There should be sufficient levels of trained people on site to manage an evacuation strategy.
- Emergency exits, access and escape routes should be clearly signposted with directional arrow signs
- Escape signs should be well lit and have tactile surfaces.

- Emergency exit routes should be on level ground with no obstacles.
- Evacuation plans should be prominently displayed. The plan should be of right size and easy to read
- The evacuation plans and building maps should be available in tactile Braille formats
- Sufficient number of fire extinguishers should be provided at the height between 1000mm and 1500mm
- Emergency alarm both audio (hooter type) and visual (flashing bulb) to be provided at strategic location. Use of vibrator on desk can be made for hearing and speech impaired staff and guides.
- The alerting buttons should be between 600-1200mm from the floor and should have a high contrast with the wall.
- Refuge areas can be provided within protected stair enclosures.
- Directional sound systems can be installed as they can be tailored to identify particular building features such as stairs or emergency exits and indicate the vertical direction to be taken on stairways.
- Discreet and sensitive smoke detection systems, known as aspirating detectors, can be installed as they can dramatically reduce the time to detection, allowing additional time for escape.

**Note: Harmonized Guidelines and Space Standards for Universal Accessibility in India-2021 and Barrier Free Built Environment for persons with disability and elderly persons, 2016, notified by Ministry of Housing and Urban Affairs (MoHUA), Government of India and as amended from time to time shall be applicable to Monuments/Sites, Museums and Libraries and will be followed invariably.**

#### INFORMATION AND COMMUNICATION TECHNOLOGY(ICT) ECOSYSTEM

- Web accessibility means that people with disabilities can also perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web. It encompasses all disabilities that affect access to the Web, including visual, auditory, physical, speech, cognitive, and neurological disabilities.
- Thus the impact of persons with disabilities is radically changed on the Web because the Web removes barriers to communication and interaction that many people face in the physical world. When websites, web technologies, or web tools are badly designed, they can create barriers that exclude people from using the web.
- The Website and apps should be designed and developed in such way that they are accessible by all people, whatever may be their hardware, software, language, culture, location, or physical or mental ability.
- Web Content Accessibility Guidelines (WCAG) covers a wide range of recommendations for making Web content accessible.
- The WCAG are organized around the four principles, which lay the foundation necessary for anyone to access and use Web content. These require the web content to be;
  - a) **Perceivable:** users must be able to perceive the information being presented i.e. it can't be invisible to all of their senses.
  - b) **Operable:** users must be able to operate the interface and the interface cannot require interaction that a user cannot perform.
  - c) **Understandable:** users must be able to understand the information as well as the operation of the user interface.
  - d) **Robust:** users must be able to access the content as technologies advance.
- The page title (the title specified by HTML <title> tag which appears on the top bar of the browser) MUST describe the topic and purpose of the page. Page title should be complete with the name of the country included, for instance, instead of the title being just Ministry of Health and Family Welfare, it should state, Ministry of Health & Family Welfare, Government of India. Alternatively, in case of a State Government Department, it should state 'Department of Health, Government of Karnataka, India'. This will not only facilitate an easy and unambiguous identification of the website but would also help in a more relevant and visible presence in the search engine results. Further, it is important since the screen readers used by the visually impaired users first read the title of the page and in case the title is not explanatory enough, it may confuse or mislead them.

- The language of complete web page MUST be indicated programmatically by the use of lang attribute. If there are any changes in the default language of the document, either in the document's text or any text equivalents (e.g., captions), they MUST also be clearly identified.
- Components that have the same functionality within a set of Web pages MUST be identified consistently. If identical functions have different labels on different Web pages, the site will be considerably more difficult to use. It may also be confusing and increase the cognitive load for people with cognitive limitations.
- It is imperative that the information and services on the website are well organised and categorized into relevant modules/sections and sub-sections so that any information can be located conveniently and is not buried deep inside WebPages. These sections or categories may be identified with headings or labels. Headings wherever used MUST correctly describe topic or purpose of content. Headings must be specified using HTML heading tags (H1 to H6) with proper hierarchy. When headings are clear and descriptive, users can find the information they seek more easily, and they can understand the relationships between different parts of the content more easily. Descriptive labels help users identify specific components within the content. Labels and headings do not need to be lengthy. A single word may suffice if it provides an appropriate cue to finding and navigating content.
- Sighted users perceive structure and relationships through various visual cues present on a page (page headings are in a larger and bold font; list items are preceded by a bullet; form fields may be positioned as groups that share text labels; a different background color may be used to indicate related items and so on). However visually challenged users cannot take advantage of these cues. It must be ensured that these informations and relationships are preserved even when the presentation format changes. (For example when the content is read by a screen reader or CSS is turned off or replaced). Therefore departments MUST ensure that Information, structure, and relationships conveyed through presentation can be programmatically determined or are available in text.
- When the sequence in which content is presented affects its meaning, a correct reading sequence MUST be programmatically determined. This helps people who rely on assistive technologies like screen readers because the meaning evident in the sequencing of the information in the visual presentation will be the same when the content is presented in spoken form. This also preserves the meaning of the page when the CSS is turned off or not supported. It should be noted that a sequence is meaningful if change of order shall impact its meaning. Two independent content items like two separate articles in a page may be placed in any sequence without affecting the meaning. Similarly the navigation block and the content area may be placed in any sequence without affecting their meaning.
- A consistent page layout with reference to navigation elements MUST be maintained throughout the site, i.e., placement of navigation elements should be uniform across the website.
- It is author's responsibility to create Web content that does not prevent the user agent (e.g. browser) from scaling the content effectively, therefore Except for captions and images of text, text MUST be resizable without the use of assistive technology by upto 200% without loss of content or functionality.
- Proper contrast between text and background is essential for users who have low vision. Therefore, the visual presentation of text and images of text MUST have a contrast ratio of at least 4.5:1 except:
  - If the text is purely for decorative purpose.
  - Is not visible. or Is a part of an inactive user interface.
  - Is a part of a logo where it has no minimum contrast requirement
  - That are part of a picture that contains significant other visual content.
  - If the text is substantially large in size (18 pt or 14 pt bold) it must have a contrast ratio of 3:1.
- Color is an important asset in presentation of Web content however, some users have difficulty perceiving color e.g. People with partial sight or older users who do not see color well. In addition there are people using text-only, limited-color or monochrome displays and browsers. If a page has information that is conveyed by color differences like: "required fields are red", "error is shown in red", and "january sales are in red, july are in blue" or indications of an action like using color to indicate that a link will open in a new window then these users may not be able to access such information. Therefore it MUST be ensured that Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.
- Use of images for representing text should be limited Though images add life to a website, they also

increase downloading time. Images should only be used when it adds value to the content. Images should not be used to present text as those using text only browsers shall not be able to access the information thus rendering the site inaccessible to many. Therefore, text MUST be used to convey information rather than images of text except when the image of text can be customised to the users requirement or when a particular representation of text is essential for the information being conveyed (such as a text in a logotype): The use of text, rather than images of text, should be considered for page headings and website navigation items (Menus).

- Images and other non text content MUST be made Accessible. A meaningful explanatory text equivalent MUST be specified for images and other non text content e.g. by using the ALT attribute. The ALT text for an image is displayed before the image is fully downloaded. It is the main source of image information for users of text-only browsers, users of browsers with graphics turned off, and users who are sight impaired. The description should summarise the content or purpose of the image. For example, to use the description 'Picture' to explain a graphic does not serve any purpose.
- Text Equivalents for Video and Audio Clips: In order to ensure that content of video and audio clips is accessible to all, including those with impaired vision, hearing impaired or those accessing the information on slow connections:
  - a) Government websites MUST provide equivalent information of audio only/ video only clips (e.g. a text description of the audio/video). In case of video only clips audio description of the video may also be provided in place of text.
  - b) When audio (live or pre recorded) is synchronised with other media for presenting information the audio information MUST be presented as captions for the benefit of hearing impaired or those who do not have access to audio. Captions must not only include dialogue, but identify who is speaking and include non-speech information conveyed through sound, including meaningful sound effects. In case of video presented in synchronised media audio descriptions must be provided (if all of the information in the video track is already provided in the audio track, no audio description is necessary).
- The use of animation can be an effective means for drawing attention to key aspects of a website. However, Government websites should ensure that animations used on the site do not distract or irritate users or lead to unacceptable download times. Animation should be used only if it adds value to a page. File sizes of animated images should be kept small by limiting the number of frames.
- Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages MUST occur in the same relative order each time they are repeated, unless a change is initiated by the user.
- Web pages and applications often have content that is repeated on other pages or screens (for example navigation links, heading graphics, banner frames etc). A sighted user can ignore the repeated material by focusing on the main content area but it is not possible for a person using a screen reader as the content is read sequentially. Therefore Web pages MUST provide a mechanism to bypass blocks of content that are repeated on multiple Web pages. This may be done by providing a link at the top of each page that goes to the main content area.
- Government websites MUST include either a "Search" box or a link to a "Search" page from every page of the website. The search box or link must be titled "Search", as it is a standard term understood by web surfers world over. As per internationally accepted Usability principles, search boxes are most effective when placed in the same position on all pages (usually within the upper third part of the webpage).
- Every Indian Government website MUST have a 'Sitemap' linked through to Homepage as well as all important entry pages of the site.
- It MUST be ensured that in content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and IDs, if any, are unique, except where the specifications allow these features. This helps to ensure that user agents, including assistive technologies, can accurately interpret and parse content. If the content cannot be parsed, then different user agents may present it differently. Some user agents use "repair techniques" to render poorly coded content. Since repair techniques vary among user agents, authors cannot assume that content will be rendered correctly by specialized user agents.
- Labels or instructions MUST be provided when content requires user input (for example in forms). Text instructions that describe the input must be provided at the beginning of a form or set of fields. Elements associated with input must be labelled to ensure that information about the input field is spoken by screen readers when the field receives focus.

- In situations where web functions are time-dependent, (for example, filling out online form) it will be difficult for people with disabilities such as blindness, low vision, dexterity impairments, and cognitive limitations to perform the required functions before a time limit occurs. This may render the service inaccessible to them. It must therefore be ensured that such users are given adequate time to interact with Web content whenever possible. For each time limit that is set by the content, the user MUST be allowed to turn off the time limit, adjust the default setting before encountering it or is warned before time expires and given option to extend the time limit with a simple action (for example, “press the spacebar”).
- Many users including the visually challenged cannot perceive shape, size or use information about location or orientation. For such users the content that relies on knowledge of the shape or position of objects becomes inaccessible (for example, “round button” or “button to the right”). Hence It MUST be ensured that instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound. Additional information needs to be provided to clarify anything that is dependent on this kind of information
- If an input error is automatically detected, the error MUST be described to the user in text. The error message should be as specific as possible. This will ensure that users are aware that an error has occurred and can determine what is wrong. Describing the error in text in addition to highlighting the errors will help screen reader users, who cannot distinguish colour and users with cognitive disorders who have difficulty in perceiving the meaning of other visual cues
- All functionality of the content MUST be operable through a keyboard interface without requiring specific timings for individual keystrokes, except where input depends on the path of the user’s movement (for example, drawing freehand curves or using handwriting to write)
- Whenever a web page is rendered using plug-ins or embedded applications, it is possible that functionality of the Web page restricts the keyboard focus to a subsection of the content, unless the user knows how to leave that state and “untrap” the focus. This situation may affect navigation for people who rely on a keyboard or keyboard interface to use the Web, including visually challenged and people with physical disabilities. Therefore, it MUST be ensured that if focus can be moved to a component of the page using a keyboard interface, then focus can be moved away from that component using only a keyboard interface, and, if it is not possible the user is advised of the method for moving focus away.
- It MUST be ensured that the purpose of each link can be determined from the link text alone or from the link text along with its programmatically determined link context e.g. by using title attribute as a tooltip to clarify the purpose of link.
- When any component receives focus, it MUST not initiate a change of context. Developers must use “activate” rather than “focus” as a trigger for change of context. This ensures that functionality is predictable as visitors navigate their way through a webpage. (Examples of changing context when a component receives focus include forms being submitted automatically when a component receives focus or new windows launched when a component receives focus).
- Entering data or selecting a form control must have predictable effects. Changing the setting of any user interface component MUST not automatically cause a change of context unless the user has been advised of the behaviour before using the component. Unexpected changes of context can be disorienting for users with visual disabilities or cognitive limitations.
- When users navigate sequentially through content, they should encounter information in an order that is consistent with the meaning of the content and can be operated from the keyboard. Hence if a Web page can be navigated sequentially and the navigation sequences affect meaning or operation, focusable components MUST receive focus in an order that preserves meaning and operability.
- For all user interface components, it is a MUST that the name and role can be programmatically determined; states, properties, and values can be programmatically set; and notification of changes to these items is available to assistive technologies.
- Any keyboard operable user interface MUST have a mode of operation where the keyboard focus indicator is visible. This helps the user know which element among the multiple elements present in the page has focus. For e.g., in case of a button a visual change in the button (e.g. color, size) can indicate that the focus is on the button.
- If an input error is automatically detected and suggestions for correction are known, then the suggestions MUST be provided to the user, unless it would jeopardize the security or purpose of the content. Input

error occurs if the user omits a certain information that is required by the webpage, or the information provided by the user is not in the correct format or falls outside the permissible value. This is to ensure that the users receive appropriate suggestions for correction of input errors if possible.

- For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or submit user test responses, at least one of the following MUST be true:
  1. Reversible: Submissions are reversible.
  2. Checked: Data entered by the user is checked for input errors and the user is provided with an opportunity to correct them.
  3. Confirmed: A mechanism is available for reviewing, confirming, and correcting information before finalizing the submission.

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