From: Vaishnavi Jayakumar (Inclusive India)

Date: Wed, 10 Sept 2025 at 09:46
Subject: Comments on draft Road Safety SOP
To: <policy.depwd@gmail.com>, <debala.joarder@gov.in>
Cc: Manmeet Nanda, Anjlee Agarwal, Arman Ali , Adv. Subhash Chandra Vashishth

Dear Ms. Bhattacharjee,

Please find attached a Word document of the joint submission on the crucial issue of road safety and pedestrians with disabilities - the main content has also been extracted below..

(It is also available as a publicly viewable online document for stakeholders.)

Do reach out if any clarifications are required,

Thanking you,

Anjlee Agarwal, Arman Ali, Subhash Vashishth, Vaishnavi Jayakumar

P.S. This is an electronic document and has not been prepared for print usage - the links have not been converted to footnotes.

SUBMISSION ON DEPWD ROAD SAFETY DRAFT

Section 1. Introduction

Correct typo - temporary **or** permanent disability

Section 2 - Scope

The title and scope are narrow, limited to post accident measures rather than the Supreme Court order's more expansive focus in S. Rajaseekaran on the right of pedestrians with disabilities (who are intersectionally vulnerable road users) to safely use encroachment-free, consistent footpaths and footways that are accessible and in good condition as guaranteed under Article 21 of the Constitution of India.

Car-centric transportation planning bias disproportionately distributes risk to those who often have the least ability to mitigate it (e.g., children, the elderly, those with disabilities, or low-income individuals reliant on walking/cycling). With 24 instead of 60 buses per lakh population, and State Transport Undertaking (STU) fleets further diminishing over the years instead of increasing, 2-wheeler usage has boomed, with private vehicles choking roads. Converting and incentivising private vehicle owners to use a **range** of consistent, comfortable and convenient public transport services will potentially do far more for road safety than the measures outlined in the document.

Mandating laning for buses and cycles and rolling out transformer level anti-electrocution safety systems could similarly make a huge positive impact on pedestrian road safety.

Section 3 - Definitions :

The following additions need to be made :

'vulnerable road users' (VRU) means non-motorised road users, such as pedestrians and cyclists as well as motor-cyclists and persons with disabilities or reduced mobility and orientation; with an increased risk of being injured or killed in traffic because he is not surrounded by a protective cover which would significantly reduce the severity of an accident.

'Scoop stretcher' also known as a clamshell stretcher, is a specialized medical device used to transfer patients with suspected spinal, pelvic, or limb injuries with minimal movement. It consists of two longitudinal halves that separate and reassemble around the patient, allowing them to be "scooped" from the ground without rolling the patient over, which reduces the risk of further injury, especially to the spine.

'Accessible Pedestrian Signal' is a device that communicates information about pedestrian signal status, timing and in multiple formats - visual, audible tones, speech messages, and vibrotactile surfaces. It could also permit on demand crossing with additional time for pedestrians with reduced mobility to safely cross.

'Mobile accessible pedestrian signal' system is a V2P (vehicle-to-pedestrian) application that enables an automated call from a visually impaired pedestrian's smart phone to the traffic signal.

'Accessible Emergency Communication Service' is a multimodal helpline platform available online, as an app with IP calls, text, sign language video relay options in addition to the voice and SMS based cellular network with Advanced Mobile Location.

4. Accessibility Standards for Roads and Transport

a. Compliance with standards

All references to IRC SP-137 and IRC-37 to be removed as they pertain to bridges and flexible pavements respectively, with no reference to accessibility. IRC:117-2018 (Universal Accessibility for urban roads) needs to be inserted along with IRC:67-2012 (Road Signs), IRC:SP:56-2011 (Pedestrian Bridges), and IRC:99-2018 (Traffic calming) instead as does AIS:052 & AIS-153 - the Bus Body Code.

b. Pedestrian Facilities:

Substitute Tactile Ground Surface Indicator (TGSI) for 'tactile paving', and kerb for

'curb'

With insertions, this para should read :
'Install Tactile Ground Surface Indicator (TGSI) for blind pedestrians' guidance and warning, accessible pedestrian signals at zebra crossings, traffic lights with audible signals , signage with symbols accompanying text (tactile when within reach), kerb ramps for footpaths, bollards with minimum 1m spacing, accessible wayside amenities for and ramped grade-separated crossings like foot over bridges / underpass / subway (with lift provisions and seating) for barrier-free and safe movement.;

Add
Pavement bollards parallel to the carriageway should be crash-rated to potentially save pedestrians' lives in case of collision with an out of control vehicle.

To avoid time-consuming repositioning of utilities and natural barriers like trees, 2 metres minimum walking pedestrian zone (as specified in IRC-103-2022 Table 2) can be reclaimed from the carriageway for the footpath with markings for a 3 feet wide wheelchair 'lane' and 1 foot wide tactile guiding path. Tactile warning strip at kerb ramps and vehicular crossovers (in case of continuous footpath) shall be mandatory. The pavement surface shall be smooth but non-slip, and pattern-free with adequate contrast to differentiate it from the road.

c. Monitoring:

*Substitute 'regular **walkability** audits' for' regular audits'*

d. Vehicle Adaptation

Add :The current electric vehicle registration plate design white / yellow on green fails contrast tests - a more readable design - perhaps a green border / line as in UK. Acoustic Vehicle Alerting System (AVAS) for electric / Quiet Road Transport Vehicles must be mandated for safety of blind pedestrians as per AIS:173.

f. Enforcement:

Fines to be incorporated for pavement encroachment by way of parking, driving or a building entryway's ramp or outward opening gates or dumped building construction debris. This could be automatically challaned via CCTVs with automatic name plate recognition. Additional penalties to be introduced for blocking kerb ramps or bollards, forcing wheelchair users into dangerous traffic and removing manhole covers during flooding. Penalties to be levied on road surfacing contractors who reduce the 150 mm pavement height above the carriageway by not milling or coring the road before relaying, thus necessitating pavement raising. Similar penalties are required for low hung cable TV wires and insufficiently pruned tree branches which can be very dangerous for blind pedestrians.

Buses, trucks and trailers shall not be granted fitness certificates if not equipped with Rear Underrun Protective Devices (RUPD). Front Underrun Protective Devices (FUPD)

and Side Underrun Protective Devices (SUPD) as required by AIS and mandated by MORTH.

➕ *Add the following subheadings*

i. Traffic Communication :

IS:7537-14 to be amended to ensure that colour is not the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element. A secondary cue in addition to colour (such as shape or text), is essential to distinguish information and convey meaning.

Traffic lights can be redesigned for those with colour blindness to incorporate shape in addition to colour differentiation. Using the current road sign logic where triangles warn, rectangles inform and circles give orders, the red light can be a triangle, the yellow a square and the green light a circle.

During the process of developing BIS standards for Accessible Pedestrian Signals, and Mobile Accessible Pedestrian Signals, retrofitting of existing traffic signals can undertaken as per the Manual on Uniform Traffic Control Devices (MUTCD) specifications. Signals, zebra crossings, legal speedbreakers, grade-separated pedestrian crossings, auto / taxi stands, public transport stops, metro station gates, accessible parking slots and drop off zones, dog pack zones shall be mapped with accessibility status and published as open data for ease of wayfinding. A system of real-time service alerts based on lifts not working, traffic diversions, waterlogging etc can supplement QR coded street names and geographic database of street ids for safety.

IRC:676-2012 (road signs) to be amended to change warning signs for zones with concentration of deaf / blind pedestrians into a more intuitive international symbol of deafness and blindness respectively within the red warning triangle. A similarly intuitive sign for pedestrians with restricted mobility has to be developed for the standard as do signs for 2 wheeler parking, 4 wheeler parking and drop off zones. A behaviour change communication campaign of disability-specific road signs and what they mean should be undertaken with rollout of 'wheelchair lane markings' at bollards.

j. Accessible Parking, Drop-off Zones, Level Boarding Bus stops:

Standardised dimensions and drawings for both stage carriage and contract carriage public transport terminals with near-level boarding as well as accessible adapted 2 wheeler parking, and drop off zone are required to be formulated by MoRTH and implemented without deviation nationwide without further delay.

Intelligent Transportation Systems (ITS) shall include user-triggered bus identification and homing system for blind passengers to board a particular bus when multiple buses arrive simultaneously at a bus stop.

Stage Carriage buses with hydraulic wheelchair lifts shall be removed from circulation due to safety concerns in urban Indian traffic. Safety standards and tests for wheelchair lifts in long distance bus travel need to be developed and conducted.

6. Sensitization/Training:

Substitute with following text

a. First responders (police/ paramedics / road safety professionals / **helpline counsellors** etc) shall be sensitized/trained to recognize signs of disabilities, including physical impairments, sensory loss, neurological **or mental health** issues, with training facilitated by DEPwD's NI/CRC network.

b. DRSC shall arrange training on safe commute, **transfer**, **suppor**t and handling of PwDs to the staff of establishments with high footfall of persons with disabilities and **hospitals.**

c. First responders and medical personnel shall undergo mandatory training on disability identification, safe handling, and initial care to minimize future disabilities, conducted by AIIMS or state health departments in collaboration with NI/CRCs and State Disability Welfare Departments. The training to be held annually to update skills and incorporate new disability care protocols.

d. Physiotherapists, occupational therapists, **speech-language pathologist**s and clinical psychologists shall be trained in advanced rehabilitation techniques, including mental health support, tailored for road accident victims and newly disabled, at NI/CRCs in collaboration with State Health and State Disability Welfare Departments.

7. Mandatory facilities:

a. Safe Handling:

Substitute with following text :

MRI compatible, plastic scoop stretcher (with optional cervical collar) to be carried by default across all ambulance categories so as to prevent rescue-caused spinal cord injuries after road accidents. From level V trauma centres upwards, Victims with suspected spinal or limb injuries shall be handled using immobilization techniques (e.g., cervical collars, spine boards) to prevent further damage and minimize future disabilities. Medical boards assessing and certifying disability shall be equipped with a height adjustable examination table and trauma centres with a height adjustable transfer chair.

c. Ambulance Deployment:

Add text at end

The Union Government shall set up and fund a pan-Indian multilingual 'accessible emergency communication service' to extend capabilities of 108 / 112 / 14416 / 1070 and other crisis helplines.

f. Rehab Services

Add text at end :

Deployment of Non-Emergency Patient Transport Services (102):

States/UTs shall ensure non-emergency patient transport services with trained assistants and passenger service vehicle with hydraulic wheelchair lift equipped with Evacuation Chair, foldable wheelchair, Wheelchair Tiedown and Occupant Restraint System (WTORS), portable ramp, transfer board, Augmentative and Alternative Communication (AAC) picture chart etc).

Step down hospital wards, rehabilitation centres, long stay residential choultries / dharmashalas shall be barrier-free as per relevant provisions of the National Building Code with centre oriented (Type A) wheelchair accessible toilet with swivel grab bars and space for assisted bilateral transfer.

References

Delete :

Irrelevant IRC codes :

- IRC-SP-37: Guidelines for Evaluation of Load Carrying Capacity of Bridges" and relates to bridge assessment, not pedestrian facilities or tactile paving
- IRC-37: standards for the design of flexible pavements (road layers/structural pavement design)

Add :

- IRC-SP-117: 2018- Manual on Universal Accessibility for Urban Roads and Streets
- AIS codes linked in comments
- Rajive Raturi Rules
  - Built Environment Draft
  - Transport Group Draft

RAJIVE RATURI TRANSPORT NON-NEGOTIABLES

A	PAVEMENT / FOOTPATH	REFERENCE

A01	Elevated pavement of 150 mm on both sides of finished road to be provided where traffic speed is > 15 km/hour (and if need be can be reclaimed from the carriageway / parking). One-side footpath may be permitted only where RoW < 10m	IRC-103-2022 - 6.2
A02	Pavement to demarcate clear width of 2 m wide walkway to ensure 2 wheelchairs can pass each other. (ISA symbol marking at start and end can reinforce lane usage). Transverse slope of this pedestrian zone to not exceed 2% for wheelchair user safety. Surface of the pavement to be smooth (and uniform in colour and material) but non-slip achieving PTV ≥ 45 when wet. Any gratings / storm water drain inlets, even if flush, should be perpendicular to direction of travel to prevent blind pedestrians' cane or wheelchair's casters from getting caught in the gaps.	IRC-103-2022 - 6.2.1
A03	Walkway to be devoid of obstructions for 2.4 metre clear height - tree branches should be routinely trimmed to ensure safety for blind pedestrians.	IRC-103-2022 - 6.2.1
A04	Where there are many building entrances cutting across the footpath, a seamless continuous pavement will be preferred to kerb cuts. Ramped access for vehicles can be provided only before and after the pavement walkway. Tactile warning of contrasting shade should indicate vehicular crossover zones	IRC-103-2022 - 6.2.1
A05	Contrasting tactile guiding path must be provided when footpath exceeds 4m, on the walkway side closer to the carriageway	IRC-103-2022 - 6.2.5
A06	All street access control bollards of at least 800 mm height must be placed apart with no less than 900 mm and no more than 1200mm clear width to be able to admit wheelchairs while blocking auto-rickshaws. Care should be taken during installation to factor in other potential barriers at the pavement boundaries like trees, sign boards and electricity boxes. For pedestrians with low vision, bollards should contrast visually (factoring in colourblindness and night time use) with the surface of the pedestrian circulation path and with other background colours. 6" band yellow prismatic retroreflective strips must wrap around the top and bottom of each non-security bollard located approximately 2" from the top of the bollard, AND approximately 12" from the bottom of the bollard.	IRC-117-2018 - 3.2.20

	Where the pavement meets the carriageway, whether flush or dropped kerb, the bollards must be installed in the 300 mm setback from pavement edge where the 560-600 mm depth full width tactile warning strip starts. Tactile warning pavers (with minimum luminous contrast of 70%) must be used as warning strips near all locations on the footpath with conflicting uses like driveways - especially if tabletop crossings to property entrances. Where bollards are placed parallel to the carriageway to prevent mounting by vehicles, they must be at the edge or immediately after the kerb stone. In case of designated parallel parking the bollards may be set back 460 mm from the kerb edge.	
A07	Kerb Ramps transitioning to street level shall have a gradient not steeper than 1:15 with width not less than 1200 mm and flared sides with gradient not steeper than 1:10 while preventing water pooling. If a landing is not provided, clearance of at least 800 mm on the footpath behind the kerb ramp. A contrasting tactile warning of at least 300 mm width (or more depending on location vis a vis line of travel) must stretch across the entire width where ramp meets road. Dropped kerbs should be provided at parking, crossings, bus shelters, IPT stands and at least every 100 m on long roads to prevent long detours for wheelchair users. If there is a kerb ramp on one side of the roadway, there should also one be on the other to prevent pedestrians being 'stranded' on the roadway itself.	IRC-103-2022 - 6.7.1 NBC-2016 B-2.3 IRC-117-2018-3.2.2 ADA-§406
B	**CROSSINGS & INTERSECTIONS**	
B01	At-grade controlled crossings (whether Zebra, Pelican or Puffin signalled) need to provide level access on both sides of the road of the same width as the crossing itself (i.e. 2000 mm minimum) whether by dropped kerb or raised, 'tabletop' crossing. Medians with width not less than 1500 mm in the middle and contrasting tactile warning demarcations, must either be cut through and levelled with the street or have a returned kerb ramp to the raised median in case the road is very wide. Bollards may be spaced to permit wheelchair users but deter motor vehicles.	IRC-103-2022 - 6.7.1
B02	Well-lit grade separated crossings are to be resorted to only when unavoidable and whether overpass or underpass must be enclosed, 1:20 ramped with contrasting, dual height, heat-insulated railings and landings with at least 1500 mm length (and in case of change in direction, 1500 mm width) clear wheelchair navigation space at every rise of 2.5m.	IRC-056-2011 - 12

	Raised benches of 550 mm straight seat height with 890 mm upright backrest and armrests would help elderly / chronically fatigued to rest. Bollards may be spaced at either end to permit wheelchair users but deter motor vehicles.	
B03	Audio Visual traffic signals locations must be mapped with locations released as open data for smartphone guided wayfinding. Timings must factor in atypical crossing times. Pedestrian On demand accessible pedestrian signals (APS) should further provide vibrotactile information to benefit deaf-blind pedestians with pushbutton controls accessible by wheelchair users.	HG-2021-3.8.5 ADA PROWAG 2023
B04	Street name boards must include a standard placement of enhanced Navilens type QR code for pedestrians with low vision	IRC
Road : Taxis , IPT		
A01	Licensing for 4 wheeler taxis / All India permit holders to require vehicles to have trunk capacity to fit an IS7454:2024 standard folding wheelchair. / rollator / walker	
A02	Commercial driving license acquisition to be conditional to drivers being 'trained to proficiency' in disability assistance via tests based on self-guided multimedia tutorials	
A03	Discriminatory provision 7.6a in advisory for licensing of on demand aggregators to be removed as this exclusionary provision is targeted towards disability characteristic alone. 7.4c to include discrimination on the basis of disability.	
A04	Assistance to disabled passengers in locating and use of taxi must be provided without any additional charges - advance intimation of such specific needs shall not be a cause for refusal of service.	
A05	Post app aggregator market disruption and resulting absence of a designated taxi vehicle model like London's Black Cab or the Kaali Peelis, taxi aggregators must offer a proportion of wheelchair accessible vehicles (WAVs) to ensure equivalent service.	

A06	Demand-responsive aggregators to provide vehicle choice app filters for wheelchair users to specify whether seat transfer is possible or own wheelchair travel with tie-downs and ramp / lift required.	
A07	E-autorickshaw taxi policy (including share auto and shuttle buggies) must include standardised design on lines of Kickstart Gati or EzyMov to allow wheelchair boarding and safe travel. - current policy only outlines livelihood scheme for family members of persons with disabilities.	
Road : Adapted Vehicles Etc		
A01	GST rationalisation from 18% to 5% for adapted car	
A02	Fastag exemption migration to GNSS	
A03	Frictionless default future exemption from odd-even type restrictions as essential living aid for drivers with disabilities	
A04	Highways wayside amenities (Restaurants, Washrooms, Fuel Stations, EV Charging, Truckers Amenities, Medical Facility, Kids Play Area, Auto Repair/Maintenance, Village Haats) to meet specific design needs of drivers and passengers with disabilities including Changing Places Toilets.	
A05	Blue Badge type QR code verifiable reserved parking sticker system to be rolled out for drivers with disabilities with potential for UDID database integration	
A06	Symbol standardisation specific to accessible parking in India is required.	
A07	Electric vehicle registration plate requires a more readable design.	
A08	Driving license SOP for persons with disabilities for frictionless experience at RTO offices	

A09	Electric charging infra to be universally designed for disabled drivers and must include power wheelchair charging	
Road : Special Vehicles	• **Ambulance & Fire to carry scoop stretcher and cervical collar to reduce spinal cord injuries due to improper post trauma handling** • **Police / Prison Van - Low Floor with ramp, pneumatic kneeling, foldout step**	
Road : Bus Shelter	• **Pavements to be blended with bus shelter with LF bus level boarding platform with Kassel Kerb base** • **Marking - bus lane, ISA etc and docking flag**	SAC-RR Draft BE - B (Part B FMC specs being incorporated)
Road : Bus Terminals / Depots	**Terminals must be equipped with additional inspection pits for low floor buses as well as multilevel boarding platforms with docking rubber platform gap fillers and fold out ramps to permit wheelchair boarding of buses whether LF, SLF, HF or truck chassis high floor**	
Road : Type III Bus- Long Distance	**New non-low floor buses may be permitted to operate with ARAI-certified wheelchair lift and onboard aisle chair if the luggage is stored at the base.**	
Road : Type 1 & II (City & Inter-City) Buses		
A	**DOORWAY / GATE / LEVEL CHANGES**	
A01	Max 400 mm floor height (GFH) w/o kneeling, Step-Free, Level Entry Door 1200 mm wide (at least 900 mm clear after counting flaps and railing) with **immobile** (achieved by inswing door) handrails' knuckle clearance of 38 mm across full length) , contrast / lit edges and av indicator for door opening and closing and failsafe	* AIS-153 : Anx V - 3.6.4 * HG-2016 11.7.1.2 / 21 6.3.1.2.2,
A02	At least 60 mm kneeling via air suspension on entry/exit side severally & collectively with failsafe	* AIS-153 : 2.8 * AIS-153 : Anx V - 3.11.2 * UBS II : 7.3

A03	**Rear entrance** wheelchair ramp to extend to 400 mm level bus boarding platform specified in UBS II. Sunken type **hybrid** (manually wrap over + retractable automatic cassette ramp below footboard), for wheel chair of PwDs, fitted on floor at gate in front of PwD seat anchorage. Load capacity 300 kg mm, anti side roll edge colour contrasted. Usable width of 800 mm (920 mm will facilitate crutch users) usable length 1200 mm. **AIS bus ramp slope contradictory** with AIS requirement of 'moving freely and easily' for unassisted, safe boarding - Maximum slope should not exceed 1:6. Pictographs on ramp must caution use of seat belt and anti-tip wheels.	* AIS-153 : Anx V - 3.11.4.1.3 * AIS-153 : Anx V - 3.6.4.1 * UBS II : 14.8 * MOUD 2012 NUTP advisory * MoRTH 2021 draft 10.4.1
A04	**Front entrance** height of first step from ground to not exceed 250 mm says bus code - with fold out / retractable step this should be 6" / 150 mm for ambulant disabled	* AIS-153 : Anx V - 3.1
A05	Passenger safety system - allowing bus motion on electro pneumatically controlled entry / exit gates doors closing and doors opening only when the bus is stopped	* UBS II : 14.1.d
A06	Anti-skid Interior steps in case of low entry bus to be 120-250 mm high with 200 mm depth with 50 mm edge demarcation contrast and fully coloured tread of first and last step. Colour contrasted stanchions to be aligned with steps and seats for fall prevention. Elevated seat platforms to be similarly edge demarcated.	* AIS-052 : 2.2.5
B	**SEATING**	
B01	At least 1 front-facing Wheelchair space close to the driver must be not less than: 1300mm measured in the longitudinal plane of the vehicle, 750mm measured in the transverse plane of the vehicle, 1500mm measured	* AIS-153 : Anx V - 3.6

	vertically from any part of the floor of the wheelchair space. **Backrest with seat belt anchorage, stoppers, WTORS and handrail, communication button at** 700-1200 mm height**.**	* AIS-153 : Anx V - 3.8 * CMVR -2022 GSR-797(E)
B02	At least 4 Priority seats **with seat belts** for other PRM / medically disabled (with tactile pictogram) near driver (2 for Midi / Mini) with movable armrests, aid securement, tactile pictogrammed high visibility communication control at 700-1200 mm height.	* AIS-052 : 2.2.19.1 - 5 * AIS-153 : 3.2 * CMVR -2022 GSR-797(E)
B03	Space for guide dog	* AIS-153 : Anx V - 3.2.2
1C	**SUPPORT, SAFETY & FALL PREVENTION**	
C1	Handrails & stanchions & handholds - boarding assist till seat. Immobile, high visibility, colour contrasting and slip resistant.	* AIS-052 : 2.2.19.4 * AIS-052 : 2.2.9 * AIS-046 * AIS-153 : Anx V - 3.4 * CMVR -2022 GSR-797(E)
C2	Gangway min 700 mm width	* UBS II : 15.7.2 b
C3	Level floor anti-skid without trip hazards (WTORS), colour contrasted demarcated wheelchair space, priority seating. If low entry bus, internal steps to have tactile warning at both ends and edge colour contrast for every step. Ditto if some seats are on raised	* AIS-153 : Anx V 3.11.4.1.6

	platforms. These seats and those opposite doors to have seat belts and vertical stanchions.	
C4	Bilateral under run protection - (front & rear depending on design)	* AIS-052 : 2.2.20 / 2.2.21 etc
D	**COMMUNICATION / PIS / ITS / ICT**	
D01	GPS + Transponder Automatic Vehicle Location Realtime Text Feed via GTFS - Flex. Multimodal (audio + visual + phone based text feed of information of destination display, route, bus identification & homing transmission / beacon system for blind / deafblind, arrival announcements, emergency alerts etc. Acoustic Vehicle Alerting System (AVAS) for electric / Quiet Road Transport Vehicles	* AIS-153 - 2.18 * AIS-140 * AIS-173
D02	Wheelchair Boarding Driver Communication button 800-1300 mm high adjacent to door, Tactile pictograms with high visibility. Message to be received by driver separate from other call buttons.	* AIS-153 Anx V - 3.3.4 * CMVR -2022 GSR-797(E)
D03	Signage / Tactile Pictogram on wheelchair accessible door and at wheelchair docking space floor and backrest, and outside bus indicating wheelchair space location. Ditto dashboard and ramp.	* AIS-153 : Anx V - 3.7 * CMVR -2022 GSR-797(E)
D04	High visibility Night Stop on demand request communication button shall be fitted at an ideal height of 1.2 meter (800-1500 mm) on all stanchions. Message to be received by driver separate from other call buttons.	* AIS-153 : Anx V - 3.3 * CMVR -2022 GSR-797(E)

D05	App integration with GTFS Pathways, SoundScape , NextStop ,	* RPDA 2016 * RPDA 2016 * GIGW 2.0 * IS 17802 Parts
E	**POLICY UPDATION**	
E01	In keeping with ongoing UNECE R-107 amendments, the bus body code needs to be synced to insert the missing words from R-107's 2.1.4 to AIS-052's 1.1.74 so that it reads : 'Low-floor vehicle' **is a vehicle of Type I, II or B** in which at least 35 per cent of the area available for standing passengers **(or in its forward section in the case of articulated vehicles, or in its lower deck in the case of double-decker vehicles)** forms an area without steps and includes access to at least one service door.	
E02	Apart from Group B minibuses required to be low floor, microbuses and e-carts must also be low floor with a boarding height of 340 mm or lower.	
E03	UBS to include specifications for hilly area buses and electric buses which must be born ultra low floor irrespective of end use class or type	
E04	Rural area option of Mega-Bus type solution to be standardised	
E05	Low Floor bus chassis to be promoted to utilise vast capacity of bus body manufacturers in the transition to low floor city and inter city buses	