

# A Universal Design Approach for an Integrated and Inclusive Customer Transport System

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## Executive Summary

Access to public transport is crucial for independent living, particularly for people with disabilities, as emphasized by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). Articles four and nine of the UNCRPD highlight the importance of accessible transport, alongside the physical environment, information, and ICT, to ensure full participation in all aspects of life.

At the European level, the 'Lecco Declaration' outlines principles to improve accessibility, signed by AAATE, UITP, and ENIL. It asserts that freedom of movement is a human right and that public transport is essential for social and economic development. Technological advancements are seen as key to overcoming access barriers.

EU legislation on passenger rights and accessibility standards aims to ensure quality services for people with disabilities. However, these systems are complex, involving various stakeholders—regulators, transport providers, and passengers—each with different priorities. Legal requirements must ensure accessibility through applying a universal design approach across the entire transport journey, considering the diverse needs of all stakeholders.

Despite existing legislation, gaps remain in accessibility, such as inaccessible stations and limited assistance availability. A 'Whole Journey' approach, considering all stages of travel, is recommended to ensure comprehensive accessibility.

A systems approach at macro (policy and legislation), meso (institutional practices), and micro (service delivery) levels is needed to create universally designed public transport. Examples include the European Accessibility Act, Irish Disability Act, and initiatives like the JAM Card in Ireland, which support people with hidden disabilities access transport and other services.

Urban and rural transport contexts pose different challenges, with rural areas often having less infrastructure and more complex mobility needs. Maritime and air transport also require improved accessibility.

Technological advancements and new initiatives like the EU Disability Card and revised rail passenger rights legislation aim to enhance accessibility. Ensuring accessibility through digital platforms and standards, as seen with the Web Accessibility Directive and the European Accessibility Act, is essential.

Overall, the integration of new technologies and adherence to accessibility standards and legislation are key to creating an inclusive public transport system. The European Commission's AccessibleEU initiative supports this by promoting accessibility standards and training across member states.

## I. Background

Access to public transport is fundamental to independent living. Transport access is so important to independence that it is recognised as a key area of focus for State Parties under Articles four and nine of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)<sup>1</sup> which links access to transport (as well as the physical environment, information, and ICT) as central to ensuring persons with disabilities can live independently and participate fully in all aspects of life. Article four<sup>2</sup> of the UNCRPD specifically states that States Parties have “[...] to undertake or promote research and development of universally designed goods, services, equipment and facilities, which should require the minimum possible adaptation and the least cost to meet the specific needs of a person with disabilities, to promote their availability and use, and to promote universal design in the development of standards and guidelines”.

At a European Level, the ‘Lecco Declaration’<sup>3</sup> (named after the Italian city where the agreement was reached and signed) is an important framework aligning key principles that organisations can build on to improve their own implementation of accessibility. The declaration was signed by the Association for the Advancement of Assistive Technology in Europe (AAATE), the International Association of Public Transport ((UITP) Union Internationale des Transports Publics and the European Network on Independent Living (ENIL). The Lecco Declaration is founded on the following core concepts:

- Freedom of movement is a human right and personal mobility should be guaranteed.
- Mobility is related to other rights such as participation, education and employment.

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<sup>1</sup> <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-9-accessibility.html>

<sup>2</sup> <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-4-general-obligations.html>

<sup>3</sup> [https://cms.uitp.org/wp/wp-content/uploads/2022/07/The-Lecco-Declaration\\_signed.pdf](https://cms.uitp.org/wp/wp-content/uploads/2022/07/The-Lecco-Declaration_signed.pdf)

- Public transport is a vector of social and environmental policies and values – connecting places and people to foster social and economic development.
- Technological developments have the potential to reduce or overcome access barriers by providing new solutions.

Along with the UNCRPD and the Lecco Declaration, there is EU legislation which deals with Passenger Rights as well as accessibility standards for vehicles and infrastructure that defines the quality and level of services that people with disabilities are entitled to receive when they travel. These are laid out in detail in the report from Accessible EU<sup>4</sup>: ‘Accessible Public Transport in the EU: What the law says and what it means.’<sup>5</sup>

Transport systems are complex and a journey on public transport encompasses many different elements. As such, legal requirements must be in place to ensure accessibility throughout the Whole Journey.

The transport landscape is further complicated when we look at the stakeholders affected by transport legislation. These stakeholders all have very different views on what outcomes should be delivered by an integrated inclusive transport system.

- Regulators: want to see reduced emissions and congestion, increased efficiency, and greater accessibility and social equity.
- Transport providers: want greater efficiency, capacity and market share.
- Passengers: want increased usefulness, accessibility, inclusivity, comfort, affordability, convenience and safety.

In addition to all elements of the transport journey, the considerations of the needs of all these stakeholders adds more complexity when examining existing transport delivery systems and drafting new policies, legislation, standards etc.

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<sup>4</sup> AccessibleEU is one of the flagship initiatives proposed in the European Commission’s Strategy for the Rights of Persons with Disabilities 2021-2030. It is a resource centre on accessibility, working on the areas of built environment, transport, information, communication technologies and policies in order to ensure persons with disabilities’ participation in all areas of life on an equal basis with others. Further information on Accessible EU is detailed in this document.

<sup>5</sup> [https://accessible-eu-centre.ec.europa.eu/accessible-public-transport-eu-what-law-says-and-what-it-means\\_en](https://accessible-eu-centre.ec.europa.eu/accessible-public-transport-eu-what-law-says-and-what-it-means_en)

Despite the need to balance the diverse needs detailed above, that when considering public transport, the passenger (i.e.: 'the public') must be at the heart of all discussions and in particular disabled persons organisations (DPOs), and older people in relation to all levels in developing, implementing and delivering an integrated, inclusive transport system.

There has been legislation enacted at the EU level to attempt to ensure accessibility of public transport services and systems for persons with disabilities. However, in considering the importance of the needs of passengers in legislation, particularly in considering the accessibility needs of passengers, gaps still remain.

The current challenges to customer transport services are clearly outlined by the European Disability Forum such as: lack of accessible stations, limited availability of assistance in stations and transport hubs due to staffing cuts, the need to notify passenger assistance in advance, lack of accessible transport information, inaccessible transport fleets/rolling stock <sup>6</sup> etc.

Accessibility requires an approach that goes beyond the transport fleet itself, that encompasses many different elements. That is why it is useful and important when looking at accessibility requirements to take on board the Whole Journey (or Whole of Journey) Approach to understanding transport systems.

## 2. The Systems Approach

It is notable that transport legislation enacted at EU level (detailed below) is quite wide ranging and covers not only transport nodes (i.e.: transport fleets themselves) but also encompasses the built and the digital environments (for example journey planning, payment, mobile apps, as well as staff training).

This is where a systems approach is useful to consider in rolling out legislation, standards, monitoring, codes of practice, education, training etc. in delivering universally designed public transport. A systems approach<sup>7</sup> is needed to consider all the stages of the transport lifecycle, as outlined above but also at the practical

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<sup>6</sup> <https://www.edf-feph.org/whats-new-in-the-revised-rail-passenger-rights-regulation/>

<sup>7</sup> [https://universaldesign.ie/education/third-level-education#:~:text=Universal%20Design%20in%20Education%20\(UDE,in%20a%20more%20inclusive%20environment.](https://universaldesign.ie/education/third-level-education#:~:text=Universal%20Design%20in%20Education%20(UDE,in%20a%20more%20inclusive%20environment.)

level in areas of planning, design, construction, operation, maintenance, and decommissioning.

This approach allows for transport to be examined as a whole, particularly in the context of disability and overall equity of access. This approach provides an understanding of the multidisciplinary relationships and interdependencies between transport modes, infrastructure, the community, government policy, legislation, regulations etc.

The systems approach encompasses 3 levels:

### **Macro Level**

This consists of elements such as policy, legislation/regulation and standards which are formed at International/European/National level.

As an example, the European Accessibility Act (EAA)<sup>8</sup> sets out requirements for the provision of accessibility of electronic ticketing machines as well as optional requirements for ensuring accessibility of the built environment. These requirements are echoed in national legislation.

For example, in the Irish context they are set out in the Irish Disability Act 2005<sup>9</sup> which requires Government Departments and public bodies to ensure that their physical premises, information, and services provided are accessible to persons with disabilities. This would of course include, buildings, information, and services associated with public transport.

### **Implementation at Macro Level**

In order to ensure improved freedom of movement across the EU, the Commission has proposed the creation of:

- a new European disability card
- improved European parking card for persons with disabilities.

A proposal to create these two cards was advanced by the Commission in 2023. The creation of these cards has recently being negotiated by the EU Council and the European Parliament, and a legal act will be passed, requiring EU governments to implement the cards for their citizens within 2.5 years<sup>10</sup>.

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<sup>8</sup> <https://ec.europa.eu/social/main.jsp?catId=1202>

<sup>9</sup> <https://www.irishstatutebook.ie/eli/2005/act/14/enacted/en/html>

<sup>10</sup> [European disability card - Consilium \(europa.eu\)](#)

The European Disability Card will serve as a **proof of disability status** across all EU countries. It will grant cardholders equal access to special conditions and preferential treatments anywhere in the EU.

The special conditions apply when using public transport, attending cultural events and visiting museums, leisure and sports centres, amusement parks, and more. They can take the form of, among others: free entry, reduced tariffs, priority access, personal assistance, mobility devices.

The European disability card will complement national disability cards, which will continue to be awarded by national authorities, based on their own criteria.

The European parking card will guarantee use of parking spaces and facilities reserved for persons with disabilities in all EU countries. This parking card will replace national parking cards<sup>11</sup>.

Implementation across member states will be a challenge particularly when considering harmonisation that will be required<sup>12</sup>. Taking the Irish context, for example, Ireland does not have a national disability card in place and assessments are conducted by a variety of Government Departments depending on the support or grant being applied for. However, despite the challenges present in implementation, in considering the Irish example we can see how the implementation of legislation and schemes at this level can be of benefit in terms of standardising and simplifying systems, updating assessment frameworks and promoting a more joined-up approach to accessibility at both national and European level.

## **Meso Level**

This focuses on an institutional level where certification or monitoring combined with codes of practice are built-into the hierarchical structure of the organisation.

Taking the above example, in the Irish context there is the Code of Practice on Accessible Services and Information Provided by Public Bodies<sup>13</sup> which is a Statutory Instrument and provides more detailed information on what public

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<sup>11</sup> <https://ec.europa.eu/social/main.jsp?catId=1139>

<sup>12</sup> [Disability assessment, mutual recognition and the EU Disability Card - Progress and opportunities \(europa.eu\)](#)

<sup>13</sup> <https://nda.ie/uploads/publications/Code-of-Practice-on-Accessibility-of-Public-Services-and-Information-Provided-by-Public-Bodies.pdf>



bodies must do in order to be compliant with the Disability Act 2005<sup>14</sup> and makes suggestions on how to meet these obligations.

The National Disability Authority in Ireland is the monitoring body for the Codes of Practice and monitors public bodies against indicators based on the Code of Practice<sup>15</sup>. These reports inform public bodies of legislative requirements, provide information and advice on how to meet these requirements, and point out when these requirements are not being met. As the famous Management consultant Peter Drucker said “You can’t improve what you don’t measure.”<sup>16</sup>

Another example of this at the EU level is the Transport Innovation for Persons with disabilities needs Satisfaction (TRIPS) project <sup>17</sup>, which set out to monitor the accessibility of public transport across several cities using user-generated data to assess these services against a co-designed mobility divide index (MDI) <sup>18</sup>. At present this has only been rolled out in the context of urban environments but could be applied to rural transport environments as well. This assessment of MDI can help national and local governments to pinpoint and address accessibility gaps in public transport services.

### **Implementation at Meso Level**

The ‘Just a Minute’ or JAM card used in Ireland is a good example of an initiative implemented at this level. The JAM Card (and associated app) allows people with a hidden disability or communication difficulties to inform transport staff that they need extra time and understanding in a private and easy way<sup>19</sup>. This card comes with associated guidance and training documents to be used across transport services which improve services and standardise approaches across all transport at national and local levels in Ireland.

National guidelines are also a good example of implementation of legislation on the meso level. For example, the Irish Department of Transport is in the process of developing guidelines on universally designed electric vehicle charging infrastructure <sup>20</sup> aiming to ensure that the physical and digital charging

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<sup>14</sup> <https://www.irishstatutebook.ie/eli/2005/act/14/enacted/en/html>

<sup>15</sup> <https://nda.ie/publications/monitoring-report-on-access-officers>

<sup>16</sup> [https://link.springer.com/chapter/10.1057/9781137375469\\_7](https://link.springer.com/chapter/10.1057/9781137375469_7)

<sup>17</sup> <https://trips-project.eu/>

<sup>18</sup> [https://trips-project.eu/wp-content/uploads/2021/10/2021\\_09\\_27\\_MDI-WHITE-PAPER.pdf](https://trips-project.eu/wp-content/uploads/2021/10/2021_09_27_MDI-WHITE-PAPER.pdf)

<sup>19</sup> <https://www.jamcard.org/>

<sup>20</sup> <https://www.gov.ie/en/press-release/ec681-public-consultation-on-draft-universal-design-guidelines-for-electric-vehicle-charging-infrastructure-now-open/>

infrastructure, which is newly designed and developed and which is being rolled out at pace across the country, is universally designed and therefore accessible to all. These guidelines were developed through consultation with key stakeholders including representatives from disabled persons organisations (DPOs). As these guidelines are dealing with new technology, the Department of Transport in Ireland is planning to pilot these guidelines while keeping apprised of new developments in terms of research and manufacture of electric charging points.

## **Micro Level**

This is at the department or service level which can consist of elements such as the built and digital environments along with the guidance, training, and toolkits to train and inform frontline staff.

An example of this is the Centre for Excellence in Universal Design's Customer Communications Toolkit for Services to the Public, which previously won a ZeroProject conference award <sup>21</sup>. This toolkit is based on a universal design approach and provides guidance to inform the design, procurement and delivery of customer communications covering spoken, written, digital and sign language which can be accessed, understood, and used to the greatest extent possible by all people, regardless of their age, size, ability, or disability. This has recently been published as a European standard specifically in the area of Transport as outlined below.

## **Implementation at Micro Level**

The development and publication of [EN 17478:2021 Transport Services - Customer communications for passenger transport services - A Universal Design approach](#) presents a useful resource for transport providers in terms of ensuring they are informed of how best to design and implement universally designed communications serving all elements of the "Whole Journey".

Another excellent example in terms of knowledge sharing and capacity building is the Accessible EU Hub<sup>22</sup> to promote better understanding of accessibility thus resulting in more accessible environments, information, and services. The online portal is supported by the 27 national partners as part of the Accessible EU providing resources on universal design and accessibility, in the areas of built environment, transport, information, communication technologies, standards and

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<sup>21</sup> <https://universaldesign.ie/communications-digital/customer-communications-toolkit-a-universal-design-approach>

<sup>22</sup> <https://ec.europa.eu/social/main.jsp?catId=1612&langId=en>

policies. Documents, reports, webinars, in-person events, and news items can be freely accessed by a wide range of people in the public and private sectors.

### **3. Ongoing Concerns of Public Transport Accessibility**

#### **Taking the Whole Journey into Account**

Ensuring accessibility throughout the whole journey is dependent on multiple government agencies and/or transport providers working together to design, deliver and promote a universal designed, integrated, and inclusive service. A fault or lack of consideration at any point in the journey can render transport inaccessible.

The Australian Government in their document: “The Whole Journey: A guide for thinking beyond compliance to create accessible public transport journeys”<sup>23</sup>, details that Whole-of-journey planning is about creating complete, seamless journeys for public transport users which will facilitate journeys from A to B to C and back again. The Australian government details eight key stages, each of which form a part of the journey:

1. Pre-journey planning 2. Journey start to end 3. Public transport stop/station 4. Public transport service 5. Interchange 6. Return journey planning 7. Disruption to business as usual 8. Supporting Infrastructure.

The International Association of Public Transport (UITP - Union Internationale des Transports Publics) published in early 2024 a policy briefing paper intitled “Integrating Walking +Public Transport,” states that despite the interdependency between walking and public transport, the modes are often delivered separately. This can lead to poor walking experiences reducing public transport usage, and increasing car dependency, which negatively impacts people’s health and well-being, social equity, urban and infrastructure resilience, economic vitality and the predictability of our climate. More attention to the integration of walking and public transport is needed in travel surveys, environmental audits, urban mobility plans and investment decisions to enhance both active travel and public transport and reduce the use of private cars. This policy paper also provides recommendations that can increase walking activity and public transport ridership by creating and promoting safe, accessible and comfortable walkable catchments

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<sup>23</sup> <https://www.infrastructure.gov.au/infrastructure-transport-vehicles/transport-accessibility/whole-journey-guide/whole-journey-guide-thinking-beyond-compliance-create-accessible-public-transport-journeys>

to and from public transport stops and stations. The integration of walking and public transport is presented as a key strategy for reducing the use of private cars, reducing carbon emissions and improving the fiscal viability of public transport services while enhancing urban efficiency and liveability.

## **Urban vs Rural Transport**

When considering all transport accessibility concerns detailed in this document, it is important to note that these complexities can be amplified in rural contexts.

Rural environments present a number of challenges <sup>24</sup> which might be more easily addressed or non-existent in more urban environments such as:

- **Demographics:** rural populations tend to have higher proportions of older people <sup>25</sup> and therefore may have more complex mobility difficulties, this can mean an even greater demand for things like wheelchair space on buses, universally designed bus stops, and accessible journey planning information in a number of formats
- **Governance:** lack of joined up thinking with regards to needs of rural communities or rural development policies which don't include public transport considerations
- **Geography:** larger areas to travel and decentralised travel patterns
- **Infrastructure:** because of above factors very car-centric infrastructure which means fewer footpaths or built-up bus stops.

While there are a number of initiatives (such as Demand Responsive Transit (DRT)) <sup>26</sup> and moves to reduce car dependency in rural locations, challenges remain in rolling these out due to the large distances, the smaller populations served and the need for joined-up thinking across a range of local and national governments.

Many accessibility standards, monitoring mechanisms, and guidelines are very much geared towards transport infrastructure in an urban setting. It is important to note that rural environments may require tailored standards and guidelines

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<sup>24</sup> [https://cms.uitp.org/wp/wp-content/uploads/2022/02/Knowledge-Brief-Rural-Mobility\\_FEB2022-web.pdf](https://cms.uitp.org/wp/wp-content/uploads/2022/02/Knowledge-Brief-Rural-Mobility_FEB2022-web.pdf)

<sup>25</sup> <https://www.itf-oecd.org/sites/default/files/docs/innovation-rural-mobility.pdf>

<sup>26</sup> DRT is a hybrid between bus and taxi services, involving flexible routing and scheduling of small- or medium-sized vehicles. DRT services utilise technology to integrate orders and optimise routes: <https://www.itf-oecd.org/sites/default/files/docs/innovation-rural-mobility.pdf>

which take the nature of the rural transport landscape as well as the different infrastructure into account.

## **Maritime and Air Transport**

These two important areas of accessible transport have been paid the same attention as both bus and rail transport. The “Guidelines for Accessible Maritime Passenger Transport”<sup>27</sup> which were developed in Ireland is one example of guidance. However more work needs to be done to bring maritime transport to the same level of accessibility as bus and rail transport. Air transport as already outlined, requires a significant shift to make the service more accessible and user friendly for disabled and older people. Some advancements have been made with the IATA (International Air Transport Association) which represents some 290 airlines comprising 82% of global air traffic in their AGM in 2019 committed to “Airlines Commit to Improve Travel for Passengers with Disabilities”.<sup>28</sup>

## **New Modes of Transport: Shared Mobility - Car Sharing<sup>29</sup>**

Shared transport or shared mobility is a relatively new transportation approach that allows users to access transportation services on an as-needed basis. Shared mobility is an umbrella term that encompasses a variety of transportation modes such as car sharing, bicycle-sharing systems etc. There is a significant gap in that these schemes have not taken on board the accessibility of these modes of transport, to make them/ensure they are available to and usable by disabled people.

## **Interoperability of data**

The role of technology in the ‘Whole Journey’ experience cannot be over-stated. Whether checking the arrival of the next train, or locating available parking spaces suitable for adapted vehicles, the use of mobile apps and websites is now all-prevailing. However, it is frequently necessary to provide information in a variety of modalities to ensure that it can be accessed by all users, and particularly persons with disabilities. For example, whilst a map may be ideal for a user with the requisite amount of vision to look at it, such a presentation would

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<sup>27</sup> <https://assets.gov.ie/19471/60854e81deec4bc5a3f0bfe3211db84c.pdf>

<sup>28</sup> <https://www.iata.org/contentassets/0facd06de56e457b8bc93dbc6ef55f4c/resolution-disabled-pax-agm-2019.pdf>

<sup>29</sup> [https://en.wikipedia.org/wiki/Shared\\_transport](https://en.wikipedia.org/wiki/Shared_transport)

be challenging for someone who is blind. In order, therefore, that access to digital resources is available to everyone, it is of paramount importance that large-scale data sources are designed with interoperability uppermost in mind. The data should be structured to ensure that all information is available, thus ensuring that it can be accessed in various manners and modalities. Promising work on improving the accessibility and interoperability of different modes of transport is being considered at European and international level such as through collaboration between the International Transport Forum (ITF)<sup>30</sup> and Organisation for Economic Co-operation and Development (OECD) on the interoperability for mobility, data models on building a common, connected, and interoperable foundation for the future of mobility.

## **Advancements in Accessibility of Transport Services**

### **EU Disability Card and EU Parking Card**

As mentioned previously in this document, Political agreement was reached by the European Parliament and the European Council on both the EU disability card and EU parking card.

While there will be some limitations and there are some concerns surrounding the transposition and implementation of the EU disability card, there are many advantages such as EU-level information on the benefits of the card, consistency of benefits in terms of accessing public transport, leisure and tourism, and provisions to access support when taking part in EU Mobility Programmes<sup>31</sup>.

In implementing the new EU disability card, Ireland and many other EU States are presented with a number of challenges in terms of harmonising assessment frameworks and introducing a new disability card on National level. This, however, presents real opportunity to improve and update frameworks which are perhaps not fit for purpose, or are based more on medical models of disability rather than social or rights-based models.

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<sup>30</sup> ITF (2023), Mix and MaaS: Data Architecture for Mobility as a Service, International Transport Forum Policy Papers, No. 113, OECD Publishing, Paris. <https://maas-alliance.eu/library/>

<sup>31</sup> [Agreement on the European Disability Card: major advance for freedom of movement - European Disability Forum \(edf-feph.org\)](#)

## **Revisions to rail passenger rights legislation**

Revised passenger rights legislation came into effect in June 2023, supplanting the rules that had been in place since 2007.<sup>32</sup>

In addition to enhancing the rights that increase protection to all passengers when travelling by train, the Rail Passenger Rights Regulation includes specific updated provisions for persons with disabilities. These include; strengthened passenger rights on accessibility of regional and long distance rail services, a halving of the notice period for rail passenger assistance requests from 48 to 24 hours, requirements for provision of assistance at unstaffed rail stations, requirements for training of railway staff, and strengthening of the compensation system for damaged or broken mobility equipment in the context of rail travel.<sup>33</sup>

## **New Technologies: More Accessible Journeys in the future**

The integration of new technologies into our daily lives has ushered in a new era of convenience, efficiency, and innovation. With advancements in technology such as robots are becoming increasingly capable of providing valuable assistance across various aspects of everyday life, fundamentally transforming the way we live, work, and interact. From household chores to healthcare, from manufacturing to entertainment, robotic assistance is leaving an indelible mark on our routines and activities.

A key area of development has been in transport assistance due to staffing cuts leading to the limited availability of assistance in stations and transport hubs, the need to notify passenger assistance in advance, lack of accessible transport information etc. This is where robots can help disabled and older people to navigate autonomously in large infrastructures such as transport stations, airports etc, an example of such a robot is the Watchbot assistant.<sup>34</sup>

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<sup>32</sup> [What's new in the revised Rail Passenger Rights regulation? - European Disability Forum \(edf-feph.org\)](https://www.edf-feph.org/en/what-s-new-in-the-revised-rail-passenger-rights-regulation/)

<sup>33</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0782>

<sup>34</sup> <https://www.star-robotics.com/en/watchbot-assistant/>

## 4. Current Accessibility Legislation and Transport-Summary

### Legislation- Digital Requirements

#### Web Accessibility Directive

The Web Accessibility Directive (Directive (EU) 2016/2102)<sup>35</sup> has been in force since 22 December 2016 and provides people with disabilities with better access to websites and mobile apps of public services <sup>36</sup>.

Under the EU Web Accessibility Directive, public bodies (including public transport providers) must:

- Ensure their websites and mobile apps are procured, developed and maintained to comply with all relevant parts of the harmonised standard EN 301 549 v 3.2.1 “Accessibility requirements for ICT products and services”<sup>37</sup>.
- Maintain an up-to-date Accessibility Statement on a prominent area of the website or link from the mobile app. The Accessibility Statement must contain accurate information on the website’s compliance. It must include contact details for people to request assistance or make a formal complaint in relation to the website’s accessibility.
- Ensure relevant staff are aware of and receive adequate training on web accessibility.

#### European Accessibility Act

Directive (EU) 2019/882 of the European Parliament and of the Council of 17 April 2019 on the accessibility requirements for products and requires that, from 28th June 2025, a range of specified products and services are designed, and where necessary manufactured, to ensure that they are accessible to persons with disabilities.

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<sup>35</sup>

<https://www.legislation.gov.uk/eudr/2016/2102/introduction#:~:text=lt%20sets%20out%20actions%20to,devices%20for%20people%20with%20disabilities.>

<sup>36</sup> <https://digital-strategy.ec.europa.eu/en/policies/web-accessibility>

<sup>37</sup>

[https://www.etsi.org/deliver/etsi\\_en/301500\\_301599/301549/03.02.01\\_60/en\\_301549v030201p.pdf](https://www.etsi.org/deliver/etsi_en/301500_301599/301549/03.02.01_60/en_301549v030201p.pdf)



The directive is known as the European Accessibility Act (EAA)<sup>38</sup>. The EAA focuses mainly on digital products and services, however, the following elements of passenger transport services are covered by the EAA:

- websites
- mobile apps
- electronic tickets and electronic ticketing services
- delivery of transport service information, including real time travel information.

The main focus of the EAA is on digital services and elements of the requirements of the EAA will apply to the physical realm in the transport context as well in the areas of:

- interactive self-service terminals, except those installed as integrated parts of vehicles
- electronic ticketing services
- delivering of transport information.

The EAA sets out accessibility requirements for the built environment. However, implementation of these requirements is devolved to individual Member States, who “may decide, in the light of national conditions, that the built environment used by clients of services covered by this directive shall comply with the accessibility requirements set out in Annex III, in order to maximise their use by persons with disabilities” (Article 4(4)).

While this is not a mandatory aspect of the EAA, consideration should be given to the case where the accessibility of products and/or services requires that the environment in which they are located should also be made accessible. For example, the EAA mandates that payment terminals at ticketing machines must be made accessible. However, the accessible ticketing machine will be rendered useless to persons with disabilities if the built environment in which it is located cannot be accessed by said persons.

It should therefore be noted that the voluntary nature of the built environment requirements under the EAA represents a significant gap in ensuring accessibility throughout the whole of the passenger’s journey.

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<sup>38</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019L0882>

## Legislation- Physical Requirements

Detailed technical (construction) regulations are in place for:

- rail<sup>39</sup>,
- bus,<sup>40 41</sup>
- maritime (sea and inland waterway) – on a very limited basis.<sup>42</sup>

These technical regulations cover aspects of rolling stock (buses, coaches, trains, etc.) in terms of the requirements to the physical infrastructure. Technical standards for rail travel also detail technical requirements for railway stations.

It should be noted that the technical specifications for maritime travel are very limited and only cover in general way, information on board, access between decks and embarking/disembarking in a very general sense.

## Passenger Rights

Passenger rights regulations covering standards of service, rights of redress and complaints and dispute resolution are in place for:

- air<sup>43</sup>,
- rail<sup>44</sup>,
- bus<sup>45</sup>,
- maritime<sup>46</sup>.

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<sup>39</sup> [COMMISSION REGULATION \(EU\) No 1300/2014 - of 18 November 2014 - on the technical specifications for interoperability relating to accessibility of the Union's rail system for persons with disabilities and persons with reduced mobility - \(europa.eu\)](#)

<sup>40</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32001L0085>

<sup>41</sup> <https://unece.org/transport/documents/2021/05/standards/un-regulation-no-107-rev7>

<sup>42</sup> [Directive 2009/45/EC of the European Parliament and of the Council of 6 May 2009 on safety rules and standards for passenger ships \(Recast\)Text with EEA relevance \(europa.eu\)](#)

<sup>43</sup> [eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R1107](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006R1107)

<sup>44</sup> [Regulation - 2021/782 - EN - EUR-Lex \(europa.eu\)](#)

<sup>45</sup> [Regulation \(EU\) No 181/2011 of the European Parliament and of the Council of 16 February 2011 concerning the rights of passengers in bus and coach transport and amending Regulation \(EC\) No 2006/2004Text with EEA relevance \(europa.eu\)](#)

<sup>46</sup> [Regulation \(EU\) No 1177/2010 of the European Parliament and of the Council of 24 November 2010 concerning the rights of passengers when travelling by sea and inland waterway and amending Regulation \(EC\) No 2006/2004 \(europa.eu\)](#)

These passenger rights regulations specify that transport providers establish ‘non-discriminatory access rules’, ensure accessible information is provided to passengers, and assistance requests are easy to access and free of charge. These requirements also set out the timeframe for requesting assistance, that compensation for damage to equipment must be provided for and the establishment of a complaints mechanism.

More detail regarding technical requirements and passenger rights can be found in the report **Accessible EU: Accessible Public Transport in the EU: What the law says and what it means**<sup>47</sup>.

## Current EU Initiatives in Advancing Accessibility in the Public Realm

### AccessibleEU

As detailed above, AccessibleEU is one of the flagship initiatives proposed in the European Commission’s Strategy for the Rights of Persons with Disabilities 2021-2030.

- It is a resource centre on accessibility, working on the areas of built environment, transport, information, communication technologies and policies, to ensure persons with disabilities’ can participate in all areas of life on an equal basis with others.

The purpose of AccessibleEU is to:

- build the capacity on accessibility in EU countries
- support the implementation of the European Union legislation on accessibility
- connect stakeholders responsible for implementing accessibility rules in the EU
- create a common European one-stop-shop on accessibility
- train professionals on accessibility.

Further information is available at the following link: [https://accessible-eu-centre.ec.europa.eu/index\\_en](https://accessible-eu-centre.ec.europa.eu/index_en)

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<sup>47</sup> [https://accessible-eu-centre.ec.europa.eu/accessible-public-transport-eu-what-law-says-and-what-it-means\\_en](https://accessible-eu-centre.ec.europa.eu/accessible-public-transport-eu-what-law-says-and-what-it-means_en)

## Standardisation and Accessibility

Common European accessibility standards<sup>48</sup> have been introduced in order to help remove barriers for people with disabilities and other relevant groups (such as older people).

If buildings and streets are inaccessible to disabled people they cannot access the built environment in the same way that people without disabilities can and are therefore excluded from accessing a wide range of activities and services of public life. Hence, European accessibility standards have been put in place to support implementation of accessibility in the built environment and ICT, and for organisations to adopt a 'Universal Design' approach.

When applied across Member States, these standards also improve the functioning of the internal market, by removing barriers to free movement of goods and services.

The Commission instructed [European standards organisations](#), which include [CEN](#), [CENELEC](#) and [ETSI](#), to develop and implement accessibility standards. These include the following standards covering:

- Mandate 376 [ICT accessibility](#) resulting in European Standard EN 301 549
- [accessibility to the built environment](#), leading to European Standard EN 17210, which is currently in the process of consultation
- Mandate 473 [accessibility following “Design for all” standards](#), resulting in European Standard EN 17161 and [EN 17478:2021 Transport Services - Customer communications for passenger transport services - A Universal Design approach](#)
- Mandate 420 [accessibility of websites and mobile applications](#), updating European Standard EN 301 549.

Key EU legislative instruments (the [Directive on Web Accessibility](#), the [European Accessibility Act](#), the [Public Procurement Directives](#)) refer to the possible use of accessibility standards. The European Commission encourages the participation of all relevant stakeholders in these processes, including persons with disabilities.

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<sup>48</sup> <https://ec.europa.eu/social/main.jsp?catId=1485&langId=en>

## EU Strategy for the Rights of Persons with Disabilities 2021-2030<sup>49</sup>

Key objectives listed in the strategy in relation to Transport are:

- review the passenger rights regulatory framework to include the rights for persons with disabilities and reduced mobility in transport by air, water, bus and coach and in line with the Sustainable and Smart Mobility Strategy<sup>50</sup>;
- launch, an **Inventory of Assets on rail infrastructure**, i.e., of accessible parts of train stations, aiming at identifying the existing obstacles and barriers to accessibility<sup>51</sup>;
- review, the Regulation on Union Guidelines for the development of the **trans-European transport network to strengthen the provision on accessibility**<sup>52</sup>;
- revise, its Urban Mobility Package to strengthen **Sustainable Mobility Planning** which requires Member States to adopt local mobility plans taking into consideration the needs of different groups, including persons with disabilities<sup>53</sup>.

### Key Recommendations

Ensuring the needs and concerns of disabled persons organisations (DPOs), persons with disabilities and older people means that their needs must take precedence in designing a more universally designed, integrated and inclusive transport system.

Therefore, taking a universal design systems approach to enable greater collaboration between European, national, regional authorities and the private sector with disabled and older people is essential to drive change. In order to advance this, it is vital that financial and human resources are provided for

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<sup>49</sup> <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8376&furtherPubs=yes>

<sup>50</sup> Commission Communication (COM(2020)789 final): Sustainable and Smart Mobility Strategy, points 91 and 92, and Annex, actions 63 and 64. The evaluations of the Regulations on air passenger rights for persons with disabilities and reduced mobility and on waterborne and bus and coach passenger rights (2021)

<sup>51</sup> Commission implementing regulation (EU) 2019/77

<sup>52</sup> Regulation (EU) No 1315/2013: Union guidelines for the development of the trans-European transport network; Commission Communication (COM(2020)789 final): Sustainable and Smart Mobility Strategy, point 23 and Annex, action 55

<sup>53</sup> Commission Communication (COM(2020)789 final): point 37, and Annex, action 20

disabled people to be directly involved in the standardisation process which will assist in fully implementing the UNCRPD and the Lecco Declaration.

In addition to ensuring meaningful consultation (including accessible information) is built into the design process across all elements of transport journeys, updating the built environment requirements under the EAA from “optional” to a requirement by EU countries is also recommended. This “optional status” represents a significant gap in ensuring accessibility throughout the whole of the passenger’s journey.

Legislation and standards are useful tools to drive forward accessibility, however there is still a significant gap between requirements and what is delivered on the ground. Key areas such as rural transport as well as air and maritime travel need considerable attention to improve accessibility and ease of use for persons with disabilities and older people.

There remains a lack of understanding across all elements of transport delivery about legal requirements, standards, and best practice. Therefore, it is vital that opportunities for standardisation, harmonisation monitoring, and implementation presented by the roll out of the EU disability card and parking card for persons with disabilities are seized at this juncture.

Data is critical in order crucial to create a stress-free seamless transport system for all. The first key element is advancing the interoperability of information where data can easily be shared between the various transport systems and made available in accessible formats to the customer. The second key element will be the coordination of data gathering across the EU to measure progress as well as barriers to implementation. An example of this would be the integration of the EN 17478:2021 “Transport Services - Customer communications for passenger transport services - A Universal Design approach” a useful resource for transport providers in terms of ensuring transport providers are informed of how best to design and implement universally designed communications serving all elements of the “Whole Journey”.

Ensuring ongoing funding to support capacity building as well as knowledge sharing across the 27 EU countries through the EU Accessible Hub initiative is recommended. This will ensure a consolidated approach across the EU which will complement and support the roll out of the EU disability card and similar initiatives going forward.

Further collaboration between European organisations such as the European Disability Forum (EDF), Age Platform Europe, European Passenger Federation (EPF), European Association of Service Providers for persons with disabilities (EASPD) are vital so that agreed needs and concerns are aligned in order to

advance the accessibility of all transport systems. These needs and concerns can be communicated at European, national and regional levels but also through conferences such as the Transport Research Arena (TRA) that will be held in Budapest in 2026<sup>54</sup>. Key organisers of this biennial transportation conference are the European Commission, European Conference of Transport Research Institutes (ECTRI) (an international non-profit association)<sup>55</sup> and the Forum of European National Highway Research Laboratories (FEHRL)<sup>56</sup>

Embracing, funding and implementing new technologies such as robotic assistants in order to enhance more accessible and user-friendly transport journeys for all but in particular for disabled and older people.

Finally, meaningful collaborative partnerships and increased funding will help to ensure better integration of the needs and concerns of disabled people and older people in the design and implementation process to ensure that they are integral to public transport design and delivery. The current gaps in accessibility stem from the lack of collaboration with disabled people and older people and has fomented a situation wherein the views of disabled people and older people are seen as separate or “other” within society.

In summary, **“there is no beauty in exclusion”**.<sup>57</sup>

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<sup>54</sup> <https://bkk.hu/en/about-bkk/strategy/research-development-and-innovation/tra2026/>

<sup>55</sup> <https://www.ectri.org/about-ectri/>

<sup>56</sup> <https://www.fehrl.org/>

<sup>57</sup> <https://uia2023cph.org/wp-content/uploads/2024/01/UIA-World-Congress-of-Architects-Copenhagen-2023-Report.pdf>