STUDY

Requested by the TRAN committee

European Parliament

Research for TRAN Committee - Transport and tourism for persons with disabilities and persons with reduced mobility

ANNEX

Policy Department for Structural and Cohesion Policies
Directorate General for Internal Policies of the Union
PE 617.465 - May 2018

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DIRECTORATE-GENERAL FOR INTERNAL POLICIES

Policy Department for Structural and Cohesion Policies

TRANSPORT AND TOURISM

Research for TRAN Committee - Transport and tourism for persons with disabilities and persons with reduced mobility

ANNEX

Abstract

This study has undertaken literature reviews, user and experts' questionnaires, interviews and workshop surveys, analysis of EU legislation, SWOT and Multi-Criteria Analysis, identification of best practices and analyses of case studies. This has led to a mapping of accessibility across the EU Member States (identifying relevant state clusters) for three different sectors: local transport, long-distance transport, and tourism. Specific policies, research priorities and recommendations are made per state clusters and for the EU, which can enhance accessibility in each of the three sectors.

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This document was requested by the European Parliament's Committee on Transport and Tourism.

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SUMMARY

Background...

Evidence from the EU Agency for Fundamental Rights consistently demonstrates that persons with disabilities face discrimination and barriers to exercising their rights on an equal basis with others. This is despite the fact that, in the EU, persons with reduced mobility (PRMs), whether caused by disability, age or any other factor, are accorded the same rights as all citizens to free movement, freedom of choice and non-discrimination. Against this background, this study examines the problems of accessibility in transportation and tourism, covering the EU as a whole and providing relevant analysis from a number of individual EU Member States.

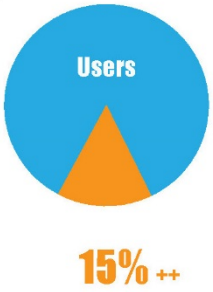
Aim...

The aim of this study is to provide Members of the European Parliament's Committee on Transport and Tourism (TRAN) with clear recommendations on what could be done, in particular at the EU policy level, to support accessibility in the transport and tourism sectors. The distinction is made in this study between: local transport, long-distance transport and tourism.

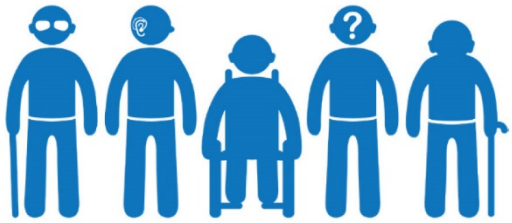
Meet the Users...

The sector

The users



The Market



- Only 9% of touristic services provide accessible offers.
- Accessible tourism market value could be much higher (44% more), if more accessible offers were in place.
- Current market value of accessible travel and tourism is €394 billion.

The missed opportunity

- Potential of €142 billion annual expansion and 3,4 million more jobs.
- Potential of touristic period elongation through special packages for seniors and travellers with disabilities.
- Accessible transport and tourism constitute an enhancement of Quality of Service (QoS) for all travellers.

Design and sources...

The work has been organised around 2 axes:

1) The areas under examination, namely local transport, long-distance transport and tourism; and
2) The 3 distinct cross-cutting phases, namely Description, Assessment and Recommendations.

Realised through:

- More than 100 literature sources analysis.
- 23 experts and 36 user representatives' questionnaire feedback from 16 countries.
- NEBs input from 17 countries.
- 16 user representatives' interviews from 10 countries.
- 15 own experts.
- 3 workshops with 38 participants.
- 90 best practices (43 for local transport, 19 for long-distance transport and 24 for tourism) and case studies (5 for each area) from over 17 EU states and other countries (Australia, Norway, the USA).
- SWOT analysis performed in all 3 sectors.
- MAMCA (Multi-Criteria Analysis) on user needs prioritisation.

Results:

- Clustering of EU Member States in "models" according to their local transport, long-distance transport and tourism accessibility status, legislation and plans.
- Mapping of local transport, long-distance transport and tourism accessibility across all EU Member States and the European legislation.
- Recommendations on all three areas for all country clusters.
- EU Policy level recommendations for local transport (4), long-distance transport (5) and tourism (4).
- Research priorities recommendations for local transport (4), long-distance transport (3) and tourism (4).

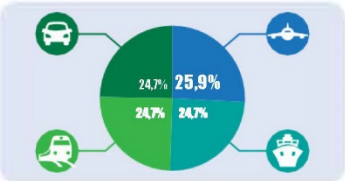
The EU legal Framework...

Relevant EU regulations, standards and initiatives, have been thoroughly surveyed, including:

- Air: Regulations (EU) No 1107/2006 and 261/2004
- Rail: Regulations (EU) No 1371/2007, 454/2011, 1300/2014 and 2016/797
- Maritime and Inland Waterways: Directive 98/18/EC, Regulation (EU) No 2008/ 0816 and Regulation (EU) No 1177/2010
- Road: Regulation (EU) No 181/2011 (for Bus and Coaches)
- Multimodal: ITS 2010/40 (missing a relevant Directive)
- Tourism: EU Preparatory Action on Accessible Tourism for All

For each one of those, detailed recommendations are drawn.

20 National Enforcement Bodies (NEBs) from 17 EU states, covering all transportation modes, have provided feedback on their national situation as shown below.

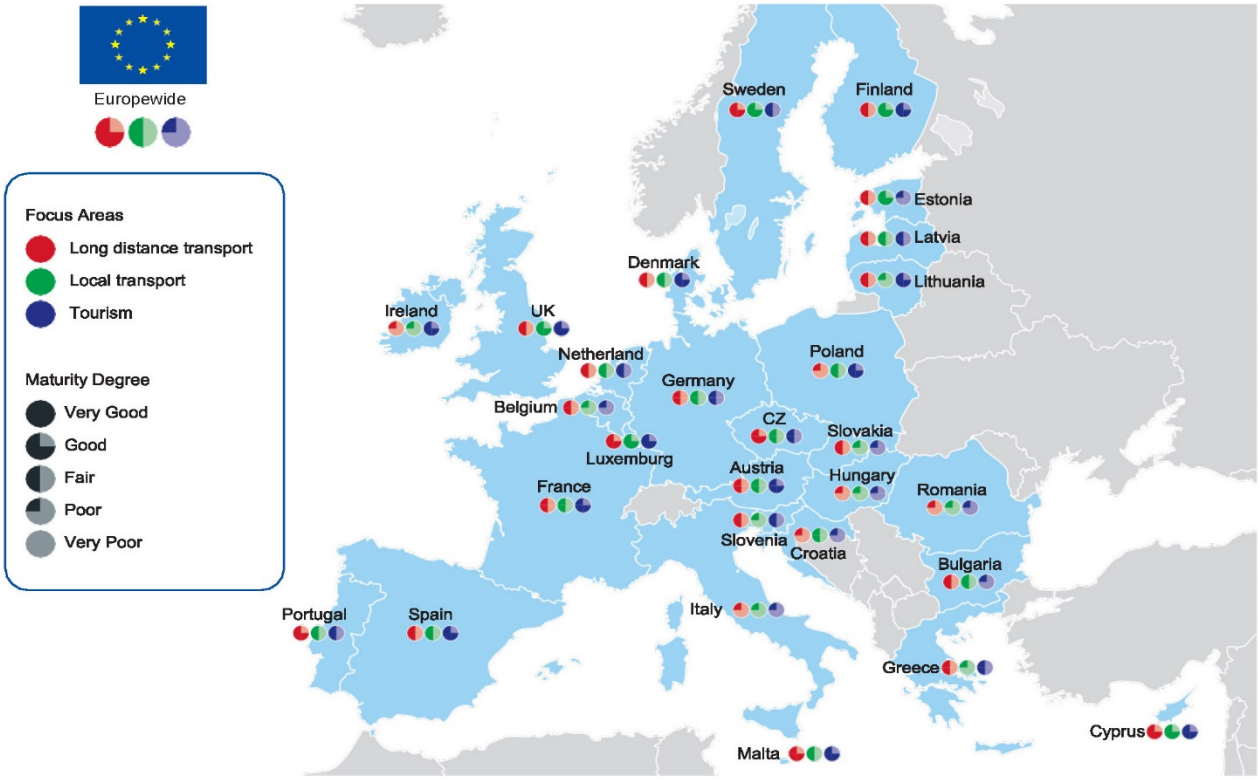


The NEBs estimated that they receive, on average, 736 complaints from air passengers annually, 26 concerning maritime transport, 421 regarding the rail and 201 from the road ones. From them, only 1% of the complaints came from persons with disabilities and persons with reduced mobility. Nearly half of the NEBs (44%) admitted that most passengers, as well as the public in general, are not sufficiently aware of the existence and role of NEBs. From the users' point of view, the majority of participants that replied to the relevant questionnaire of this study (59%) also stated that they are not aware of the relevant national enforcement bodies (NEBs) that could help them with the enforcement of their rights.

Accessibility across Europe...

The accessibility of the local and long-distance transport, as well as tourism, of each EU Member State has been evaluated and the various states have been clustered into respective "models".

The relevant qualitatively assessed accessibility status of each EU Member State and the EU is graphically depicted below.



Main barriers...

The main needs recognised per area, are briefly summarised below:

Local Transport

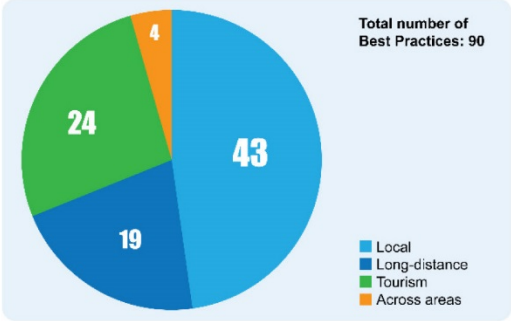
- No accessible info on local transport in accessible format that is concise and reliable.
- Low use of mobile apps and social media for it.
- Low accessibility in suburb and rural areas.
- Significant barriers in interchanges and intermodal hubs.
- Low number/frequency of accessible city buses.

Long-distance Transport

- Slow implementation of relevant regulations.
- Need for more mobile ramps at stations.
- Need for better maintenance of accessible equipment. Replacement if redundant.
- Need for incentives and policies to push operators to go beyond minimum legal requirements.
- Staff training and behavioural issues constitute a barrier.
- Need for accessible infomobility service tools (including cross-border and multimodal transport).
- More emphasis on use of modern Information & Communication Technology (ICT) for accessible ticketing replacement.

Tourism

- Access accessibility at the overall destination, not only in individual services.
- Top down tourism accessibility policy pays off.
- Lack of strong business case remains a major barrier.
- Individual Accessibility Information Schemes (AIS) lack harmonisation and reliability.
- Staff knowledge and information is also a key barrier.
- Lack of accessible experiences, attractions and recreation opportunities.
- Conferences and events accessibility promote overall destination accessibility.



90 best practices and 15 case studies (5 per area) have been analysed and are presented within this study.

Key recommendations...

The main policy and research recommendations per area, are briefly summarised below:

Generic (G) & Research (R)

G1. Develop an "EU Access Board" or European Agency (like the one in the USA).
G2. Support of at least WACAG 2.0 accessibility level of the websites and apps.
R1. Research on a standardised clustering of disabilities for accessible transport and tourism.
R2. Research on the economic impact of substantially higher accessibility levels.

Local Transport (LO)

LO-N1: "Front-runners" to focus on overall state coverage of services, including rural and suburban areas.
LO-N2: "Gap of implementation" EU Member States to consider innovative business models to finance accessibility.
LO-N3: "Late-starters" to push awareness campaigns higher up the political agenda.
LO-E1: Standardise, in an accessible format, information on local transport accessibility across EU Member States.
LO-E2: At least 1/3 of local transport vehicles to be accessible. This should be included as quota at relevant future public procurements.
LO-E3: Harmonise local transport training staff across the EU.
LO-E4: Extend Regulation (EU) No 181/2011 to all bus and coach services, including local ones.
LO-R1: Research on holistic tools for accessibility inclusion in Sustainable Urban Mobility Plans (SUMPs).
LO-R2: Research on accessibility in relation to autonomous vehicles.
LO-R3: Research on accessibility of emerging Mobility-as-a-Service (MaaS) schemes.
LO-R4: Research on epayment/mpayment and contactless Information Technology Services (ITS) use for personalised accessibility.

Long-distance Transport (LD)

LD-N1: "Front-runners" to implement transport staff life-long training in accessibility nationwide and for all modes.
LD-N2: "Gap of implementation" EU Member States to adopt realistic targets and prioritise implementation in a modular manner.
LD-N3: "Late-starters" to regulate accessibility through national act and implementation plan for all modes.
LD-E1: Specify better safety reasons behind denial of carriage in the air sector and, if applied, the cost to be borne by the airline.
LD-E2: Reduce the maximum notice period to book assistance in the rail sector.
LD-E3: Define guidelines for staff training and include it in regulations for all modes.
LD-E4: Adopt a multimodal passengers' rights regulation.
LD-E5: Denominate an "accessibility coordinator" in multimodal terminals.
LD-R1: Provide personalised information for the required transport mode interchange time for each PRM group, according to mobility pace, speed and restrictions.
LD-R2: Research cost-efficient accessibility for domestic waterborne excursion vessels.
LD-R3: Integrate the many digital tools across EU Member States on long-distance transport accessibility information.

Tourism (TO)

TO-N1: All EU Member States to develop statistics on national accessible tourism offer and demand.
TO-N2: "Front-runners" to consolidate actions to cover the whole territory.
TO-N3: "Improvers" and "late-starters" to liaise with "front-runners" to transfer know-how.
TO-E1: Accessible tourism market to be included in Eurostat statistics.
TO-E2: Return on Investment (RoI) of accessible tourism to be populated with "hard data" and business cases at European level.
TO-E3: Develop or adopt a common EU label on accessible tourism.
TO-E4: Promote the European "Accessible Tourism Directory" database.
TO-R1: Research on barriers to small and medium-sized enterprises (SMEs) business development.
TO-R2: Research on communication channels for SMEs business advice and support.
TO-R3: Research on key communication channels to convince SMEs to invest in accessibility.
TO-R4: Research on possibilities of using Artificial Intelligence (AI), Robotics, Environmental Sensing and other new technologies and applications.

2 ANNEX 2: EU-28 NATIONAL ACCESSIBILITY LEGISLATION AND THE TOURISM SECTOR

This ANNEX is based on the original Annex 2 of the Study: "Mapping and Performance Check of the Supply of Accessible Tourism Services" (prepared by VVA and ENAT, 2015 and updated in December 2017).

(European Commission 220/PP/ENT/PPA/12/6491)

2.1 EU-28 National accessibility legislation regarding the tourism sector

Table 1: EU 28: National legislation for tourism accessibility

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
International	UN Convention on the Rights of People with Disabilities, 2007.	The European Union signed the UNCRPD on 30.3.2007 and ratified the Convention on 23.12.2010. The UNCRPD contains several Articles addressing accessibility and access to the built environment, culture, leisure and sport… (etc.) with relevance to the tourism sector. The international Reference Standard for design and construction of accessible buildings is: ISO 21542:2011 Building Construction: Accessibility and Usability of the Built Environment.	ISO 21542:2011
Austria	Federal Disability Equality Act, 2006.	OIB guidelines (2007)1 (Oesterreichisches Institut fuer Bautechnik)-binding in four regions. The ÖNORM B1603 refers to "Barrier free buildings for tourism-Design principles" Barrierefreie Tourismuseinrichtungen-Planungsgrundlagen, ÖNORM B 1603: 2005 02 01 (is currently being revised, 2014). Not all provinces have put the B1600 and other standards into their legislation.	A-Standards B1600ff
Belgium: Flemish Region **Brussels Metropolitan Region**	• Decree of 10 July 2008 (a framework for the Flemish policy on equal opportunities and equal treatment). • Article 8 of the Decree of 06 April 1995 (the integration of people with disabilities).	• The Flemish Decree of June 5, 2009: regional urban development regulation concerning the accessibility of public buildings. • Regionally Urban Development Regulation and the Decree of May 28, 2009.	

[1] http://www.oib.or.at/veroeff.htm#richtlinien

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
Walloon Region	• Decree of 6 November, 2008 against certain forms of discrimination, as amended by the Decree of 19 March, 2009.	• Walloon Code (1995) of Land Management, Urban Planning, Heritage and Energy (CWATUPE) (article 414 and article 415 guarantee the accessibility to public and private buildings).	
Bulgaria	Anti-discrimination Act passed in 2003 transposing the EU Equality Directives (43/2000/EC, 78/2000/EC, 75/117/ECR, 97/80/EC, 76/207/ECR).	Regional Development Act (requires access to the built environment for PwD) - Regulation 4 of 2009 on accessibility contains all standards that make the built environment accessible.	
Croatia	• The law on Croatian Citizenship (1991). • Declaration on the Rights of Disabled Persons in 2005 (Official Gazette 47/2005).	The law on Physical Planning and Construction (Official Gazette 76/07, 38/09, 55/11, 90/11, 50/12) gives the ground to a Rulebook on ensuring accessibility of buildings[2] to persons with disabilities and reduced mobility (Official Gazette 78/13)[3].	
Cyprus	Persons with Disabilities laws 2000-2007.	• Streets and Buildings law of 1999 - Chapter 96 and Regulations (Regulation 61 H) – Regulation on Access for Disabled People in Buildings[4]. • Hotels and Tourist Accommodation Regulations 1985-2005 - Regulation 47A-Facilities for persons with disabilities[5].	Technical Guide for hotel businesses from CTO[6].

[2] "Public and business buildings in the Rulebook are buildings for trade, hotel/restaurant and/or tourist purposes"
[3] http://narodne-novine.nn.hr/clanci/sluzbeni/2013_06_78_1615.html
[4] http://prosvasi.blogspot.com/
[5] http://www.visitcyprus.com/media/b2b_gr/Tourism_Services/Accommodation/Oi_peri_Xenodoxeion_kai_Touristikon_Katalymaton_Genikoi_Kanonismoi_tou_1985_kai_tou_2005.pdf
[6] http://www.visitcyprus.biz/wps/portal/b2b/!ut/p/c5/hc0xD4IwFATgn_SOtrY41gBCDBBLUGQhHYipEXAw_n6rLjqA741f7o5a8j_ahzvbu5tGe6WGWtnFidZVJhi2O3CwpJI630cMgPfTl4eF2oCtTcCNSllZs590GdVezaHKuZQBxIqOrz3ZYeY0Pj7TH6plf8vecz_5EFFOg093YYGLruIJ9ILCRE!/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfRUZBQVNJNDIwT05GNDAyVFVQMjk5VjMwNjY!/?WCM_GLOBAL_CONTEXT=/b2b_greek__el/b2b/generic/protypa_odigos_gia_atoma_me_anapiries?contentIDR=f56d910047276888a890b874f712794b&useDefaultText=1&useDefaultDesc=0

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
Czech Republic	Act No. 198/2009 Coll., on Equal Treatment and on Legal Means of Protection against Discrimination.	• Decree No. 398/2009 Coll. on General Technical Requirements for Barrier-Free Usage of Constructions. • Decree No. 499/2006 Coll. on Building Documentation presents solutions for all buildings in terms of their barrier-free accessibility and usage. • Act No. 183/2006 Coll, Building Act (stavební zákon) (acknowledges that barrier-free environment is in the public interest). • Edict No. 501/2006 Coll. sets conditions for designing barrier-free public areas.	
Denmark	Motion B 43 on equal treatment and equality between person with disabilities and persons without disabilities (1993).	Building regulation ("Anvisning om bygningsreglement 2010", 4th Edition, 2014). SBI-Guidance document from the Danish Building Research Institute)[7].	Danish Standard 3028:2001 Accessibility for All
Estonia	• Social Welfare Act (1995). • Equal Treatment Act of 23 December 2008.	• Building Act8 (requires accessibility to buildings in public use). • The Decree of the Minister of Economics and Communication No.14 from 28 November 2002 (specific requirements to facilitate access to buildings).	
Finland	Non-Discrimination Act (21/2004) (does not include requirement for accessibility to the built environment)	• Land Use and Building Decree (895/1999)[9]-Section 53 says that buildings must ensure accessibility. • Finnish Building Code (2004)[10], sections F1 Barrier-free Building, F2 Safety in use of buildings and G1 Housing design.	

[7] SBi http://anvisninger.dk/Publikationer/Sider/Anvisning-om-Bygningsreglement-2010.aspx also refers to Foreningen for Tilgængelighed – an association which issues a label and provides an accessibility information system for public and private buidlings including tourism venues (www.godadgang.dk).
[8] http://www.legaltext.ee/et/andmebaas/tekst.asp?loc=text&dok=X50072K2&keel=en&pg=1&ptyyp=RT&tyyp=X&query=Ehitusseadus
[9] http://www.finlex.fi/en/laki/kaannokset/1999/en19990895.pdf
[10] http://www.ymparisto.fi/default.asp?contentid=68171&lan=en

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
France	Law n° 2005-102 of 11 February 2005 for equal rights and opportunities, participation and citizenship of disabled persons.	Law n° 2005-102 of 11 February 2005 - Chapitre III: Built environment, transports and new technologies. Deadlines for implementation are given in Chapter III "Building, Transports and New Technologies " (articles 41 to 54): 2011 for the accessibility to prefectures, public tertiary education facilities, and State web sites; 2012 for territorial authorities web sites; 1.1.2015 for public and private buildings open to the public and transport services (RO p. 9). The 2015 deadline has been delayed in 2014, as it cannot be reached in time.	AFNOR Standards
Germany	Disability Equality Act [Gesetz zur Gleichstellung behinderter Menschen-Behindertengleichstellungsgesetz, BGG]-at the national level that public buildings have to be accessible (section 8 paragraph 1) 16 Acts on Equal Opportunities of the Länder, (Federal Equal Opportunities Act, 2002)	• 2005: the target agreement for the German Hotel and Restaurant Association (DEHOGA) Accessibility in the hospitality industry and various DIN standards. • 2011-2013: the project "Development and marketing of accessible products and services offered in terms of a Tourism for All in Germany" resulted in a Tourism Information Standard. • Section 55 Building Regulation of North Rhine-Westphalia is one of 16 examples of an accessibility regulation at the federal level[11].	Construction of accessible buildings [Barrierefreies Bauen] - Design principles - Part 1: Publicly accessible buildings; standard NA 005-01-11 AA
Greece	Greek Constitution establishes the principle of equality among all Greek citizens (article 4). Article 21 (fundamental rights of disabled people)	• Law: General Building Regulations 2831/2000 art.28. Ministry of Environment, Planning and Public Works. Special arrangements for people with special needs. Amendment of Law about General Building Regulations no. 1577/1985. • Law 4067/2012: New Building Regulations[12]	

[11] https://recht.nrw.de/lmi/owa/br_bes_text?anw_nr=2&gld_nr=2&ugl_nr=232&bes_id=4883&aufgehoben=N&menu=1&sg=0#det241837
[12] http://www.hellenicparliament.gr/Nomothetiko-Ergo/Anazitisi-Nomothetikou-Ergou?law_id=3dc4f0f3-36b8-4431-92d2-4ade78c39705

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
		• Greek Accessibility Guidelines (for the autonomous movement and living of people with disabilities)[13]. • Presidential Decree 43, Government Gazette No. 43/7-3-2002 Classification of main hotel types, in categories (star system) and their technical requirements, pages 449-772. Ministry of Development. • Ministry of Transport and Communications, Presidential Decree 79/2004. Defining the conditions and requirements for establishing and operating bus stations and terminals (infrastructure) for long-distance buses and other vehicles. • Law 4199/2013 (article 106) amendment of law 4070/2012 (A΄ 82) and • Law 3534/2007: Special license permit for fixed price taxi services for disabled passengers.	
Hungary (Updated 2017)	• Act XXVI of 1998 on the rights and equal opportunities of persons with disabilities: this act is secure the rights for wheel-chair accessibility, perceptible and safe built environment. • Act CXXV of 2003 on equal treatment and on the promotion of equal opportunities. • Act of XCII of 2007- Announcement of Convention	• Government Decree 253/1997 (XII.20) on National Requirements of Spatial Planning and Building. • Act LXXXVIII of 1997 on the formation and protection of the built environment (general).	

[13] http://www.minenv.gr/1/16/162/16203/g1620300.html

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
	on the Rights of Persons with disabilities: obligate the states to secure the access to sports, recreation and tourism for the people with disabilities. • National Disability Programme 2015-2025: Establish the need for refreshing and progressing the opportunities in tourism in favour of disabled people.		
Ireland	Equal Status Acts (ESA) 2000 to 2012 are the principal pieces of anti-discrimination law in Ireland.	• Building Control Act 1990 requires safe and independent access to building by PwD. • Part M of the Building Regulations Building Control Act 1990 (last update 2010)[14].	
Italy	Law 104/92 ("Framework law for assistance, social integration and rights of the handicapped").	• Law 9 January 1989, n. 13. "Regulation to support the overcoming and the elimination of architectural barriers in private buildings." • Legislative Decree-Ministry of Public Works 14 June 1989, n. 236 "Technical prescriptions to guarantee accessibility, and adaptability of private and assisted residential buildings for the overcoming and elimination of architectural barriers." • Decree of the President of Italian Republic 24 July 1996, n. 503: Rules for the elimination of architectural barriers in public buildings, public environment and facilities. Decree 114 of the Ministry for Arts and Culture of 16 May	

[14] http://www.environ.ie/en/Publications/DevelopmentandHousing/BuildingStandards/FileDownLoad,24773,en.pdf

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
		2008: Guidelines for the elimination of architectural barriers in places of cultural interest.	
Latvia	Article 91 of the Constitution (Satversme) Concept 'Equal Opportunities for All' (Cabinet of Ministers, 1998) was intended to create equal opportunities for people with disabilities etc.	• Construction law (1995) (construction has to ensure the accessibility of the environment). • Regulations of the Cabinet of Ministers No.112-Regulations on the Design of One-Level Parking places (2002). • Regulations No.567 of the Cabinet of Ministers. • Regulation on Latvian Building Code LBN 208-08. • Public Buildings and Structures (2008) (provides ensuring requirements of physical accessibility in public buildings). • Regulation on Latvian Building Code LBN 211-08 on Multi-storey Multi-Apartment Residential Buildings (2009)[15] (requirements if accessible apartments are to be anticipated). • Standard LBN 209-09 "Low-rise residential buildings"[16].	Standard LBN 209-09 "Low-rise residential buildings".
Lithuania	• Law of Equal Treatment (IX-1826 of 18 November 2003) (not requiring accessibility of the buildings). • Law on Social Integration of the Disabled (1991)-requires access to built environment.	• Law on Construction ((Official Gazette) [Valstybės žinios] No 32-788, 1996; No 101-3597, 2001)-buildings need to be designed to accommodate the needs of PwD. • Technical Building Regulation requirements (Art.2.03.01:2001 of 19 March 2002)[17]-binding rules for residential and other buildings in connection to accessibility. • Annex 8 of Technical Requirements STR 1.05.06:2010 Building design ((Official Gazette) [Valstybės žinios] No 4-80, 2005; No 115-5902, 2010) – specific provisions in regard to accessibility.	

[15] http://www.likumi.lv/doc.php?id=187528&from=off
[16] http://www.likumi.lv/doc.php?id=197624&from=off
[17] http://www.spec.lt/index.php?cid=774

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
Luxembourg	Action Plan in favour of Persons with Disabilities (Plan d'action en faveur des personnes handicapées) published in 1997	• National Accessibility Acts of 2001 and 2008 (Règlement Grand-Ducal sur l'accessibilité des lieux ouverts au public)[18]- series of accessibility criteria. • National accessibility guide (Guide des Normes 20020)[19]- explanation of detailed requirements.	
Malta	Equal Opportunities (Persons with Disability) Act (Chapter 413)	Access for All Design Guidelines (2011)[20] – Part for the accessibility of the hotels[21].	
Netherlands	General Act on Equal Treatment [Algemene wet gelijke behandeling behandeling] (1994) based in the Constitutuion (1983).	The Building Code 2012[22] - compulsory accessibility requirements.	Design code NEN 1814
Poland	• Charter of Rights for Persons with Disabilities, approved by the Parliament (Sejm) 15 on 1 August 1997 (M.P. 1997, No. 50, item 475). • Act on Equal Treatment (2010).	• Law on Construction (1994)[23]. • Ministry of Infrastructure Regulation of 12 April 2002 on technical standards (OJ 2001, No. 75, item 690)24 - more specific requirements in regard to accessibility.	

[18] http://www.legilux.public.lu/leg/a/archives/2008/0040/a040.pdf
[19] http://www.mfi.public.lu/publications/Handicap/GuidedesNormes_brochure_FR.pdf
[20] http://www.knpd.org/pubs/pdf/AADGJune2012.pdf
[21] http://www.knpd.org/pubs/pdf/Revised%20Guidelines_Hotels.pdf
[22] http://www.rijksoverheid.nl/documenten-en-publicaties/besluiten/2012/01/19/bouwbesluit-2012-doorlopende-tekst.html
[23] http://isap.sejm.gov.pl/DetailsServlet?id=WDU19940890414
[24] http://www.snb.org.pl/pliki/ujednolicone_WT_2013.pdf

COUNTRY	ACT ESTABLISHING EQUAL RIGHTS FOR PWD ON NATIONAL LEVEL	LEGISLATION REGARDING ACCESSIBILITY FOR PERSONS WITH DISABILITIES TO THE BUILT ENVIRONMENT	STANDARDS, GUIDELINES
Portugal (Updated 2017)	• Constitution of the Portuguese Republic. • (Article 71 affirms the equal rights of persons with disabilities). • Law 38/2004, of 18 August- Legal System for Prevention, Habilitation, Rehabilitation and Participation of the Disabled Persons.	• Decree-Law 163/200625-defines the accessibility standards for buildings, public spaces, shops, tourism facilities, etc.. • Accessibility and mobility for all [Acessibilidade e mobilidade para todos]26 - the technical accessibility standards (only applicable to some parts of the construction). • The legislative framework for installation and operation of tourism enterprises, in the strict sense, is, in essence, set out by the Decree-law nº 39/2008, March 7. It is a fundamental law in the process of installation of tourist developments because it introduces various specialties for the Legal Regime of Urbanisation and Construction. That diploma, along with the complementary legislation, also establishes the rules for the installation and operation of tourism enterprises in their various types and groups. Portaria (Order-in-Council) 327/2008, April 8 establishes the specific requirements for the setting up, grading and working of Hotels, Holiday villages, and Tourist apartments. Portaria (Order-in-Council) 518/2008, June 25. Particulars required to draw up applications in respect of urbanisation operations to the provisions of the urbanisation and construction legislation. • A new Portuguese Standard on Accessible Tourism facilities was issued in May 2014, Publicação da NP 4523/2014 Turismo Acessivel em Estabelecimentos Hoteleiros. • "All for All" National support programme for Accessible Tourism, (2016-2017). Turismo de Portugal.	NP 4523/2014. Turismo Acessivel em Estabelecimentos Hoteleiros.

[25] http://www.inr.pt/bibliopac/diplomas/dl_163_2006.htm
[26] http://www.inr.pt/uploads/docs/acessibilidade/GuiaAcessEmobi.pdf

2.2 Description of legislative framework per EU Member State

Austria

According to alternative report on the implementation of the UN Convention on the Rights of Persons with Disabilities in Austria, published by Austrian National Council of Persons with Disabilities (OEAR), Austria has no regulations on regional development concerning housing or land use planning. OEAR also considers that regulations addressing structural accessibility in construction laws are not organised in a standardised form neither are considered sufficiently. Austrian Standard B1600ff regulates the standards for accessibility, however they have not been taken into consideration in the existing building laws and they are not binding. Non-structural measures that address needs of persons with sensory impairments and intellectual disabilities are not addressed sufficiently in public buildings, even though the requirements are a part of the A-Standards B1600ff[27]. With the exception of the federal buildings, 9 existing provinces in Austria have 9 different laws that deal with the issue of accessibility in several manners with regard to standard and quality. Austrian Institute for Structural Engineering (Oesterreichisches Institut fuer Bautechnik-OIB) developed Standard Guidelines on accessibility for planning and building in 2007, as a result of an Austrian Parliament resolution requesting the Minister of Social Affairs to negotiate with the provinces on harmonisation of accessibility requirements in the building and planning laws in 2005. Even though, all the provinces agreed on the OIB guidelines, only 5 of the provinces (Vienna, Vorarlberg, Tyrol, Steiermark and Burgenland) had adopted it by 2012[28]. The OEAR states that the OIB guidelines have been declared to be mandatory in 4 of the provinces; furthermore they see them only as "inadequate guidelines" on the number of accessible apartments in one complex since only few provisions from the Austrian Standard B1600 are incorporated in them. The number of accessible accommodation units in hotels and similar establishments is not mentioned[29].

Belgium

Belgium is geographically divided in 3 regions: Flemish Region, Brussels Metropolitan Region and Walloon Region. There are few national law addressing building and construction, since the matter in question is regulated on the regional level. In regard to sustainability topics, only fire resistance and energy performance are regulated by national law, other topics are voluntary and no regulation in regard to sustainability (including accessibility) applies to existing buildings. System of building quality control is grounded in the Civil Code, where building permits are issued by local authorities, but there is no control on general technical compliance. This control is carried out by private insurance companies (on voluntary basis)[30]. The accessibility concerning public buildings is regulated by Decree of June 5, 2009 in the Flemish region and by the Decree of May 28, 2009 in the Brussels Metropolitan Region, where Regionally Urban Development Regulation sets rules regarding adaptation of public spaces. The access to all buildings for PwD is ensured by Walloon Code (1995) of Land Management, Urban Planning, Heritage and Energy (CWATUPE) in the Walloon region (Academic Network of European Disability Experts, 2012). All 3 regions are involved in several initiatives and projects aiming to make town and cities more accessible (form inventory of accessibility of built environment, parks, wellness facilities etc. in Flemish region, to program of specific initiatives with the purpose to fund projects regarding accessibility in Walloon region etc.). Decree of July 9, 2010 establishes the reasonable accommodation notion[31].

[27] Austrian National council of persons with disabilities (OEAR), 2013.
[28] (Academic Network of European Disability Experts, 2012)
[29] ENAT National Expert and Austrian National council of persons with disabilities (OEAR), 2013
[30] PRC Bouwcentrum International and Delft University of Technology, 2011.
[31] ENAT National Expert and Ministry of Social Affairs, Public Health and Environment: Conseil Supérieur National des Personnes Handicapées, 2011.

Bulgaria

Construction regulations in Bulgaria are set by government and implemented by municipalities or private entities (licensed by the Minister of Regional Development and Public Works) depending on the type of construction. The Territorial Development Act is regulating construction area, while Ordinances are issued to strengthen this Act by giving more specific requirements on construction works. Many topics regarding construction have background in the EU directives (among which also the accessibility to buildings for PwD, which is regulated on the national level). Technical aspects of construction plans (where the requirements regarding accessibility fit) are checked more thoroughly than other aspects such as economic, ecological and social quality. If the object under construction does not satisfy the standards, the building process is stopped until non-compliances are resolved[32]. Accessibility to the built environment has been addressed in the Anti-discrimination Act (2003), where construction of inaccessible building is declared as discrimination. Legal ground for full accessibility of the built environment is laid down in Regional Development Act, where Regulation 4 (2009) establishes all requirements that make the built environment accessible. There is no official data on the accessibility of the environment; even though it has been recognised that majority of the urban environment is not accessible[33].

Croatia

The Law on Physical Planning and Construction (Official Gazette 76/07, 38/09, 55/11, 90/11, 50/12) gives the ground to a Rulebook on ensuring accessibility of buildings to persons with disabilities and reduced mobility (Official Gazette 78/13). The requirements in the Rulebook are applicable to public, as well as to residential buildings. The building control is provisioned from the design of the building to construction and maintenance and sanctions for non-compliance are foreseen for all the parties involved in construction that are somehow involved in breaching the requirements. In 2004 a "Project for solving facility accessibility for persons with disabilities" was started by Ministry of Family, Veterans' Affairs and Intergenerational Solidarity, co-funded by the government. The funds were granted to local self-administration unit(s) and regional self-administration unit(s). Apart ensuring the accessibility to public building, the project has been including also other facilities (town pools and baths, pavements in streets, tactile warning strips, traffic lights with audible signalisation etc). The state has the obligation to ensure funds for removal of construction and other barriers under the National Strategy of Equalisation of Opportunities for Persons with Disabilities 2007-2015[34].

Cyprus

In the first report of Cyprus for the implementation of the UN Convention on the Rights of Persons with Disabilities, the Department for Social Inclusion of Persons with Disabilities states that there are still significant barriers in access to the built environment for the persons with disabilities mainly because of inadequate enforcement of legislation on accessibility by the relevant local authorities. The legislation that warrants the access to the PwD to the built environment is "Streets and Buildings Law - Chapter 96 and Regulations (Regulation 61 H)", which is currently under revision, in order to set higher standards for the requirements in the design of roads and buildings. Despite the mandatory provision that all public buildings must become accessible (no timeframe for the implementation of the Regulation 61 H for buildings[35]), the Department for Social Inclusion of Persons with

[32] PRC Bouwcentrum International and Delft University of Technology, 2011.
[33] ENAT National Expert and Academic Network of European Disability Experts, 2012.
[34] ENAT National Expert and Committee for Persons with Disabilities of the Government of the Republic of Croatia, 2011.
[35] Academic Network of European Disability Experts, 2012.

Disabilities of Cyprus finds that implementation of the provisions of the law for the buildings built before the Regulation 61 H is weak. In the process of issuing the building permit, the documents concerning the building certificate have to comply with the requirements set in the Regulation 61 H. Architectural plans of hotels that provide infrastructure for persons with disabilities in the context of the "Hotels and Tourist Accommodation Regulations 1985-2005 - Regulation 47A - Facilities for persons with disabilities" are approved by Cyprus Tourism Organisation (CTO). For premises that wish to improve or expand their infrastructure, the CTO has created a Technical Guide containing technical specifications, criteria and best practices and they also maintain a list of the hotels that provide accommodation and additional services for persons with disabilities[36].

Czech Republic

In the Czech Republic certain basic requirements for the barrier-free environment are set down by Act No. 183/2006 Coll., on Special Planning and Building Code, by which the state acknowledges that barrier-free solutions and usage of buildings are of public interest., while the Decree No.501/2006 Coll. on General Land Use Requirements establishes the conditions for designing barrier-free public areas. The Decree No. 499/2006 Coll. on Building Documentation contains solutions for all buildings, in terms of their barrier-free accessibility and usage. The Decree No. 398/2009 Coll., on General Technical Requirements for Barrier-Free Usage of Constructions stipulates technical requests to enable the usage by persons with disabilities. Nevertheless, the initial report submitted by the Czech Republic under article 35 of the UN Convention on the Rights of Persons with Disabilities recognises that there are still some gaps in ensuring completely barrier-free environment. In order to eliminate the barriers in transportation and public buildings the government approved the Governmental Plan for Funding the National Development Programme Mobility for All. On the municipal level the Ministry of Regional Development introduced the programme "Barrier-Free Municipalities" that provides the municipalities with subsidies for projects for barrier-free ways, entrances, insides of the buildings, purchases of lifting and transport technologies etc.[37].

Denmark

The accessibility in the new buildings, refurbishment and renovation of existing buildings is regulated by Danish Building Regulations from 2010 (BR10) and require that all parts of the new building are being accessible for the wheelchair users, who are subsequently being able to move throughout the building without being stopped by barriers or obstacles, such as staircases[38]. As to existing buildings, stricter accessibility requirements in relation to requirement of level-free access have been introduced in 2008. Another change in the building legislation was the introduction of requirement of accessible signs and information as a response to UN Convention on the Rights of Persons with Disabilities, in 2010[39]. Danish Building Research Institute issues SBi Directions (Anvisninger). A system of progressive access requirements is used, consisting of A, B and C standard. The A standard is a higher standard (for buildings such as nursing homes), the B standard is standard DS3028 Accessibility for All (meaning the building is accessible) and the C standard is the compliance with the existing legislation (BR 2010). A sign for accessibility for existing buildings has been made by the association "Accessibility for All", where the building is eligible for the sign if it meets at least B standard[40].

[36] ENAT National Expert and Ministry of Labour and Social Insurance: Department for Social Inclusion of Person with Disabilities, 2013.
[37] ENAT National Expert and Ministry of Labour and Social Affairs, 2011.
[38] Academic Network of European Disability Experts, 2012.
[39] Ministry of Social Affairs, 2011
[40] ENAT National Expert and Academic Network of European Disability Experts, 2012.

Estonia

The construction in Estonia is regulated by the Law of Planning and the Law of Building, however additional code of building practice, standards and several other instructions exist. Municipality or other public authority inspects objects under construction on functional quality (including accessibility). The accessibility for PwD in construction area is regulated on the regional level[41]. The Social Welfare Act sets requirement to provide access to buildings used by the public for persons with sight, hearing and mobility impairments. The Decree No.14 from 28 November 2002 is providing specific requirements for facilitating mobility of PwD in public buildings. Preparation of guidelines, comprising technical solutions for accessibility of PwD to residential buildings, was one of several activities set in Estonian Housing Economy Development Plan 2008-2013, in order to improve accessibility. Information on the access to buildings in Estonia is available on liikumisvabadus.invainfo.ee, however the data on the proportion of the buildings covered by the website on continuing basis[42]. The site is available in Estonian, Finish, English and Russian. On 8th April, 2014 among 2101 entered buildings 107 were listed as accommodation facilities (80 hotels, 18 guesthouses, 2 camping sites, 5 spas and one tourist cottage)[43].

Finland

Land Use and Building Act (2000) established by Ministry of Environment [Ymparisto] is sets up building regulations and procedures, while the local authorities have the responsibility over enforcement of building regulations in their jurisdiction and land use planning. The Code applies to new buildings and renovation of the existing ones (according to the nature and extension of the adaptation). The Code is comprised of technical regulations and instructions (established in decrees), where the former are binding, but the later only offer a possible solution how to approach the requirements[44]. Checking of building plans and checking of work under construction is done by local authority, but might delegate the later task to the developer or designer of the building. Local authority is in charge of the control before the occupation of the building and issuing completion certificate, if all the requirements are met. Accessibility in housing design and barrier-free building is regulated by National Building Code G1 Housing design and National Building Code F1 Barrier-free Building[45]. Paragraph 53 of Land Use and Building Decree (895/1999) contains the provisions that administrative and service buildings, commercial and service premises, as well as residential buildings and associated spaces must ensure accessibility. The regulation F2 Safety in use of the Building Code sets the requirements for accessibility in regard to fire safety and evacuation process in all buildings[46].

France

Construction area in France is regulated on several levels. The licences are issued by public authorities and the control over the construction is carried out by the private sector. Requirements for acoustics, thermal insulation, fire safety and accessibility are regulated by the Housing and Building Code, comprising legislative and regulatory articles (regulatory have the backgrounds in the legislative articles and are a combination of specifications (for accessibility among others) and performance requirements. Ministerial decrees (Décrêts) have the same binding effect as the law. Implementing orders (arrêtés) are often introduced, in order to set levels of the requirement. Housing and Building Code is complemented by the standards and local regulations. The legal requirement for

[41] PRC Bouwcentrum International and Delft University of Technology, 2011.
[42] Academic Network of European Disability Experts, 2012
[43] ENAT National Expert and Järve, 2014.
[44] Ministry of the Environment [Ymparisto], 2014
[45] PRC Bouwcentrum International and Delft University of Technology, 2011.
[46] ENAT National Expert and Academic Network of European Disability Experts, 2012.

"Obligatory insurance of decennial guarantee" imposes that a verification of technical compliance with the standards is made by a controller hired by the insurance company. The accessibility for PwD in construction area is regulated on the national level[47]. The Law 2005-102 "Titre IV Accessibility, Chapitre III: Built environment, transports and new technologies" sets the obligation for all buildings (new and existing ones) to be accessible by 2015 (dwellings excluded). Specific standards in regard to accessibility of buildings have been issued between 2006 and 2009 in series of decrees and orders (see in the table above). However, after submission of the cases by persons with disabilities and NGOs constitutional council decided to censure the respective decrees[48].

Germany

Germany is composed of 16 states (Länder), which all have their individual Act on Equal Opportunities and building regulations for private and public buildings, as well as buildings of local authorities, which are similar in all 16 states (these regulations are laid down in the Building Code of the States (Landesbauordnungen)). On national level Disability Equality Act [Gesetz zur Gleichstellung behinderter Menschen – Behindertengleichstellungsgesetz, BGG] requires that new public buildings have to be accessible. The obligation for the existing buildings is that these have to comply with accessibility requirements when being renovated. The regulations addressing barrier-free construction have to be taken into account in all construction projects, which can prescribe compliance with technical regulations (Deutsche Industrie Normen (DIN)) entirely or just partly, depending on the law of the federal state. Public tenders can be prescribed with additional requirements in regard to accessibility (of any kind) by contracting authorities in line with the European Directive 2004/18/EC and matching amendments of Act Against Restraints of Competition [Gesetz gegen Wettbewerbsbeschränkungen]. In the period 2009-2011 a significant contribution for barrier-free or barrier-reduced housing conversions was provided under the programme "Age-tailored conversion" by the Federal Ministry of Transport, Building and Urban Affairs. The Committee on Labour and Social Affairs recognises that accessibility has brought up the need for more and additional training of architects on that matter and promises that a concept on this will be drawn by the Federal Government[49]. Building and Civil Engineering Standards Committee (NABau) has drawn up a standard NA 005-01-11 AA "Construction of accessible buildings" ("Barrierefreies Bauen") in 2010 that establishes technical requirements for accessible buildings and applies to planning, execution and equipment of publicly accessible buildings[50].

Greece

Principle of equality among all Greek citizens is founded in the Greek Constitution. The Law 3304/2005 establishes the notion of the reasonable accommodation in the workplace. Detailed technical specifications for accessible indoor and outdoor facilities as well as horizontal and vertical access are set in Design Guidelines for the Autonomous Movement and Living of People with Disabilities51, which according to law 4067/2012 "New Building Regulations", all the new buildings must comply with. According to the "New General Building Regulation" (art.26) all public and public use buildings must provide horizontal and vertical access to people with disabilities. Provisions must also be made for accessible toilets and parking spaces. Buildings existing before the enactment of this Act, including government agencies, public entities, private entities of the public sector, charitable organisations, local governments and first tier or uses public gathering (venues,

[47] PRC Bouwcentrum International and Delft University of Technology, 2011.
[48] ENAT National Expert and Academic Network of European Disability Experts, 2012.
[49] Committee on Labour and Social Affairs (Bundesministerium für Arbeit und Soziales], 2011.
[50] ENAT National Expert and Beuth Verlag GmbH, 2014.
[51] Disability Office, Ministry of Environment 1986-1990.

exhibitions, museums, concerts, sporting or cultural concentrations, temples, theatres/cinemas, restaurants/bakeries/cafes/nightclubs, multipurpose rooms, passenger lounges, banks/bureaux etc.), temporary residence, education, health and social welfare, justice and correctional, offices and commerce, industry and crafts, as well as in car parks and service stations must make the necessary adaptations and other functional spaces that are accessible to people with disabilities. Buildings that host public services and spaces, industry, trade and offices built before 2012 should comply with the standards by 2020. Changes must be completed by 2020, provided it does not affect the main body of the building, otherwise buildings should be considered arbitrary. Law 4067/2012 also allows to persons with disabilities to make changes in common areas (on their expenses) to ensure the access to these spaces without any building permit (if these changes do not affect the building infrastructure)[52].

Hungary

Act XXVI of 1998 on the rights and equal opportunities of persons with disabilities in Hungary establishes the right to equal access to buildings, services and information for the people with disabilities. The act relates to public and private buildings, as well as to the buildings built before the adoption of the Act XXVI of 1998, though the public administration buildings were exempted until 2013. For breaking the above regulation, The Equal Treatment Act (125 of 2003) is applicable[53]. The requirements regarding the removal of the obstacles in public buildings are regulated in the Act LXXXVIII of 1997 on the formation and protection of the built environment provides interpretation of general terms, such as accessibility of the built environment, while details on the requirements of the elimination of obstacles regarding the built environment are provided by the Government Decree 253/1997 (XII.20) on National Requirements of Spatial Planning and Building. In 2009 Public Foundation of Hungary published "Auxiliary document for providing the conditions for the free accessibility to public services with equal opportunities" (revision of the version created in 2007), which among other objectives aims at elimination of obstacles in the built environment and introduction of the architectural elements of the info-communication accessibility. In order to apply for EU resources the tender has to apply the document to the project. Magyar Turizmus Zrt. provides list of tourism accommodation facilities providing accessible rooms, nevertheless according to the report of the Committee on the Rights of Persons with Disabilities this data is not always trustworthy[54]. New legislation was enacted with National Disability Programme 2015-2025: Establishing the need for refreshing and progressing the opportunities in tourism in favour of disabled people.

Italy

In Italy building control is under the competence of 20 regions. 5 of these have a high degree of legislative and financial autonomy. Every region is divided in provinces and further in municipalities with their individual sustainable building codes. Municipalities issue building licenses and can set more specific requirements of buildings projects. Technical regulations for some specific types of buildings (such as hospitals, public housing, schools, etc.) are regulated at national level by Ministerial Decrees, however the requirements regarding accessibility for persons with disabilities are set at the national level[55]. The law that addresses equal opportunities for PwD is the "Framework Law for assistance, social integration and rights of the handicapped (Law n. 104 of 5 February 1992)". The laws in Italy that ensure the right to access in public environments are the "Decree 114 of the

[52] ENAT National Expert
[53] Academic Network of European Disability Experts, 2012.
[54] ENAT National Expert and Committee on the Rights of Persons with Disabilities, 2011.
[55] PRC Bouwcentrum International and Delft University of Technology, 2011.

Ministry for Arts and Culture of 16 May 2008" and "Law n. 41 of 28 February 1986 (Finance Act 1986)". The former contains guidelines for the elimination of architectural barriers and design oriented suggestions in places of cultural interest, while the later requires local authorities, the state and regions to distribute part of their annual budget for this purpose[56]. Decree of the President of the Republic 503/96 and decree 236/89 contain implementation norms, where the accessibility of physical environment is grounded in the normative framework concerning the elimination and/or the removal of physical barriers. Technical prescriptions regarding accessibility are embodied in a plurality of norms that include dimensional limits and minimum requirements. Currently the Parliament is preparing a proposal on a single normative framework related to accessibility in a universal design perspective that will be coordinating and bringing up to date all technical provisions concerning public and private buildings[57].

Ireland

Ireland, similarly to the UK, regulates the construction area with Building Regulations (2010) that set out generic functional requirements, while Technical Guidance Documents provide more specific provisions (which are in some areas stricter than ones in England and Wales), providing advice how to comply with requirements, but are not binding as far as requirements are met. Same as in the UK, the accessibility for PwD is regulated in the Technical Guidance Document M Access and Use (by Department of Environment, Heritage and Local Government). Planning permissions are issued by the local authorities that are also in charge of monitoring the construction process. The Control Act 2007 among other provisions also raises penalties for breaching provisions of the National Building Regulations[58][59]. What is different from the UK, is that Disability Access Certificate (DAC), introduced by Building Control Regulations 2010 and issued by local Building Control Authority is required. This applies for all New Non-Domestic Buildings, Apartments and in respect of all works or a building to which a fire safety certificate is required. The certificate verifies the requirements under Part M of the Building Regulations are fulfilled. The fee for this is €800 per building[60].

Latvia

The access to buildings in Latvian legislation is regulated by National Building Law (1995), which specifies that building should be constructed in a way that enables access for PwD, however municipalities can specify more stringent construction methods. Second level legislation refers to Regulations and Latvian Building Codes (LBN), which are binding for all public and private entities, as well as for the natural persons. In 2011 there were 24 Latvian Building Codes and 15 Regulations regulating the area. The third level acts are in the domain of the municipalities. Building permits are issued by municipal Building Councils[61]. LBN 211-08 covers Multi-storey residential buildings (in case of foreseen apartments for families having disabled people with movement impairments), LBN 209-09 covers low-rise residential buildings, while LBN 208-08 sets requirements of physical accessibility in public buildings together with the Regulations No.567 of the Cabinet of Ministers. The law does however not regulate requirements for the private rooms[62, 63]).

[56] Academic Network of European Disability Experts, 2012.
[57] ENAT National Expert and Ministry of Labour and Social Affairs, 2013.
[58] PRC Bouwcentrum International and Delft University of Technology, 2011.
[59] Academic Network of European Disability Experts, 2012.
[60] Wicklow County Council [Comhairle Contae Chill Mhantáin], 2014.
[61] PRC Bouwcentrum International and Delft University of Technology, 2011.
[62] (ENAT National Expert and Academic Network of European Disability Experts, 2012.
[63] Priestley, M. (2013). National accessibility requirements and standards for products and services in the European single market: overview and examples. Academic Network of European Disability experts.

Lithuania

The law drawing up the requirements for accessibility of built environment (also designing of buildings and public facilities) is the Law on Social Integration of the Disabled (1991), while the Law on Construction ((Official Gazette) [*Valstybės* žinios] No 32-788, 1996; No 101-3597, 2001 says that buildings need to be designed, built and renovated in a way that accommodates needs of persons with disabilities. The regulation Technical Requirements STR 2.03.01:2001 Buildings and territories - Requirements related to the needs of persons with disabilities ((Official Gazette) [*Valstybės* žinios] No 53-1898, 2001) sets down binding rules for residential and other buildings in connection to accessibility. The plans and designs for construction of the buildings and constructed buildings are inspected by Department of the Affairs of the Disabled (8 of Annex 9 of Technical Requirements STR 1.07.01:2010), where renovated buildings are exempted, successively the building permit documentation must be issued by the Minister of Environment of the Republic of Lithuania ((Official Gazette) [*Valstybės* žinios] No 116-5944, 2010). Construction Completion Certificate is issued by Construction Completion Commission, stating that the building was built or renovated in line with building design solutions. Annex 8 of Technical Requirements STR 1.05.06:2010 Building design ((Official Gazette) [*Valstybės* žinios] No 4-80, 2005; No 115-5902, 2010) contains information specifying environment and building accessibility solutions for the disabled. At least 5% of the number of apartments in the building should be suitable for PwD according to Technical Requirements STR 2.02.01:2004 Residential buildings ((Official Gazette) [*Valstybės* žinios] No 23-721, 2004). STR 2.03.01:2001 Buildings and Territories (*Requirements related to the needs of persons with disabilities) s*ets the requirements for entrances, passageways, stairs and ramps. Republic of Lithuania Code of Administrative Violations contains provisions in case of breaching the requirements set in the Technical Requirements STR[64].

Luxembourg

In Luxembourg laws and regulations in connection to construction of the buildings are set mostly on the national level and lesser amount at local level. Accessibility to and within the buildings is regulated on the national level by Accessibility Act of 29 March 2001 (Loi du 29 mars 2001 portant sur l'accessibilité des lieux ouverts au public) that covers new buildings and renovations of the existing ones, but existing buildings prior to the act are left out. The amendment of the act in 2008 (Règlement grand-ducal du 25 janvier 2008) contributes series of requirements in regard to accessibility that are mandatory for all the buildings built or renovated after 2001. National accessibility guide (Guide des Normes 2020 provides the detailed explanations of the requirements (Academic Network of European Disability Experts, 2012). The monitoring process during the construction is done by the architects and technical advisers on behalf of insurers. The aspects controlled are social and technical quality, as well as control on energy, however the respondent from the Ministry of Housing [Ministère du Logement] to the questionnaire of the PRC Bouwcentrum International and Delft University of Technology collected under the Construction Products Regulation did not know whether the aspects of functional quality (under which the accessibility for PwD is located) were being monitored. The construction of the object is stopped in case of non-compliance with technical aspects, for other types of non-compliance the contractor is requested to solve the problem. Existing buildings in use are not monitored on compliance with the regulations[65].

[64] ENAT National Expert and Ministry of Social Security and Labour, 2012.
[65] ENAT National Expert and PRC Bouwcentrum International and Delft University of Technology, 2011.

Malta

The Ministry for Resources and Rural Affairs is in charge of formulation of building regulations in Malta. Construction regulations affect all types of buildings (there is no distinction between the types). The control of building plans and control of work under construction is done by architects in a superficial way, construction regulation covers only ecological aspect related to water consumption (Malta together with Qatar the world's second water poorest country, after Kuwait)[66], however other aspects are not regulated. Existing buildings are not monitored on any of the aspects[67]. The Equal Opportunities (Persons with Disability) Act (2000) establishes the ground for the regulation of built environment in relation to accessibility for PwD, stating that public and private buildings opened to the public use must be accessible to all. The Access for All Design Guidelines, issued by Malta Environment and Planning Authority (MEPA) with support of National Commission Persons with Disability (KNPD [Kummissjoni Nazzjonali Persuni b' Dizabilita]- part of the Ministry for the Family and Social Solidarity), sets the accessibility requirements for access to buildings open to the public. The planning (building) applications are submitted to MEPA and examined by KNPD. If there are no objections by KNPD, it gives the clearance regarding accessibility to issuing the permits for building[68]. The section of Access for All of the official website of KNPD contains a section Guidelines for the Hotels and accessibility checklist to assist architects in the drafting of drawings that will be vetted by KNPD for accessibility issues[69].

The Netherlands

The construction area in the Netherlands is regulated by the Housing Act that refers to the Building Decree (2012) [Bouwbesluit] for technical requirements supplemented by instructions in National standards and codes of practice on how to meet the requirements. Municipal building authority (overseen by national building inspectorate) is empowered to check planning requirements and technical requirements of a permit application, as well as inspections of the building sites – if requested (not regulated by law) and has the power to halt the construction if needed. However, the municipalities' staff has been criticised for their lack of knowledge in regard to physical aspects of construction work. Existing buildings are not inspected on the aspects of sustainability. The sustainability aspects are regulated in a top-down manner, where the government sets the requirements and the construction sector follows them. The accessibility too buildings for PwD is regulated on the national level[70] . The Building Decree (2012) accessibility requirements are binding for all the new buildings open to the public that are bigger than 400 m^2 (workplaces are included). As for the existing buildings the requirements from the initial construction date apply in case of renovation or adaptation. The application of accessibility requirements for schools, restaurants, bars and new apartment buildings depend on the size or area of the establishment. The voluntary Dutch design code NEN 1814 contains more detailed accessibility requirements[71, 72].

[66] Natural Resources Management and Environment Department, n.d.
[67] PRC Bouwcentrum International and Delft University of Technology, 2011.
[68] Academic Network of European Disability Experts, 2012.
[69] KNDP: National Commission Persons with Disability, 2014.
[70] PRC Bouwcentrum International and Delft University of Technology, 2011.
[71] ENAT National Expert
[72] Priestley, M. (2013). National accessibility requirements and standards for products and services in the European single market: overview and examples. Academic Network of European Disability experts.

Poland

Many areas of functional and technical quality are regulated in Construction Law (1994) and Ordinance of Ministry of Infrastructure on Technical requirements to be fulfilled by buildings and their localisation (2002). Among these requirements is also the obligation to render buildings accessible and consider the needs of PwD in construction projects. Building plans control and control of Work under construction is carried out by the municipality (or its technical advisor) and includes the usability of the object for PwD, regulated on the national level. Existing buildings are inspected on several sustainability aspects, including functional quality (that comprises access to the built environment for PwD)[73]. Regulation on Technical Standards of 12 April 2002 drawn by Ministry of Infrastructure sets more specific requirements in regard to accessibility. In order to remove architectural barriers that present the obstacles for PwD in their daily life, the Regulation of 25 June 2002 of Minister of Labour and Social Policy gave to PwD the right to the resources from the State Fund. In case that the barrier removal is approved, the PwD has the right to up to 80% reimbursement by the government[74]. Act on Social Rehabilitation and Employment of Disabled Persons (2010) established the concept of reasonable improvements for Poland.

Portugal

Anti-Discrimination law (Law 46/2006) regulates general requirements regarding access to the public and private built environment, while Decree-Law 163/2006 (under revision) sets specific requirements for buildings (such as lobbies, lifts, passageways, toilets, ramps, parking spaces, floor and pavements etc.). All the buildings, existing as well as new ones, are covered by the Decree. National Plan for the Promotion of Accessibility 2007/2015 (PNAP) has been launched in 2007, which among other issues addresses requirements to remove barriers to accessibility in the built environment. In 2011 new measures for improving accessibility have been proposed for the second phase (2012-2020) of the National Plan[75]. Methods to remove barriers in the built environment, particularly in public buildings have also been contained in the National Strategy for Disability 2011-2013 (Resolution of the Ministers Council 97/2010). Implementation of accessibility requirements deadlines differ depending on the building year of the facilities, however the technical accessibility for dwellings is binding for those buildings whose construction have been started after the adaption of the law. Another exempt to the accessibility requirements of the Decree-Law 163/2006 are buildings and facilities constructed in compliance with preceding accessibility law (Decree Law 123/97 of 22 May)[76]. Private sector building licenses are issued at the municipal level and statements of responsibility are submitted to the General Directorate for Buildings and National Monuments Inspection for local, regional and central government organisations works that do not need authorisation[77].

In 2016 Turismo de Portugal brought in a support programme for tourist destinations, municipalities and businesses: "All for ALL". The programme addresses accessibility improvements in infrastructure, services and local transport. A €5 million budget was assigned from National Lottery Funding for projects with 90% public funds for initiatives to improve proposals for accessibility works, studies and consulting (max 10% per project), up to a value of €200.000. By the end of 2017 around 100 projects were approved and under implementation.

[73] PRC Bouwcentrum International and Delft University of Technology, 2011.
[74] Academic Network of European Disability Experts, 2012.
[75] Ministry of Solidarity and Social Security: National Institute for Rehabilitation (INR), 2012.
[76] Academic Network of European Disability Experts, 2012
[77] Priestley, M. (2013). National accessibility requirements and standards for products and services in the European single market: overview and examples. Academic Network of European Disability experts.

Romania

Construction area in Romania is regulated by B.I.A.. The majority of the regulations are adopted on the national level and local authorities can only act upon local planning requirements. According to Romania Green Building Council, the vast majority of the regulation on sustainable topics has their background in the EU Directives, which are implemented in the national legislation, as soon as they are adopted on the EU level (not implemented that smoothly though). As Romania Green Building Council states in the questionnaire of PRC Bouwcentrum International, the national legislation is as strong as EU Directives. Construction plans are checked on almost all aspects (including Usability for PwD that is quasi-mandatory in Romania) by municipality/other public authority and the architect, while the control of work under construction is checked thoroughly on technical aspects and only superficially on other building aspects (including usability for PwD). The existing buildings are not checked[78]. Law 448/2006 includes accessibility to public buildings (Chapter IV – Accessibility, Article 62 and 63) applying to all new buildings and existing buildings that are adapted with public funds. While Academic Network of European Disability Experts states that the building permit will not be issued if accessibility requirements are not met, the Romania Green Building Council states the permits will not be issued only in case of technical quality non-compliance in practice (usability for PwD is counted under functional quality). The standards regulating accessibility are NP 051/2000, regarding the adaptation of public buildings and urban spaces for persons with disabilities (many of the requirements stayed unfulfilled despite the set deadlines)[79].

Slovakia

Technical building regulations in Slovakia are mainly set by national authorities, however some of these may be additionally supplemented by regional authorities issuing their own building codes subordinating the national regulations. These rules apply to new and existing building (however in case of energy consumption performance lower level of regulation applies)[80]. Act No. 50/1976 and its amendments contain requirements for the access to built environment. Decree No. 532/2002 addresses the general technical requirements for buildings used by persons with reduced mobility and orientation (basic requirements for buildings in the building act are derived from Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011). Decree No. 532/2002 Coll., as amended is setting more specific requirements on the general technical requirements to ensure a barrier-free environment and it applies to new buildings and extension/renovation of existing ones[81]. Paragraph 46 of the Decree No. 532/2002 Coll. covers hotels, motels and quest houses. Supportive measures to eliminate physical obstacles are laid down in Regional Operational Programme and are mainly intended to improve access to government and municipal facilities such as schools, cultural heritage etc.[82].

Slovenia

The Ministry of Environment and Spatial Planning is responsible for the construction area, regulated mainly on the national level. The practice of adopting the regulations is top down in area of construction. The usability of the buildings is considered when checking of building plans by technical advisor on behalf of future owner, in case of non-compliance the building permit is issued. The work under construction must be controlled by other public authority, architect and technical advisor on behalf of future owner, in case of non-

[78] PRC Bouwcentrum International and Delft University of Technology, 2011.
[79] Academic Network of European Disability Experts, 2012,
[80] PRC Bouwcentrum International and Delft University of Technology, 2011.
[81] Priestley, M. (2013). National accessibility requirements and standards for products and services in the European single market: overview and examples. Academic Network of European Disability experts.
[82] Ministry of Labour, Social Affairs and Family of the Slovak Republic, 2012.

compliance the constructor is required to solve the problem. The functional quality of the existing buildings might be checked by technical advisors on behalf of the authorities or on behalf of the (future) owner[83]. The barrier-free environment is required in the Rules on the requirements for free access to, entry to and use of public buildings and facilities and multi-apartment buildings [Pravilnik o zahtevah zagotavljanja neoviranega dostopa, vstopa in uporabe objektov v javni rabi] (Official Gazette 97/2003) and applies to the existing buildings and to the ones that are to be renovated. Standard SIST ISO 21542:2012 sets more detailed recommendations in regard how to achieve barrier free environment[84]. The Act on the Equalisation of Opportunities for Persons with Disabilities (2010) sets the deadline in 2025 for all the public buildings to be accessible (including penalty provisions[85].

Spain

Similarly to Austria, 17 Spanish Autonomous Communities have the power to develop specific normative responses on accessibility based on national legislation. Act No. 51/2003 of 2 December 2003 on equality of opportunity, non-discrimination and universal accessibility for persons with disabilities has caused adoption of Royal Decree No. 173/2010 that amended the Building Code and created grounds for Royal Decree No. 505/2007 adopting basic standards of accessibility and non-discrimination for persons with disabilities, as regards access to and use of urbanised public areas and buildings. On national level Technical building code CTE (Código Técnico de la Edificación) grounded in Ley de Ordenación de la Edificación) of 5th November 1999 establishes technical regulations and standards for buildings, however the local authorities can set additional requirements. The part 2 of Technical building code contains series of volumes ('documentos básicos') that establish technical rules and examples how to achieve the requirements. The First Accessibility Plan 2004-2012 introduced certain specific accommodation and emphasised achievement of universal accessibility by means of the generalisation of design for all. The Initial report on Implementation of the Convention on the Rights of Persons with Disabilities of Spain states that under of the Ministry of Housing technical document on basic standards on access to and the use of urbanised public spaces been prepared and will be made public. A study on access to the buildings of the different ministries, using as the basis first part of regulation UNE 170001-1 and its DALCO requirements, was carried out in 2006. This allowed the detection of the non-compliance areas with the respective standard and enabled formulation of proposals for corrective measures. Since then ministerial departments have been using the study with the intent to achieve better accessibility since it covers many aspects of the built environment[86].

Sweden

Legislature regulating accessibility of the built environment is Swedish Planning and Building Act (PBL) and Public Procurement Act, setting requirements that technical specifications in tender documentation are to take account of accessibility for people with disabilities, where applicable. One of 9 technical perquisites for construction work and refurbishments of existing buildings in PBL is accessibility and usability for persons with disabilities and it applies to public, as well as to private premises. Another provision in the Act that contains retroactive requirements is the removal of obstacles to accessibility that are easy to eliminate (introduced in 2001). Still the regulation in this matter is optional if there is an alternative to fulfilling the accessibility requirements[87]. In PBL there are sanctions established for breaching individual requirements, such as monetary value and/or

[83] PRC Bouwcentrum International and Delft University of Technology, 2011.
[84] Engineering Chamber of Slovenia [Inženirska Zbornica Slovenija], 2014.
[85] Academic Network of European Disability Experts, 2012,
[86] Committee on the Rights of Persons with Disabilities, 2010.
[87] Ministry of Health and Social Affairs, 2011.

ban on the use of the part of the building that is non-compliant with the regulations. Regulation 2011/338 on planning and construction (Plan - och byggförordningen) gives voice to the requirements on constructions in the built environment. The implementation of the Building Act is overviewed on municipal level, therefore the Swedish National Board of Housing, Building and Planning has since 2006 been publishing series of guidance for municipalities, which address also accessibility. Graphic symbols have been developed into national standard by the Swedish Institute of Assistive Technology, which are supposed to increase the use of non-verbal information presentation in buildings and other public locations[88] [89].

United Kingdom

The Equality Act 2010 gives ground to the right to accessible built environment in the UK. The Approved Document M (referred as to Part M) of the Building Regulations sets the requirements to ensure accessibility for construction of new buildings by al people. The British Standard BS 8300:2001 "Design of buildings and their approaches to meet the needs of disabled people – Code of Practice" is the ground for the Approved Document M, however these are not binding if there another more suitable or convenient way of achieving compliance with the requirements exists (HM Government, 2013). Regimes of the 3 UK government regions (England and Wales, Northern Ireland and Scotland) in connection to the construction regulations are slightly differing among the regions. The Part M (in England and Wales), Technical Booklet R in Northern Ireland and Technical Handbooks in Scotland apply to the construction of new buildings and existing buildings that undergo material alteration. If the new construction does not fulfil the accessibility requirements, an Access Statement is required providing the justification for the event. British Standard 8300 contains detailed code of practice on accessibility incorporating accessibility of entrances into a building and facilities within a building, including approach routes to a building and cover all types of residential and public buildings, dwellings are exempt from it though. In relation to the hotels a specific guidance on the accessibility of large hotels was published in 2008 (PAS 88:2008) (non-binding), but the title has since been withdrawn[90].

[88] Academic Network of European Disability Experts, 2012.
[89] Ministry of Health and Social Affairs, 2011.
[90] Academic Network of European Disability Experts, 2012.

3 ANNEX 3: LIST OF BEST PRACTICES

3.1 Local transport

1.	Name of Best Practice	Access City Award
	Country	EU
	Organisation/ Company	European Commission & EDF
	Description	The first edition of the Access City Awards was launched in 2010 following an initiative by the Spanish presidency of the Council of the European Union. 66 European cities from 19 EU Member States participated in the first competition; the first winning city was Ávila (Spain), followed by Salzburg (Austria) in 2012, Berlin (Germany) in 2013, Gothenburg (Sweden) in 2014, Borås (Sweden) in 2015, Milan (Italy) in 2016 and Chester (United Kingdom) for 2017. In the first years the number of participant cities was on the rise (114, 99, 102…) but has shown a slight decline since then. Once the call for nominations is launched, cities with a population of more than 50 000 can submit their applications via an on-line platform. Before going to the European jury there is a pre-selection on national level with a separate national jury which suggests up to three national finalists. After the national pre-selection, the finalists' applications are sent to the European jury that makes the final decision. All juries, both national and European, are composed of a representative of a Disabled Persons' Organisation (DPO), an accessibility expert, a representative of the national public administration and a representative of an Older Persons' Organisation. This is an excellent example of direct involvement of DPOs in a Commission initiative. The Award covers four main aspects of accessibility that all have to be taken into account to show a coherent, overarching approach to accessibility: the built environment and public spaces, transport and related infrastructure, information and communication (including new technologies (ICTs)) and public facilities and services.91 There are a first, a second and a third prize but it is also possible to designate a "special mention" for applicants that have shown a special commitment or distinguish themselves by an innovative practice in a specific area. The Award ceremony usually takes place as part of the programme of the European Day of Persons with Disabilities.
	Date of initiation	2010 (ongoing)
	Description of impact	In 2017, there was a booklet made available on the website of the European Commission which lists a few good practice examples that could be useful to city planners. (http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=7986&furtherPubs=yes).

[91] European Commission, DG Justice, Access City Awards 2015, http://ec.europa.eu/justice/discrimination/disabilities/award/index_en.htm (retrieved on 18 March 2015)

1.	Name of Best Practice	Access City Award
	Lessons learnt	Adoption of relevant competitions by key establishments (in the EC, the European Parliament, etc.) with the active participation of its representatives can have a major effect in enhancing accessibility, through such awards, which need to be continued, multiplied and endorsed widely.
	URL and/or relevant documentation	http://europa.eu/rapid/press-release_IP-17-5069_en.htm EU Access City Awards page: edition, http://ec.europa.eu/social/main.jsp?catId=1141&langId=en

2.	Name of Best Practice	Spill over effects of local transportation & tourism accessibility to PwD employment in Lyon
	Country	France
	Organisation/ Company	City of Lyon
	Description	French city Lyon rewarded with 2018 Access City Award for putting accessibility at the heart of its city life. Its public buses are 100% accessible, and access to culture for all is also ensured, thanks to the inclusion of accessible equipment in libraries, such as reading machines, audiobook readers and magnifying screens. The city has also developed digital tools for people with disabilities, and in terms of work integration, 7,8% of civil servants are people with a disability. This is significantly higher than the legal minimum quota of 6% required by the French legislation.
	Date of initiation	2017 (ongoing)
	Description of impact	• High accessibility of local transport through buses. • Spill-over out effect to accessible tourism through greater use of municipal facilities (e.g. libraries). • Better integration of PwD in the relevant services provision, and workers too.
	Lessons learnt	Accessibility in local transportation is better achieved through coordination at City-Destination level.
	URL and/or relevant documentation	http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=9019&furtherNews=yes

3.	Name of Best Practice	Combined accessibility in Rotterdam
	Country	The Netherlands
	Organisation/ Company	City of Rotterdam and RET N.V. (is the public transport company of the Rotterdam city region)

	Description	Rotterdam drew new accessibility guidelines for outdoor space in 2014. Under Dutch law, 80% of all public transport stops must be accessible to wheelchair users by 2019. Accessibility experts have been involved in all new developments to ensure the design meets the needs of PRMs. Rotterdam had already exceeded this figure by 2015 and by 2018 almost all stops will be accessible. Public transport stops also feature audio information for people with vision impairments as well as audio tours of busy places. There is also a policy that discarded bicycles are removed to keep pedestrian walkways clear. The new central railway station, which was opened in 2015, was designed and built with input from accessibility experts. Throughout the city a neighbourhood bus service, run by volunteers, provides a service for everyone aged 55 and over to promote senior citizen participation in mainstream society. By 2017 were expected these buses to be wheelchair accessible. The city repairs within 24 hours any urgent complaints that endanger accessibility.
	Date of initiation	2014 (ongoing)
	Description of impact	Accessibility level surpassing over high national standards.
	Lessons learnt	Holistic accessibility, supported also by dynamic support and maintenance services, as well as society engagement.
	URL and/or relevant documentation	http://ec.europa.eu/social/main.jsp?langId=en&catId=1170&videosId=2772

4.	**Name of Best Practice**	**Accessibility of driverless local transport – the effect of automation of PT in Rennes**
	Country	France
	Organisation/ Company	City of Rennes
	Description	The driverless Metro line A (of the city STAR transport network) is fully accessible to people with mobility, vision and hearing impairments since 2002. Since 2003 it is combined with local buses that are also accessible (feeders to the Metro line). Each bus is equipped with access platforms, has two spaces reserved for wheelchairs, as well as screens with visual and verbal announcement of stops. Rennes Metropole organisation has invested nearly €13 million to make its STAR transport network accessible. This project is implemented in cooperation with Handicap 35, an umbrella organisation of 50 disability associations. Since 2003 the city has set up a mobile intervention unit, equipped with an access platform, which drives around and steps in when called upon, in case an access platform on one of the buses malfunctions. The city holds also open days for PwD to become familiar with the way the STAR network operates.
	Date of initiation	2003 (ongoing)

4.	Name of Best Practice	Accessibility of driverless local transport – the effect of automation of PT in Rennes
	Description of impact	Wheelchair users make on average 180 journeys a day on the buses and 250 on the metro.
	Lessons learnt	• Combined accessibility of metro and "feeder" bus network • Accessibility of driverless metro • Mobile intervention unit to fix accessibility barriers dynamically.
	URL and/or relevant documentation	https://www.euractiv.com/section/public-transport-accessibility/news/how-to-make-transport-accessible-and-cheap-learn-from-rennes/

5.	Name of Best Practice	Digital and accessible PT in Tallinn
	Country	Estonia
	Organisation/ Company	City of Tallinn
	Description	Tallinn Urban Transport has systematically invested in different measures, from accessible vehicles to training programmes for bus drivers and building accessible public transport stops. However, the experience with staff helping people, turned out to be too complicated for public transport, said Service Director, Andras Herkel. Investments have included renovation of all tram stops with special paving bricks to guide visually impaired passengers and installing ticket machines next to the doors, at an appropriate height for persons in a seated position, such as persons using wheelchairs. Around 90% of buses do not have steps, and they have ramps and a special kneeling system. Around 90% of all buses in Tallinn are accessible. This is also true for the 55% of trams and 52% of trolleys. eCards for ticketing and smart cards are obligatory for the public transport; which simplifies the transport procedure for PRMs, as they do not need to use ticketing machines.
	Date of initiation	2016 (ongoing)
	Description of impact	Although a medieval city with narrow and often cobblestoned streets, Tallinn has a level of accessibility that stands out among Eastern European countries and beyond.
	Lessons learnt	Use of ITS may, combined with physical accessibility improvements, enhance the overall local PT network accessibility, even in medieval cities with a challenging outdoor environment.
	URL and/or relevant documentation	https://www.euractiv.com/section/public-transport-accessibility/news/digital-and-accessible-tallinns-public-transport-aims-for-more/

6.	Name of Best Practice	Accessibility of metro networks from design to maintenance and everyday use in Athens
	Country	Greece (Athens)
	Organisation/ Company	Attiko Metro S.A
	Description	Athens is a symbol for the transformation of an initially non-accessible underground system into one that could become a prototype of accessibility for other historic underground systems. The construction of the metro in Athens was one of the biggest and most complicated infrastructure projects in Greece. The system started out carrying 300,000 passengers daily, but it was not initially designed to integrate facilities for mobility-reduced persons. As the metro project unfolded, PRM organisations were involved, so that the final version of the metro system includes services and facilities for persons with reduced mobility. Athens' metro network consists of three lines. Line 1, the oldest, originally a railway line in which all stations have been renovated and are fully accessible to persons with mobility and sensory disabilities. Lines 2 and 3, are the newest parts of the network with infrastructure and underground trains connecting the city centre with Athens Airport. These are also fully accessible for persons with reduced mobility. All stations are provided with elevators, escalators, ramps, tactile floor guide lines for persons with vision impairments, visual and audible announcement systems, accessible toilets, easily readable signs and accessible connections between platforms. The new Metro system connected with the renovated electric railway serve very well the historical centre of Athens. The extent to which accessibility requirements for passengers with disabilities has been integrated in the transport planning, contributes to a very high level of access throughout the centre of Athens, when compared with other European historical cities. The new Metro system, combined with the renovated electric railway, is regarded as one of the most accessible in Europe, combining high technical standards and full accessibility with art and cultural exhibits at the stations. This confirms the statement of Vasilis Galis, a researcher from the Linköping University, who said that the underground system in Athens symbolises a landmark for accessible systems.
	Date of initiation	2000 (ongoing)
	Description of impact	Seamless mobility of PRM through metro network in an otherwise low accessibility transportation system.
	Lessons learnt	Good collaboration with DPOs can overcome accessibility barriers even in challenging historical city environments.
	URL and/or relevant documentation	Linköping University: From Shrieks to Technical Reports: technology, disability and political processes in building Athens metro www.ep.liu.se/abstract.xsql?dbid=7851 (07/11/2007) ECMT: Developments in Greece, http://www.cemt.org/topics/handicaps/developt/GRdev06.pdf (07/11/2007) Muffy Davis: Newsletter #1 - Sacramento, CA to Athens, Greece http://muffydavis.com/index.asp?pgid=16 (07/11/2007)

7.	Name of Best Practice	Accessibility of metro networks from design to maintenance and everyday use in Athens
	Country	Germany (Berlin)
	Organisation/ Company	The Public Transport Company of Berlin, Berliner Verkehrsbetriebe (BVG), the Suburban Rail Company (S-Bahn Berlin GmbH), the Public Transport Association of Berlin, Verkehrsverbund Berlin/Brandenburg (VBB), the local government of Berlin and other organisations.
	Description	The Public Transport Company of Berlin, Berliner Verkehrsbetriebe (BVG), the Suburban Rail Company (S-Bahn Berlin GmbH), the Public Transport Association of Berlin, Verkehrsverbund Berlin/Brandenburg (VBB), and other organisations, are charged with the provision of accessible services in all public means of transport (including taxis) for PwD. Guidelines aiming at making Berlin a barrier-free city were published in 1992 and require that both infrastructure and vehicles should be accessible for PwD without external assistance. Towards this direction, PwD were involved at all stages (e.g. for the assessment of the relative merits of powered and manual ramps for suburban trains wheelchair users participated in field trials). Today, the strategy has been developed, putting emphasis on inclusion (e.g. independent mobility instead of door-to-door services), through a design for all approach. BVG also runs a training programme (Mobilitätstraining), targeted at PwD, concerning the use of public transport. Moreover, the Mobidat website provides real-time information on accessibility level of different facilities in Berlin, including public transport. This information can also be sent to a user's mobile phone by SMS, while information en route about service disruption or delay is also available. The data is gathered through visits at the sites and facilities, while suggestions for accessibility improvement are made by the staff to the owners of the facilities. The programme is funded by the BVG and the local government of Berlin.
	Date of initiation	The increased number of PwD using the public transport system is indicative of the success of the project. Emphasis is provided on independent mobility.
	Description of impact	• Co-creation with PwD involved at all stages, including accessibility assessment • Mobility training programme for PwD Web & Mobile accessibility level dynamic infomobility service
	Lessons learnt	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf
	URL and/or relevant documentation	Germany (Berlin)

8.	Name of Best Practice	Accessibility of metro networks from design to maintenance and everyday use in Athens
	Country	Denmark (Copenhagen)
	Organisation/ Company	Metroselskabet
	Description	The lessons learnt from the operation of Metro lines M1 (the operation of which started in 2002) and M2 in Copenhagen, which have been in service since 2002, have been built into the development of the specifications for the new system (Cityringen) lines M3 and M4 using the design for all philosophy, aiming at creating a Metro for all. The main concept of the project is that PwD should be able to travel with as little assistance as possible. An industrial design process was introduced alongside the technical specification requirements using special mock-ups and high-levels of engagement with user groups. Responsible for the project is the operating company and the employer (Metroselskabet), representing the owners (the Danish state and the two cities of Copenhagen and Frederiksberg). In 1994/95, the process of accessibility testing started, while the work to ensure maximum accessibility of the new Cityringen system started in 2008 and is in process, with the new system expected to come into service in 2018.
	Date of initiation	2002 - 2018
	Description of impact	The feedback collected from PwD using the Metro has been very positive, while the number of PRM and PwD using the Metro is increasing.
	Lessons learnt	• Seamless accessibility over a metro network. • Accessibility oriented on industrial design from concept to construction and commitment.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

9.	Name of Best Practice	The KOLLA project of Göteborg on integrated local (city wide) accessibility
	Country	Sweden (Göteborg)
	Organisation/ Company	Special Transport Service (STS), in cooperation with Trafikkontoret, the traffic and public transport authority in the city, and Västtrafik, the regional public transport authority.
	Description	The project "KOLLA – Public Transport for All" refers to a set of initiatives in Göteborg, such as modified public transport stops and accessible pedestrian routes to the stops, flexible transport services (Flex Lines) in all parts of the city, staff-training, free travel training for PwD, personal assistance to make transfers, new IT-programmes, information and marketing. The project aimed at increasing travel by regular public transport and Flex Lines, and at reducing travel by STS (door-to-door) buses and taxis by at least 50%. Some of the elements assessed for potential improvement included:

9.	Name of Best Practice	The KOLLA project of Göteborg on integrated local (city wide) accessibility
		Pedestrian passages • Solutions included creating 6cm raised 'waiting' platforms in the middle of zebra crossings for the visually impaired, with a 0 cm levelled section beside them for people with wheeled mobility devices disabilities to easily cross the road. Poles/railings/lampposts on or beside pavements/footpaths • The PTA assigned three general solutions: contrast marking, moving or removing. Poles would be removed if they reduced the width of the walkway to less than 0.9m. to allow sufficient space for pedestrians. Ramps and stairs • The PTA considered it mandatory to include railings on both sides of stairs and ramps, with contrast markings on the first and last step to inform people with visual impairments about the presence of stairs. The KOLLA project also looked to improve the service provides by the Flexline, a bus line for people with reduced mobility that has vehicles with step-free access and a ramp. When the project began, there were eight Flexline buses; today, there are 20 Flexline buses and the network covers almost the whole city. All the buses in Göteborg and more than 60 % of the trams are now low-floor. The KOLLA project started in 2004 and was completed in 2010. STS and the municipality of Göteborg financed the project.
	Date of initiation (Duration)	2004 - 2010
	Description of impact	Göteborg's goal was to make all tram and bus-stops accessible to people with reduced mobility. Thanks to the KOLLA project, 83 per cent of tram and tram/bus stops (210 and 104, respectively) and 100 per cent (195) of special bus stops (stops with longer platforms to accommodate longer buses) are now accessible (for people with reduced mobility). Just over 40 per cent of ordinary bus stops (1654) have been made fully accessible. In total, Gothenburg hopes to transform 2163 stops, found across 824 different locations. The KOLLA project also installed a number of new benches; improved ramps, stairs and crosswalks; and removed, marked and moved a number of poles. In one neighbourhood alone, Majorna, around 700 obstacles were addressed to the cost of €200.000. Västtrafik constantly measures customer satisfaction in public transport, with the results revealing that the accessibility has been really improved. 98% of people in Göteborg to be able to travel by public transport.
	Lessons learnt	• Integration of accessible PT with other flexible transport services (DRT) to cover accessibly also the first/last mile • PT staff training on accessibility

9.	Name of Best Practice	The KOLLA project of Göteborg on integrated local (city wide) accessibility
	URL and/or relevant documentation	http://www.eltis.org/discover/case-studies/improving-accessibility-transport-goteborg-sweden Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

10.	Name of Best Practice	"Helsinki for All" project
	Country	Finland (Helsinki)
	Organisation/ Company	Helsinki City Board and Public Works Department
	Description	The "Helsinki for All" project, funded by the municipality of Helsinki, is the product of the cooperation between the Helsinki City Board and the Public Works Department, with the involvement of representatives of city offices, associations of PwD and older people, residents' associations, government, property owners, commercial and other organisations. The goal was that, after the end of the project, accessibility would have been fully integrated in public transport network and in the city's streets and pavements. The project started in 2002 and was completed in 2011. Among the main objectives of the project were the following: • The development of a new type of dropped kerb, which works both for wheelchair users and for visually impaired people. • The development of guidance and warning surfaces for visually impaired people that are robust enough to withstand the Finnish winter climate. • The development of new tactile maps for visually impaired people.
	Date of initiation (Duration)	2002 – 2011
	Description of impact	Feedback from PwD and older people, from public transport drivers and other staff, and from the residents of Helsinki in general, as well as customer surveys in different areas and complaints reveals the success of the project, while a seminar with users is held annually, in order to review progress, in combination with regular meetings with different user groups.
	Lessons learnt	• Co- creation with PwD, including an annual joint review process • City-wide PT and road infrastructure • Tactile maps of visually disabled people • Harsh winter withstanding accessibility scheme
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

11.	Name of Best Practice	Intelligent Transportation System for accessibility in Vienna
	Country	Austria (Vienna)
	Organisation/ Company	Wiener Linien
	Description	The improvement of accessibility of Vienna's transport system started in 1989 by Wiener Linien (a bus transport company). Wiener Linien engaged with PwD and research and development projects were funded by the Austrian Ministry of Transport, Innovation and Technology (including engagement with blind and partially sighted people, to develop tactile orientation and guidance systems). Vienna has developed a systematic model to identify, develop and implement improvements to accessibility and a philosophy of user-centered design. This runs through all transport modes and is applied to existing, as well as new rolling stock, vehicles and infrastructure. In this context, a navigation system Pre-On-Post-Trip-Information-System (POPTIS) was developed, enabling blind and visually impaired people to move about the system without assistance, using mobile phones or MP3 players to get personalised journey information. Moreover, a continuing programme of tours and visits to the underground system aims at improving accessibility for wheelchair users, blind people and others. Furthermore, all buses in the city have been accessible since 2006 incorporating a low-floor and automatic ramp, while the Ultra-Low Floor (ULF) tramway vehicle (the lowest, low-floor tramway in the world) was developed through a public private partnership between Wiener Linien and Siemens Austria. The gap between vehicle and platform is reduced by redesigning and retrofitting tramway and bus stops, while provision of information and waiting facilities are also improved. An additional ramp profile was fixed below the entrance doors to reduce the remaining gap in certain lines, while – in other cases – the gap between the platform and the vehicle edge is bridged by a powered ramp at the first and the last door. In these areas of the train, large open areas are available for wheelchair users to move with comfort. Tactile push button devices with Braille inscriptions installed on a pillar beside the lift doors are easily found by blind users, while there are also audible announcements in the lift cars. Since 2008, all stations have been accessible by means of lifts or ramps. The new Wiener Linien real-time passenger information system provides blind and visually impaired users with real-time accessible information and countdown information, delivered by the computer aided operational control system. Furthermore, at www.wienerlinien.at (the Wiener Linien website), information about service times and on the availability of a particular service available, is available, while information can also be passed direct to passengers' mobile phones during the journey. Moreover,

11.	Name of Best Practice	Intelligent Transportation System for accessibility in Vienna
		Qando, a web-based, route-planner, delivering real-time and timetable information within the eastern region of Austria, is available at www.qando.at, enabling users to find the quickest route by public transport and helping wheelchair users identify low-floor vehicles. Funding is included in Wiener Linien's running costs budget.
	Date of initiation (Duration)	2006-2009
	Description of impact	On the basis of the feedback from PwD, the project has been really successful, while the success of the accessibility improvement measures are monitored by disability organisations under the terms of the city's accessibility plan on an annual basis, while the plan is updated to take on board any potential comments. The programme also includes a self-assessment tool, in order to identify areas to be improved, according to user needs.
	Lessons learnt	• Extensive use of various ITS tools, such as POPTIS for visually disabled navigation, real-time information system and a web-based route-planner (Qando) with real time accessibility info. • Self-assessment tool for accessibility monitoring and control. • PPP scheme for accessible PT financing.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

12.	Name of Best Practice	Promoting public transport use by older people through multi-actor training and awareness creation in Salzburg
	Country	Austria (Salzburg)
	Organisation/ Company	StadtBus and Zentrum für Generationen & Barrierefreiheit (ZGB)
	Description	The product of the collaboration between the local transport operator (StadtBus) and Zentrum für Generationen & Barrierefreiheit (ZGB), the Centre for Generations and Accessibility is an integrated project, aiming at enabling and encouraging older people to use public transport. The project started in 2004 and its key objectives are the following: • to reduce the number of accidents on public transport; • to make public transport easier for older people to use; • to keep older people as public transport users; • to raise awareness of the needs of older people as public transport users. The project includes initiatives, such as: • Mobility days • Travel training for older passengers • Training for drivers, ticket inspectors and call centre agents • A safe mobility on the bus brochure

12.	Name of Best Practice	Promoting public transport use by older people through multi-actor training and awareness creation in Salzburg
		• Larger maps of the network, larger print timetables • Information about the fares for older people • Coffee parties in senior clubs and old people's homes • Information stands • Improvements to the vehicles • PR and marketing activities The public transport company StadtBus and the Non-Governmental Organisations (NGO) cover the cost of the project, while additional funding has been also received through the EU project AENEAS.
	Date of initiation	2004
	Description of impact	Feedback is gathered through customer surveys, complaints collection and questionnaires from participants in passenger and driver training schemes, while in key performance indicators a reduction in the number of accidents involving older passengers and the level of awareness about the project among older people are included. Meeting and exceeding the defined objectives constitute the success criteria of the project, which is really proven to be successful.
	Lessons learnt	Multi-actor training on safe and accessible mobility (PT operators, travellers, citizens affected)
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

13.	Name of Best Practice	Personalised accessible routing and journey planning in Nurnberg
	Country	Germany (Nurnberg)
	Organisation/ Company	Verkehrs-Aktiengesellschaft (VAG)
	Description	Verkehrs-Aktiengesellschaft (VAG), totally owned by the city of Nürnberg, is the operating company of buses, trams and underground trains in the cities of Nürnberg, Fürth, Erlangen and vicinity. It should be mentioned that Nürnberg was the first city in Germany that took initiatives towards making its public transport accessible to PwD and PRM. Lifts have been installed in all metro stations, all buses are equipped with ramps, being low-floor with kneeling function and trams are all low-floor and equipped with portable ramps. As for metro platforms, tram islands and bus stops, they all have tactile guide strips (to provide safe passage for blind people from tram stops in the centre of the street to the pavement). Moreover, an annual programme of training on disability issues for all drivers is also available, while there are also sessions of familiarisation for PwD on a regular basis.

13.	Name of Best Practice	Personalised accessible routing and journey planning in Nurnberg
		Finally, Bluetooth and wifi technology, so that individuals have at their disposal personalised route and journey planning information through mobile phones, as well as other innovations have been realised; also through co-financing from research project ASK-IT. The cost forms part of VAG's budget.
	Description of impact	The numbers of PwD and PRM have been increased, while VAG and representatives of disability organisations are in close contact and any proposal for the improvement of accessibility on the basis of the feedback gathered from PwD and PRM is taken into account for the optimisation of the services provided.
	Lessons learnt	• Personalised and accessible routing and route planning for various PwD groups • Training of PT operators and familiarisation services for travellers with disabilities.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

14.	Name of Best Practice	Fully accessible rolling stock in Stuttgart
	Country	Germany (Stuttgart)
	Organisation/ Company	Verband Region Stuttgart (VRS)
	Description	A procurement procedure for transport supply in suburban rail (including the agreement for the renewal of the fleet with 83 vehicles) for 2013 – 2028 has been established by Verband Region Stuttgart (VRS), the transport authority for the region of Stuttgart. The new vehicles (ET 430) were the first suburban rail vehicles in Germany to fully comply with the European Commission Technical Standard for Interoperability on Passengers with Reduced Mobility (TSI-PRM). The key objective was to integrate the needs of PwD and PRM into public transport, aiming at making it accessible to them. In the context of accessibility improvement, the following features were integrated into the system: • Retractable ramps to improve level access from platform to vehicle. • Priority seats with additional space. • Reserved wheelchair spaces. • Emergency call. • Audio and visual trip information to complement each other. • Audio and visual warning signals to complement each other with respect to user needs. • Real-time, on-trip information on connecting trips. • Layout, and design of devices and interior equipment according

14.	Name of Best Practice	Fully accessible rolling stock in Stuttgart
		to needs of users with special requirements (e.g. specification of tactile properties of door opening buttons, visual contrast etc). The project is run by Deutsche Bahn (the public transport provider). The procurement procedure in terms of the contract with the transport provider was closed in 2009 and the new vehicle fleet is running from 2013. The project cost is integrated into the total cost per vehicle km as concluded with the operator.
	Date of initiation (Duration)	2009-2013
	Description of impact	User satisfaction is continually monitored and it seems that the project is successful.
	Lessons learnt	Fully accessible sub-urban rail, following the EC Technical Statement.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

15.	Name of Best Practice	Disability awareness training for drivers and managers
	Country	France
	Organisation/ Company	Transdev
	Description	Drivers and managers across all Transdev companies have been trained since 2008 on disability awareness and on the needs of PwD and PRM, initially in France, while the main objective of the programme is to ensure accessibility to Transdev bus services for PwD and PRM. The programme has been established in cooperation with four French disability organisations, representing mobility, vision, hearing and cognitive impairments, while Transdev internal trainers consult representatives of these organisations. The programme constitutes part of Transdev's accessibility strategy, the starting point of which was the legal requirements in a number of Transdev's key operating areas, among which France and UK, while it has been assessed by Transdev as an integrated approach to quality management.
	Date of initiation (Duration)	2008 (ongoing)
	Description of impact	Better service to customers and a more coherent understanding of accessibility issues across management.

	Lessons learnt	• Country-wise homologated approved training of bus operators on accessibility issues; is integrated into legal requirements and quality management of service. • Programme co-created with PwD Associations.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

16.	**Name of Best Practice**	**"Les Compagnons de Voyage" in Paris**
	Country	France (Paris)
	Organisation/ Company	RATP (the Paris/Ile-de-France transport authority) and the SNCF (French Railways)
	Description	"Les Compagnons de Voyage" is an association set up jointly by the RATP (the Paris/Ile-de-France transport authority) and the SNCF (French Railways) to provide assistance to anyone with a permanent or temporary difficulty in using public transport in the Paris region or anywhere in France. It is a service available 24-hours-a-day, seven days a week, that provides PwD, PRM or anyone that feels that they have such a need with a trained escort to travel with them on a temporary or on a continuing basis, so that they can travel independently, while a door-to-door service is also provided and is available for any kind of trip (school journeys, medical appointments, leisure travel etc). The costs are covered by a charge levied on users of the service, while 50% of the costs of the trip are tax deductible for everyone.
	Date of initiation (Duration)	1993 (ongoing)
	Description of impact	The impact seems to be really positive, while the success of the programme is measured by the number of people participating in it, the feedback from them, as well as by the success in enabling people to travel independently after having been trained. Since the programme started in 1993 and since then more than 1 million journeys have been realised, more than 100 trained escorts with experience and understanding of a wide range of disabilities participating in the programme, while there is an average of 150 accompanied journeys every day in the city of Paris and its suburbs.
	Lessons learnt	Society engagement (such as PRM escorting on a PT journey) can significantly enhance the PR accessibility level.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

17.	Name of Best Practice	Mentoring services in London
	Country	UK (London)
	Organisation/ Company	Transport for London (TFL)
	Description	TfL's travel mentoring service provides support (for free) to PwD in London wishing to use public transport, aiming at making them independent travellers. Namely, this service enables PwD (with physical, sensory or cognitive impairments) to plan accessible routes and journeys, while provides them with a mentor that accompanies them during their journeys (maximum 10) until they are able to travel on their own. The programme started in 2005. Apart from its own trained mentors, the company trains people from disability organisations as well. TfL's accessibility policy is set out in its Disability Equality Scheme (a requirement under UK law) and mentors work in cooperation with the modal designers (bus, tram, Underground, Docklands Light Railway, London River Services) to evaluate new accessibility initiatives and provide feedback from mentee experience. The programme is also implemented in special needs schools, in order to help children with disabilities and young PwD understand how to use public transport in the city. The cost of the programme is integrated into the budget of TfL's budget for door-to-door transport services.
	Date of initiation	2005
	Description of impact	The feedback from PwD having participated in the programme is really positive, while the key performance indicator "number of assisted trips" has significantly exceeded its target. TfL's own mentors are currently providing more than 2.000 assisted trips a year with approximately 5.000 assisted journeys per annum being provided by mentors from other organisations who have been trained as part of the service.
	Lessons learnt	Monitoring service for PwD that integrated education at special needs school, evening sessions and accompanied training journeys.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

18.	Name of Best Practice	Training and familiarisation sessions to PwD travellers from trained Public Transport staff in Stuttgart
	Country	Germany (Stuttgart)
	Organisation/ Company	Stuttgarter Straßenbahn AG (SSB)
	Description	Stuttgarter Straßenbahn AG (SSB), the public transport provider in Stuttgart, provides passenger training (half-day sessions) four times a year for people with mobility or visual impairments. The goal is to help PwD use public transport, making it "barrier-free". The programme started in 2002. Drivers from SSB give information on the layout and the operation of buses and light rail vehicles, so that the passengers are familiarised with their use. Through this programme, PwD understand how they can use public transport and how they can benefit from it. A user committee supervises and gives advice concerning the content of the training. The funding is integrated into SBB's running costs budget.
	Date of initiation	2002 (ongoing)
	Description of impact	The feedback received from the participants is very positive, while they are involved into the update process of the content of the training through their comments, which are taken into account for the optimisation of it.
	Lessons learnt	Training of PwD passengers by trained PT drivers.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

19.	Name of Best Practice	Disability awareness training for drivers and managers
	Country	The Netherlands (Enschede)
	Organisation/ Company	The Dutch region of Twente, the local transport operator Connexxion and Enschede town council
	Description	This example examines an initiative to encourage disabled users of the local on demand bespoke service to start using an accessible mainstream bus route. In 2005, an accessible (in terms of both vehicles and infrastructure) bus route, connecting the residential area of older people and several social services was introduced by the Dutch region of Twente, the local transport operator Connexxion and Enschede town council, while a costly on demand special transport service was also provided. For the promotion of the use of the new bus route in the town, a pilot project was developed and people who qualified for the door-to-door service Regiotaxi were able to use the bus free of charge. The objective was to persuade PwD and PRM that they were really able to use public transport. Public transport "ambassadors" on the buses were explaining how they work and they were offering assistance when necessary. Apart

		from this, they also informed older people in retirement homes of the door-to-door service. This way, many people from the target group were really attracted and opted for using the service, while their suggestions for improvement (e.g. moving a bus stops to a more suitable location, improving the display of information at stops etc.) were taken into account for the optimisation of the service. The Ambassadors project was initially funded by the Twente region, but after two years, the staff employment was taken over by Connexxion.
	Date of initiation (Duration)	2005 (ongoing)
	Description of impact	Very positive feedback was given on the bus service, namely on the comfort of the vehicle and on the ease of getting on and off, while the number of PwD and PRM using the public transport was significantly increased. However, despite the significant increase in the number of wheelchair users, there was no change concerning the number of passengers on Regiotaxi. This still means a greater overall mobility for PwD.
	Lessons learnt	• Use of "ambassadors" on local PT means to inform PRM and familiarise them with the accessibility functions of the vehicles.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

20.	**Name of Best Practice**	**Working group on accessible and open Prague**
	Country	Czech Republic (Prague)
	Organisation/ Company	Prague City Hall
	Description	"Accessible and Open Prague" was set up by Prague City Hall, refers to all means of public transport, covering the whole city of Prague and surrounding neighbourhoods. The project aims at coordinating activities, so that public transport in the city becomes accessible to PwD and PRM. The project started in 2009. Operators, PwD, PRM and other stakeholders constituted the working group of the project, which – among others – included the refurbishment of tram stops and the installation of lifts into Prague metro stations. Apart from the working group, a user group (that meets for times per year) consisted of PwD and PRM sets the agenda for the working group, identifies priorities and is also responsible for the monitoring progress against the defined agenda. The working group is funded by Prague City Hall.
	Date of initiation (Duration)	2009 (ongoing)

20.	Name of Best Practice	Working group on accessible and open Prague
	Description of impact	The key performance indicator for the project is the increase in the number of public transport stops and stations accessible to PwD, while the project is also considered a success due to the communication between end users and Prague City Hall is ensured on a regular basis through the working group.
	Lessons learnt	PwD setting the agenda and guiding the PT accessibility interventions.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

21.	Name of Best Practice	Real time on-bus and bus stops audio and visual information in London
	Country	UK (London)
	Organisation/ Company	London Buses
	Description	iBus is an Automatic Vehicle Location (AVL), radio and an on-bus passenger information display and announcement system, fitted to all London buses and to all bus stops across the network. It provides passengers with information on "next stop" and "destination" through visual displays and audio announcements on the bus and is beneficial to all passengers, but particularly for PwD, PRM and those who are not familiar with the network. Apart from this, iBus also gives real-time information source for bus arrival at bus stops through the Countdown system. All the buses had been equipped since 2009. The capital costs came from Transport for London's Business Plan Investment Programme. The running costs are integral to the running costs budget for London Buses
	Date of initiation (Duration)	2009 (ongoing)
	Description of impact	The feedback has been very positive, according to surveys carried out among users and drivers. The system has been optimised over time and although official data on the number of users is not available, according to disability organisations, the number of PwD using the buses has been significantly increased. Moreover, the drivers are also satisfied, as they are not obliged to remember to provide passengers with such information. The iBus contract contains a number of key performance indicators relating to availability and performance. TfL measures passenger satisfaction separately and this has continued to rise following the installation of iBus. In addition to the reliability and availability of the system, success is also measured in terms of rising passenger approval ratings.
	Lessons learnt	Design for All infomobility services in PT; that serves also priority needs of PRM.

21.	Name of Best Practice	Real time on-bus and bus stops audio and visual information in London
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

22.	Name of Best Practice	Audio announcements at public transport stops in Sofia
	Country	Bulgaria (Sofia)
	Organisation/ Company	Sofia Urban Mobility Centre (part of the public transport authority) and the Sofia Regional Department of the Union of Blind People in Bulgaria.
	Description	An audio announcement system was implemented at public transport stops as an initiative of the Sofia Urban Mobility Centre (part of the public transport authority) and the Sofia Regional Department of the Union of Blind People in Bulgaria, aiming at improving the public transport service for blind people. Real-time visual information about vehicle movements (through electronic boards) had already been installed at city centre stops and this project added audio announcement modules to make the real-time information available to people with visual impairments. The service has been in force since 2008. The scheme is funded directly through the authority's own budget without any additional funding.
	Date of initiation (Duration)	2008 (ongoing)
	Description of impact	Feedback from representatives of the Union of Blind People has resulted in the adoption of modifications, aiming at the improvement of the system (e.g. increase of the volume level of the announcements).
	Lessons learnt	Design for All infomobility services in PT; that serves also priority needs of PRM.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

23.	Name of Best Practice	Accessible ticket machines for all PwD in Barcelona
	Country	Spain (Barcelona)
	Organisation/ Company	Transports Metropolitans de Barcelona (TMB)
	Description	Transports Metropolitans de Barcelona (TMB), the operator of public transport in Barcelona, has established ticket vending machines (available throughout the Barcelona Metro network) that can be used by people with visual and other impairments, aiming at promoting the use of public transport by PwD. This initiative was the result of ONCE (the Spanish National Organisation of Blind

23.	Name of Best Practice	Accessible ticket machines for all PwD in Barcelona
		People) actions, while PwD were involved in all the phases of the project through interviews for the determination of user needs, the validation of the technical and functional requirements during the design process and the approval of the final product. The concept of universal design regulates their development, while the machine components are not organised in an engineering order, but in the order of users' actions. Their design was based on strict accessibility criteria and they are fitted with an ergonomic device to allow people in wheelchairs or people of reduced height to purchase the tickets on their own. Moreover, the ticket machines are fitted with a navigation system targeted at blind people, guiding them person through the process, by means of audio and Braille systems, while they are also equipped with a system for the duplication of the tickets (also useful for people with learning disabilities). TMB's cost is covered by public funding. The cost of the project and the maintenance cost of the ticket machines are covered by a framework agreement, signed periodically with public institutions. TMB also published, in collaboration with ONCE, 500 copies of a guide to the metro in Braille, providing operational information of the metro network. The guide complements the a Braille/tactile map metro network map, which allows blind and visually impaired to orientate themselves while in the metro network according to a map of the city. A Braille guide to the legend of this map is also available, listing all the codes and numbering used in the map. 
	Date of initiation (Duration)	2006 (ongoing)
	Description of impact	Formal acceptance of the machines by ONCE and meeting the quality and maintenance standards set for TMB's technological systems constituted the success criteria. According to Fundación Corresponsables about 7.700 visually impaired people benefit from TMB's work in improving metro accessibility. Currently, the entire bus fleet is accessible, as is 88% of the metro network (up from 80% in 2010). TMB has also received positive feedback from the users and organisation representing people with disabilities and several awards for its focus on universal accessibility issue.

23.	Name of Best Practice	Accessible ticket machines for all PwD in Barcelona
	Lessons learnt	• Co-design with PwD. • Holistic coverage of ticketing and navigation for all PRM group needs.
	URL and/or relevant documentation	http://www.eltis.org/discover/case-studies/improving-accessibility-visually-impaired-people-barcelona-spain Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

24.	Name of Best Practice	Real time on-bus and bus stops audio and visual information in London
	Country	Spain (Burgos)
	Organisation/ Company	City of Burgos
	Description	A project aiming at the development of a 100% accessible public transport system (bus vehicles and bus stops), through ramp access, audio and visual information, etc., in the city of Burgos, particularly for older people and PRM, is run by the City of Burgos on the basis of the Strategic City Plan (a city association that promotes public transport) and the Castilla and Leon Institute of Technology (responsible for evaluation and technical aspects). The fundamental objectives of the project are the provision of universal accessibility, comfort and safety to users and the provision of information to passengers about transport facilities, while representatives of disability organisations were involved in the project. In the context of the project, new bus lines were developed, and timetables and frequencies were increased. The project was funded by the City and the European Commission through the CIVITAS initiative, as well as by Fundación ONCE.
	Date of initiation (Duration)	The increase in the number of passengers and the results of surveys among PwD and meetings with stakeholders constituted success indicators for the project, which was proved to be really successful, with the number of PwD and PRM passengers having been significantly increased. According to a survey carried out, 90% of citizens report that they are happy with the improvements that have been introduced (ramps, audible and visual information, real-time information, driver training etc.). 8% of people had no opinion (mainly because they do not use public transport) and 2% wanted further improvements. More training for bus drivers was adopted on the basis of the results of relevant surveys and the feedback of passengers, while the complaints mainly referred to the lack of awareness on PwD needs among the drivers and not about the system itself.
	Description of impact	Accessibility of PT infrastructure and fleet is not enough; without proper PT operators/ drivers appropriate training.

24.	Name of Best Practice	Real time on-bus and bus stops audio and visual information in London
	Lessons learnt	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf
	URL and/or relevant documentation	Spain (Burgos)

25.	Name of Best Practice	Pedestrian accessibility plan in Lisbon
	Country	Portugal (Lisbon)
	Organisation/ Company	City of Lisbon
	Description	A pedestrian accessibility plan (referring to outdoor public space, such as pavements, urban parks, etc. and the area between the pedestrian environment and public transport) for the city has been developed by the City of Lisbon, aiming at making Lisbon an accessible city, preventing the creation of new barriers to access, promoting the elimination of existing barriers and mobilising the community towards the creation of a city for all. The key objective of the plan is the promotion of the movement, independence, comfort and safety of all pedestrians; with emphasis on PwD, PRM and children. The methodology was approved by the city council in 2009.
	Date of initiation	2009
	Description of impact	The project has been warmly supported by political parties, PwD organisations and pedestrian rights associations. Success indicators include pedestrian traffic levels at some strategic points, usage of public transport by disabled and older people, the number of pedestrian accidents, user feedback (through surveys) and revenue for local shops. The project is reported as successful, based upon these indicators results.
	Lessons learnt	Due emphasis on the accessibility of the built environment for the pedestrian routes for all PRM. They constitute not only one transport mode but also the intermodal interface between most urban PT means.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

26.	Name of Best Practice	Easy access in Stockholm
	Country	Sweden (Stockholm)
	Organisation/ Company	City of Stockholm
	Description	The "Easy access in Stockholm project", run by the city of Stockholm, aims at improving accessibility conditions at the built outdoor environment (streets, pavements and public areas) and at public buildings, with the involvement of PwD and PRM in the whole process. The key goal was to make Stockholm Europe's most accessible city by 2010. The scheme started in 1999 and finished in 2010, with the access improvements having been integrated into the everyday city life. The starting point for the planning process was the Disability Policy Programme for the City of Stockholm, adopted in 2004. The Disability Policy Programme for the City of Stockholm is a steering document for the committees and boards of the City Council and is also intended to be used by the business community, the disability movement and the citizens of Stockholm. The detailed strategy is based on accessibility plans for each part of the city, starting with an inventory of barriers which need to be removed and are then developed into annual programmes of specific measures and investment. The following improvements are included in the plan: • Audio signals at pedestrian crossings. • Seats and benches around the pedestrian environment to provide resting points. • Removal of old gutters across the pavement, which were a hazard for wheelchair users. • Raising the level of bus stops to make it easier to get on and off buses and introducing colour contrast to mark bus stops. • Fitting flights of stairs with new handrails. • Adapting public toilets. A handbook has been produced targeted at planners, designers and architects, providing information on legal requirements and best practice. The project has been funded through specially allocated resources in the annual city budget.
	Date of initiation (Duration)	1999-2010
	Description of impact	Feedback is gathered from PwD and PRM, while a board of users monitor progress on a continuous basis. The key performance indicator is the percentage of the population who perceive Stockholm as a city with a high-level of accessibility. This is measured through surveys, revealing a significant project success so far.

26.	Name of Best Practice	Easy access in Stockholm
	Lessons learnt	• Holistic approach in all urban transport elements; from PT to stops, stations, toilets and pedestrian routes' accessibility; all through an integrated programme. • Participation of the whole local community in it. • Particular accessibility plan per neighbourhood.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

27.	Name of Best Practice	Modifying public transport stops
	Country	Poland (Krakow)
	Organisation/ Company	City of Krakow, the Road Transport Management Board and the local public transport operator.
	Description	An EU-funded project for the reconstruction of the Lubicz-Pawia streets intersection with the introduction of a safe bus and tram stop (because of problems with unsafe exiting from trams directly to the street at Lubicz Street) was realised in the city of Krakow, while reconstructed bus and tram stops were rolled out across the city, in the context of the "Integrated Public Transport in the Krakow Agglomeration" project. The aforementioned project constituted the starting point of a scheme coordinated by the City of Krakow, the Road Transport Management Board and the local public transport operator which was developed to make public transport stops in the city of Krakow safer and accessible to PwD and PRM either by changing or by rebuilding them. The key objectives of the scheme are the following: • to improve public transport safety and security • to improve public transport infrastructure in the city centre, particularly for PwD and PRM • to reduce the boarding and alighting times on public transport, particularly for PwD and PRM. The project was funded by the EU and the city of Krakow. The project is linked with measures implemented in the EU Caravel/Civitas II Project – Security Action Plan for Public Transport in Krakow. A survey carried out for this project, revealed a number of factors that – according to the respondents – reduce journey comfort and the sense of security when using public transport in Krakow. The main problems identified were: • The difference in floor levels – high floor vehicles were a particular problem for disabled and older people. • The speed of cars passing the bus/tram stops. • The number of cars passing the bus stops which made it difficult to get on and off.

27.	Name of Best Practice	Modifying public transport stops
		The main objectives of the survey were to compare the feelings of passengers about changed bus/tram stops and existing ones. After the survey, a document called "The Security Action Plan" has been published. The agreement now is that before any bus or tram stop is reconstructed, the ideas and requirements of the plan must be taken into consideration.
	Description of impact	A reduction in the number of accidents between pedestrians and public transport passengers, mainly in relation to getting on and off public transport vehicles has been recorded, as well as a reduction in the speed of private cars in the area of bus/tram stops. These two improvements constitute evidence of the success of the project, having increased public transport accessibility and having improved the conditions for pedestrians, especially for the most vulnerable ones.
	Lessons learnt	• Linking accessibility of urban PT enhancement to enhancement in safety and security, as well as efficiency of opportunity. • Accessibility as a prerequisite of any new PT project in the city.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

28.	Name of Best Practice	Taxi drivers training
	Country	Finland, Germany, Sweden, The Netherlands
	Organisation/ Company	Taxi companies
	Description	Disability awareness training forms part of taxi drivers training. In some countries (such as Sweden and Netherlands) taxi companies form part of the rail assistance network, so taxi drivers assist, by pre-arrangement, disabled passengers from the train at stations in case that rail staff is not available for assistance. Such strategies include, among others: • intermodal transfers; • partnerships with bus and taxi operators; • through ticketing schemes (through ticketing is a system whereby a traveller passing through a number of different transport networks can purchase one ticket for the complete journey; • liaison with local authorities on door-to-door systems.
	Description of impact	Enhancement of travel chain and transport links.
	Lessons learnt	Training of taxi drivers on accessibility to cover holistically PRMs needs; including first/ last mile.

28.	Name of Best Practice	Taxi drivers training
	URL and/or relevant documentation	COST 335 Passengers' Accessibility of Heavy Rail Systems Final Report of the Action European Commission Directorate General Transport 1999 http://cordis.europa.eu/pub/cost-transport/docs/335-02.pdf

29.	Name of Best Practice	Accessible PT for all PRMs in Prague
	Country	Czech Republic
	Organisation/ Company	Prague Public Transport Company
	Description	During the early 90s little to nothing was done for PT passengers with reduced mobility. Since the mid-90s, however, there was a significant shift when the city purchased low-floor vehicles – a statutory obligation to ensure barrier-free access into new subway stations, tram and bus stops. By 1998, Prague Public Transport Company provided all vehicles with special equipment to allow communication between the vehicles and the visually impaired. Visually impaired passengers own a portable remote control, obtainable through the association of the visually impaired, which sends a signal to an arriving vehicle. This makes the vehicle announce (loudly) externally its number and direction. The same equipment enables the visually impaired person to confirm to the driver whether he or she plans to board the vehicle, which increases the travellers' safety. Automatic stop announcements inside the vehicles help the blind (and of course all other passengers) to orient themselves as to where they are on the route. Besides the programme focusing on vehicles and information provision, Prague also invested in infrastructural accessibility. All newly opened metro stations are fully accessible for all travellers and a programme to make older metro stations barrier-free and accessible to wheelchairs was also launched. Prague determined which stations needed adaptations with the help of a feasibility study and feedback from organisations representing the visually impaired. As of 2015, four stations are under construction to make them accessible by wheelchair: Mustek line A, Mustek line B, Andel and I.P. Pavlova. All wheelchair-accessible stations and tram stops are also equipped with guiding infrastructural elements for the visually impaired, such as ensuring that there are no stairs between the platform and streets. At the end of 2015 Prague will have 61 metro stations, 43 of which will be accessible by wheelchair. All these stations will have appropriate supplies and will be manned by personnel to aid PT access. In tram and bus transport the situation is similar. All new vehicles are low-floor to ensure easy access without stairs; 259 trams of 883 (30 per cent) are low-floor as are 884 out of 1187 buses (75%).

29.	Name of Best Practice	Accessible PT for all PRMs in Prague
	Date of initiation (Duration)	1998 (ongoing)
	Description of Impact	This system has been viewed as successful that is being extended to several cities in the Czech Republic but also by PT operators abroad, such as the Dresden transport company (Dresdner Verkehrsbetriebe AG).
	Lessons learnt	PT accessibility achieved for all PRM, including use of ICT solutions for personalised guidance and routing.
	URL and/or relevant documentation	http://www.eltis.org/discover/case-studies/helping-visually-impaired-passengers-travel-around-prague-czech-republic http://www.dpp.cz/en/barrier-free-travel/

30.	Name of Best Practice	Introduction of Accessible Waterbuses in Venice
	Country	Italy
	Organisation/ Company	ACTV
	Description	Waterbuses constitute an important part of the public transport system in Venice. In the past the accessibility of motor impaired people was not provided for. The new boats offer disabled inhabitants of Murano Island the chance to arrive at the bus terminal and reach the Mainland without changing boats. The project for the construction of 20 new accessible waterbuses was approved in 2004. By the end of 2006 the public transport provider ACTV (Azienda Consorziale Transporti Venezia) was already operating 15 waterbuses. To reduce the impact on the physical environment, hulls were adapted in order to reduce superficial wave action. The shipyards and RINA (Registro Italiano Navale), a society for the classification of merchant ships, supervised the construction of the waterbuses and official tests have been made to guarantee a high standard for mobility reduced users of the waterbuses. In the future it is expected that motor impaired people's overall travel time between Murano and the Mainland will be reduced by half. The project has been financed within the CIVITAS programme.
	Date of initiation (Duration)	2004-2008
	Description of Impact	Reduction of the travel time for people with disabilities from Murano Island to the Mainland by one half.
	Lessons learnt	Accessible urban maritime transport may significantly affect PRM mobility and make up for the other modes' inaccessibility.
	URL and/or relevant documentation	https://esteast.unep.ch/good-practices/italy/introduction-of-low-impact-access-for-all-waterbuses-in-venice/

31.	Name of Best Practice	Introduction of Accessible Waterbuses in Venice
	Country	Czech Republic
	Organisation/ Company	City of Brno & DPMB (Brno Public City Transit Co. Inc)
	Description	In Brno wheelchair users often live together in special houses and typically travel from their homes together in groups. To improve transport services for this group of people, the City administration together with DPMB (Brno Public City Transit Co. Inc.), the public transport operator, decided to purchase 5 special minibuses within the CIVITAS ELAN project. The basic features of these minibuses include a modern information system, loading ramps, folding seats and space for at least 6 wheelchairs. Compared with standard buses the minibuses are also more environmentally friendly. The buses are run on 2 special routes, connecting the homes of mobility-impaired travellers with the main public institutions and hospitals in the city centre. The 2 routes run from Monday to Friday from 5:00 to 20:00. At other times the buses provide other services, for example, at the weekend, the buses are used for special trips for people with reduced mobility, to take them to, for example, a shopping centre, or other destinations. The Brno Public Transport Company also consults directly with mobility-impaired groups to accommodate their current and future travel needs.
	Date of initiation (Duration)	2015 (ongoing)
	Description of Impact	• Compared to the standard buses, travelling in the minibuses is safer and more comfortable for mobility-impaired travellers; • The operating costs of the minibuses are much lower than for the standard buses, especially in the case of fuel consumption, which is less than half that of the standard buses. • The number of low floor vehicles within the bus fleet has been increased, which gives people with reduced mobility greater travel opportunities in addition to the specialised minibus services.
	Lessons learnt	Accessible paratransit services may enhance mobility of PRM in inaccessible transport networks at lower cost to all
	URL and/or relevant documentation	http://www.eltis.org/DISCOVER/CASE-STUDIES/MINIBUSES-PEOPLE-REDUCED-MOBILITY-BRNO-CZECH-REPUBLIC

32.	Name of Best Practice	Door to door bus services and adapted infrastructures for people with reduced mobility in Wallonia
	Country	Belgium
	Organisation/ Company	TEC, Urban communities, AWIPH and the Red Cross
	Description	The aim of this initiative is to promote public transport as much as possible via specific solutions and to improve normal services in urban areas. The target group are people with reduced mobility, both permanent and non-permanent. Strong collaboration with the associations for disabled people has been a key condition for this initiative. TEC is collaborating with AWIPH, Agence Wallonne pour l'Intégration des Personnes Handicapées and the Red Cross. Improvements were made on material and bus stops. Two bus lines connecting hospitals are equipped with a bus designed especially for wheelchair users and with access ramps to the bus stop. Marketing and dissemination is mainly provided at the TEC Website. GAMAH complained on the fact that the passenger has to ask the bus driver to get on the vehicle and the Wallonia transport authority was also asked to accelerate the urban plans concerning the fully accessible bus lines besides of specific accommodation.
	Date of initiation (Duration)	2014 (ongoing)
	Description of Impact	One of the key benefits is the simultaneous development of specific services and universal design-oriented urban works.
	Lessons learnt	Continuous collaboration between transport operators, local authorities and the rehabilitation sector.
	URL and/or relevant documentation	http://www.eltis.org/DISCOVER/CASE-STUDIES/DOOR-DOOR-BUS-SERVICES-AND-ADAPTED-INFRASTRUCTURES-PEOPLE-REDUCED-MOBILITY

33.	Name of Best Practice	Internet information service for mobility-reduced persons in Paris - Infomobi
	Country	France
	Organisation/ Company	Ile de France region
	Description	Infomobi" is an information service for all people with reduced mobility in and around Paris and is accessible by telephone, e-mail or website. It provides real-time information about the accessibility of public transport services, with special concern for PwDs. The website of "Infomobi" is divided into four information categories according to different user groups: passengers with motor, visual, hearing and cognitive impairment. The service gathers information from RATP (Régie autonome des transports Parisiens - Paris Transport Association providing bus, tram, metro and heavy rail services), SNCF (Société nationale des chemins de fer français - French national railway providing suburban rail services) and OPTILE (L'Organisation

33.	Name of Best Practice	Internet information service for mobility-reduced persons in Paris - Infomobi
		Professionnelle des Transports d'Île-de-France - a federation of 80 private bus operators around Paris) and includes a lot of information about stations equipment, (i.e. number of lifts and other facilities). The call agents are able to give detailed information about walking distances, lift locations and where people can seek assistance during their journey. If no mainstream transport service is accessible for a specific request, the user of the information portal can contact the door-to-door transport reservation centre.
	Date of initiation (Duration)	2014 (ongoing)
	Description of Impact	The Infomobi service is integrated in the mobility service of Paris Ile de France https://www.iledefrance-mobilites.fr/
	Lessons learnt	• One-stop=shop accessible transport information service for urban transport, with integrated info on multimodal hubs accessibly and interfacing both public and private PT service providers. • Different info for each main PRM user group.
	URL and/or relevant documentation	https://www.iledefrance-mobilites.fr/plan-infomobi/ http://www.eltis.org/DISCOVER/CASE-STUDIES/INTERNET-INFORMATION-SERVICE-MOBILITY-REDUCED-PERSONS-PARIS-FRANCE

34.	Name of Best Practice	Mobility Agents help people with public transport in rural North Rhine Westphalia
	Country	Germany
	Organisation/ Company	Transport Association
	Description	The Mobility Agents programme was established in 2005 when a gap was identified in the service of the local PT providers. The information service targets those who use public transport but find it difficult to obtain the scheduling information they need. Although established, organised and run by a volunteer-run, non-profit society, the Mobility Agents programme is financed by the Transport Association, an agglomeration of 9 public transport providers and 20 local authorities. Costs include telephone and internet connections for the volunteers working on the hotline as well as a uniform (jackets or shirts) to make the Agents visible and recognisable at public events. Promotional material (posters, flyers and adverts) for the services is also produced. The Transport Association is the sole funder of the Mobility Agent programme. Initially, the Agents offered 'office hours' in different public locations (banks, community centres, city halls) in the communities they serve where local citizens could drop by with

34.	Name of Best Practice	Mobility Agents help people with public transport in rural North Rhine Westphalia
		their questions, but they found that the uptake was not as high as expected and they weren't able to cover the relatively large territory effectively. They had much more success with a telephone hotline, which allowed people to ask questions when it suited them as opposed to offering the services during prescribed hours. This approach has been employed since then.
	Date of initiation (Duration)	2005 (ongoing)
	Description of Impact	The Mobility Agents keep a record of all requests for information they receive. These went up from 1149 requests for information by telephone in 2006 to 1808 in 2009, as well as e-mail inquiries and questions at information stands. In 2006, a village information stand would have received fewer than 10 requests for information. In 2010, they often received more than 75, indicating significantly increased interest.
	Lessons learnt	• Public-Private Participation scheme offering Demand Responsive Transportation (DRT) services for accessible rural transport. • Novel business model.
	URL and/or relevant documentation	http://www.eltis.org/discover/case-studies/mobility-agents-help-people-public-transport-rural-north-rhine-westphalia

35.	Name of Best Practice	Ultra-low—floor buses, tramcars and underground trains in Vienna
	Country	Austria
	Organisation/ Company	Public transportation operator Wiener Linien
	Description	This new-generation vehicles were designed for the existing infrastructure at Wiener Linien, in order to meet increasingly challenging passenger demands; such as air conditioning and level passageways through the passenger compartment, passenger information systems and facilities for persons with impaired mobility. Within the vehicles an easily accessible wheelchair space is provided behind the driver‛s cab. A manually operated folding ramp is available for bridging any differences in height between vehicle and platform. Passengers with baby carriages benefit from the very low entrance height and end-to-end low floor. The bus fleet already consists exclusively of low-floor vehicles which can be lowered even further by hydraulic means, when required. The modern V-type metro vehicles operating on the underground are also barrier-free.
	Date of initiation (Duration)	Ongoing (order was made in spring 2004, but delivery was to be complete by 2015)

35.	Name of Best Practice	Ultra-low—floor buses, tramcars and underground trains in Vienna
	Description of Impact	The ultra-low-floor (ULF) network is very popular. Each year 20 older trams are replaced by the air-conditioned ULF models and the entire bus fleet is already composed of ULF vehicles. The ULF network gives a particular focus on people who have a physical disability or a hearing or visual impairment while it continues to be a flexible, safe and comfort way of transportation for all.
	Lessons learnt	Totally accessible multimodal (metro, bus, tram) public transport fleet.
	URL and/or relevant documentation	http://www.mobility.siemens.com/mobility/global/sitecollectiondocuments/en/rail-solutions/trams-and-light-rail/ultra-low-floor/ulf-strassenbahnsystem-en.pdf https://www.wienerlinien.at/media/files/2015/facts_and_figures_2014_151139.pdf

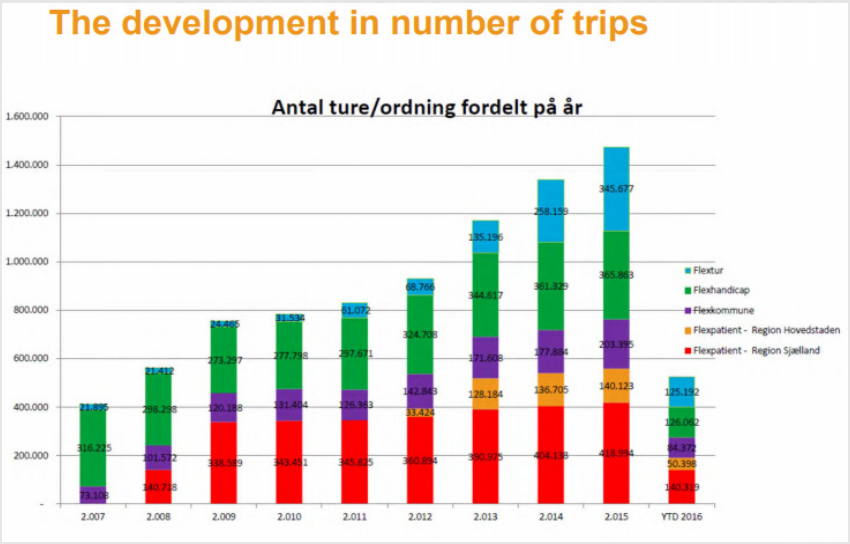
36.	Name of Best Practice	Accessible transportation for persons with visual disabilities in Vienna
	Country	Austria
	Organisation/ Company	Public transportation operator Wiener Linien
	Description	• **Acoustic Underground Orientation System POPTIS** POPTIS (Pre-On-Post-Trip-Information-System) is an acoustic orientation system offered by the public transport operator "Wiener Linien" in its underground network, developed together with organisations for blind people. The POPTIS route descriptions can be accessed via the barrier-free version of the Wiener Linien website, which also contains current reports and other relevant information. The website has been specially designed for screen reader programmes that automatically read out the text, ensuring that even blind and visually impaired passengers have unrestricted access. • **Tactile guidance system** Many underground stations, in addition to the area around a number of stops, are equipped with a tactile orientation system, to facilitate orientation for passengers with visual disabilities. The system is comprised of bright, raised guidance strips on the platform floor that run parallel to the edge of the platform. Additional strips branch out in different directions to mark the way to lifts, stairs or escalators. Blind or severely visually impaired individuals with their principle place of residence in Vienna may – just like any other annual pass holder – take a dog free of charge with their annual pass. If the dog has not been state-certified and entered in an orange disability pass issued by the Federal Social Welfare Office, then the dog must wear a muzzle.
	Date of initiation (Duration)	2004-ongoing (still expanding to all lines; currently covering U1, U3 and U4 lines).

36.	Name of Best Practice	Accessible transportation for persons with visual disabilities in Vienna
	Description of Impact	POPTIS can support trip preparations, can be used as a guide and aided recall for visually impaired people, as assistance for private study and for education for the blind or guide for managers of mobility trainings.
	Lessons learnt	Alternative HMI (acoustic, tactile) for travel planning at guidance.
	URL and/or relevant documentation	https://www.wienerlinien.at/eportal3/ep/channelView.do/pageTypeId/66533/channelId/-4001458 http://www.eltis.org/discover/case-studies/acoustic-underground-orientation-system-poptis-vienna-austria http://www.wl-barrierefrei.at/

37.	Name of Best Practice	Information services for persons with reduced mobility in Prague
	Country	Czech Republic
	Organisation/ Company	Prague Public Transit Co. Inc.
	Description	The provision of services for those with mobility impairments involves communications about these services to public transport customers and other potential users. Orientation in selected stations is made easier by special acoustic beacons informing the blind by means of an acoustic signal (tone tune) in underpasses and vestibules about the entrance to the passenger processing area of the station. **Metro** At some stations acoustic beacons also provide voice information. Blind passengers can activate acoustic beacons by means of a transmitter as required. Stations built in later periods — particularly B line stations — have been equipped with special leading grooves installed on the floor to enable easier orientation and movement within stations. Handrails at stations are also equipped with information in Braille. **Trams** From 1996 to 1998 all tramcars were equipped with special receivers for the blind. This equipment enables any blind passenger to activate — by means of a remote control — an external announcement informing him/her about the route number and destination of the approaching tram. The same equipment enables provision of an acoustic confirmation to the driver of the possible intention of the blind passenger to get on board. This increases safety for such passengers. The automatic announcement of stops inside trams helps the blind (as well as all other passengers, naturally) to be informed about stops along the route.

37.	Name of Best Practice	Information services for persons with reduced mobility in Prague
		Buses In cooperation with the Environmental Union of the Disabled of the Czech Republic and the Regional Organiser of Prague Public Transport (ROPID), Prague Public Transit drew up a plan for the operation of low-floor buses on 21 selected lines, nine of which are fully covered by low-floor buses and five of which are covered by low-floor buses on Saturdays and Sundays. At the beginning of 2000 over 90% of buses used in public transport operations were equipped with a new passenger processing and information system for the blind, including automatic announcement of stops.
	Date of initiation (Duration)	1998 (ongoing)
	Description of Impact	Measures that have been implemented in recent years have resulted in an increase of public transport riders from 1,03 billion trips in 2000 to 1,19 billion trips in 2016. Accessibility is based on sustainable urban public transport and, vice versa, public transport accessibility represents an aspect of sustainability. With additional investment in the public transport system including accessibility the City will become more and more attractive. 57% of all journeys are realised by means of public transport, of which almost 50% of all public transport passengers use the metro as the main transport mode and 30% use the tram
	Lessons learnt	Combination of generic elements with personalised devices enabled additional info and guidance.
	URL and/or relevant documentation	https://guests.blogactiv.eu/2017/06/08/accessibility-of-public-transport-services-in-prague/ http://www.eltis.org/sites/default/files/case-studies/documents/prague_3.pdf https://www.intelligenttransport.com/transport-articles/2060/public-transport-system-in-prague/

38.	Name of Best Practice	Demand Responsive Transportation in Denmark
	Country	Denmark
	Organisation/ Company	FlexDanmark tilbyder bl.a.
	Description	Flextrafik Administration is responsible for the administration ofservice of driving with customers with disabilities, who cannot use conventional public transportation. **Procurement model for the DRT operations:** • **SPOT-MARKED VEHICLES**: A unit price (€ per vehicle hour) is given at the bidding moment (i.e. every year) and then used each time when assigning a suitable vehicle for the actual transport task (combined with other parameters).

38.	Name of Best Practice	Demand Responsive Transportation in Denmark
		• **FIXED VEHICLES**: A guaranteed minimum availability in the contract (contracts for 2-4 years). Drivers are not allowed to refuse trips without good cause. Flexhandicap users can be transported 104 times during a year using this scheme. If more trips are needed, users can apply with their local municipality. It typically costs an annual fee of €40 to be part of Flexhandicap, plus €3 for the first 5km of every trip. An additional reduced fee is applicable for trips above 5km. The vehicles used for Flexhandicap are designed to carry people in wheelchairs in a safe and comfortable way. Furthermore, members of Flexhandicap can ride for free with all of the Regional Transport Authorities' service buses. All service buses have ramps for wheelchairs, and street level entry. Drivers can help passengers to board and alight from the vehicles. Many of the designated Flexhandicap busses are equipped with a stair climber which makes it possible to get up and down stairs with a manual wheelchair in buildings without elevator.
	Date of initiation (Duration)	2007 (ongoing)
	Description of Impact	The figure below shows not only the rapid development and coverage of the DRT scheme, but also the impact of the service and the need to transportation of people with reduced mobility who are unable to use regular buses and trains. 
	Lessons learnt	Specialised DRTs can be viable and sustainable accessible means to supplement public transport for persons with reduced mobility.
	URL and/or relevant documentation	http://nordicpublictransport.com/wp-content/uploads/51_Jens-Peter-Landberg-Flextrafik-presentation-i-Finland-juni-2016.pdf

39.	Name of Best Practice	Sensorial accessibility in Paris PT through the Equisens Project
	Country	France
	Organisation/ Company	RATP
	Description	The Equisens project is a collaborative initiative to install equipment and amenities in public areas for persons with limited sensorial capacity. RATP's Accessibility Advisory Committee (9 associations) has been invited to participate on several occasions. Included as part of the 5-year investment programme signed with Île-de-France Mobilités, this project covers 383 metro stations and 65 RER stations. After testing and evaluation, these visual, audio and tactile facilities are now being deployed in transport areas, helping passengers to locate different services and access passenger information. **Audio beacons to locate entrances and the main services** Audio beacons are being installed as part of the Equisens project. They enable the sight impaired to locate metro and RER station entrances, thanks to the messages they broadcast when triggered by the same type of universal remote control that is used at crosswalks. Inside metro and RER stations, audio beacons are also being installed to the right of information desks and special audio-feedback ticket vending machines. Altogether, 918 external beaconsequip 271 metro and RER stations. **Audio-feedback ticket vending machines** The blind or sight impaired may purchase their ticket or travel pass using a new generation vending machine that uses a specific visual and audio interface. In addition to its speakers, the vending machine is also equipped with headphones for very noisy environments. These special vending machines are located in metro and RER stations and at tramway stops. **Signalling using hyper signs** Hyper signs are increasingly being used for signalling in the rail networks' corridors, to favour immediate understanding, particularly for the sight impaired. **Secured stairways** The first secured stairways are being installed in 57 stations on lines M1, M2 and M3, as well as in the Port-Royal, Laplace, and Val de Fontenay RER stations. The equipment includes BEV warning strips, contrasting, anti-slip nosers and risers, and specific signalling for the top and bottom stairs. Handrails will be extended in phase 2 of the Equisens project. **Platform call boxes that can be located easily by the sight impaired** At the request of French Confederation for the Social Promotion of Blind and Amblyopia (CFPSAA), an interception band perpendicular to the flow of traffic has also been installed on platforms, to indicate the location of a passenger call box to contact the station

39.	Name of Best Practice	Sensorial accessibility in Paris PT through the Equisens Project
		agent. The new call box, currently being deployed on the RATP network, is equipped with a magnetic loop that enables the hearing impaired to contact the station agent. An audio message can also be triggered by the sight impaired using their remote control to help locate the call box. **Audio information on metro platforms** The waiting time before the next two metro trains is announced via loudspeakers. Distinguishing the direction of trains is facilitated by the use of a male voice for one direction and a female voice for the other.
	Date of initiation (Duration)	2013 (ongoing)
	Description of Impact	Passengers with reduced mobility can now use the entire Paris bus network (63 lines), over 70% of the suburban bus network (i.e. 275 lines), 63 RER stations out of the 65 that make up the RATP network and all 7 tramway lines, plus line 14 of the Paris metro.
	Lessons learnt	Need for an integrated set of measures to enable PT accessibility for all groups of persons with disabilities.
	URL and/or relevant documentation	https://www.ratp.fr/en/accessibility/sensorial-accessibility

40.	Name of Best Practice	Göteborg new Flixity trams full scale model test on accessibility
	Country	Sweden
	Organisation/ Company	Västtrafik the PTA of West Sweden in cooperation with Göteborg's Spårvägar (tram operator)
	Description	In order to evaluate the accessibility of Gothenburg's new trams, a full scale model has been developed and a group of passengers with mobility restrictions were invited to test it. Västtrafik, the PTA of West Sweden, has procured new trams in cooperation with Göteborg's Spårvägar (Gothenburg´s tram operator) that will be supplied by Bombardier in 2019. In order to test the design before the series production starts, a full scale model of a part of the tram has been built in Berlin, Germany. This mock-up made it possible to evaluate a number of important factors, such as the design of the driver's cab and how to provide the best customer experience. Västtrafik asked 4 people with mobility restrictions for help: one person using a wheelchair, one using a walker, one with impaired vision and an elderly person. They were invited to test the mock-up on location in Berlin. The visit took place 15-16 August 2017 and the participants tested many different aspects, such as the height of seats designated for people with reduced mobility, the space available for turning a wheelchair inside the tram and the access to stop buttons, ticket machines and handles.

40.	Name of Best Practice	Göteborg new Flixity trams full scale model test on accessibility
	Date of initiation (Duration)	2017 (ongoing)
	Description of Impact	There were many interesting and rewarding discussions during the visit and it has led to several adjustments being made to improve the accessibility of the trams (i.e. changes in the handles in places dedicated to wheelchairs, adjacent to ticket validator, changes on clear markings on the floor by the doors where the inclination starts to prevent accidents, etc.).
	Lessons learnt	Use of models to test PT accessibility with users and experts, before order and commissioning.
	URL and/or relevant documentation	http://www.uitp.org/sites/default/files/V%C3%A4sttrafik%20evaluating%20the%20accessibility%20of%20new%20trams.pdf http://www.railwaygazette.com/news/single-view/view/goeteborg-orders-flexity-trams.html

41.	Name of Best Practice	ICT for accessibility PT in Madrid
	Country	Spain
	Organisation/ Company	Empresa Municipal de Transportes de Madrid (EMT Madrid)
	Description	To facilitate the use of the bus service by persons with visual disabilities, visual and acoustic information is provided both inside and outside the vehicle. It indicates the position of the bus, the line number, the direction, and information about the route once the bus arrives at the bus stop. The information panels at the bus stop include audio information that can be activated through a simple button or by activating Bluetooth on the mobile phone. A telephone service provides automatic information about the estimated time of arrival at each stop. The website has also been created in an accessible way. **Process/strategy to implement the project/programme:** The company makes its own technological designs and makes public tenders for the implementation of fabrications, supplies and facilities. **Changes achieved:** A series of ICT actions have been implemented: • visual and acoustic information systems installed inside and outside the bus and at bus stops; • systems based on mobile phones, with voice recognition and synthesis; • innovative mobile applications, such as a voice guidance system to use the bus; • innovative Smart TV and wearables applications; • an Open Data Platform in order to third parties can develop even more apps and functionalities.

41.	Name of Best Practice	ICT for accessibility PT in Madrid
	Date of initiation (Duration)	2014 (ongoing)
	Description of Impact	• 1,900 vehicles of EMT provide visual and audio information; • 800 information panels at bus stops; • Applications and Open Data Platform receive 30 million visits per month.
	Lessons learnt	Optimal use of ICT to enhance PT accessibility.
	URL and/or relevant documentation	https://zeroproject.org/practice/public-buses-in-madrid/ https://mobilitaetsprojekte.vcoe.at/visual-and-acoustic-information-on-public-buses-emt-madrid

42.	Name of Best Practice	Tactile paths giving voice commands via a smart stick and a mobile phone app in Italy
	Country	Italy
	Organisation/ Company	JKJ Srl and Associazione Disabili Visivi Onlus (National Associations for Visually Impaired People)
	Description	JKJ Srl, an Italian plastic fabrication company and Associazione Disabili Visivi Onlus (National Associations for Visually Impaired People) have developed the Loges Vet Evolution (LVE) tactile path system with integrated communication tags. The path helps persons with visual impairments to navigate safely by giving voice directions to the user's mobile phone about the path and surrounding spaces via a Bluetooth "Smart Stick." Over 450 areas (mostly in Italy) have had the technology installed, plus two paths in Belgium and one in Canada. The LVE system is made up of tactile paving (textured surfaces that allow visually impaired users to feel the different patterns through their feet, indicating directions and dangers) integrated with radio frequency tags. The user holds a Bluetooth-equipped smart stick, which receives instructions from the radio tags when it touches the path. These instructions are then sent via Bluetooth to an app on the user's mobile phone, which reads out voice instructions, based on a downloadable map. The type of information provided is unlimited, but typically users are notified of intersections, crossings, the direction of travel, and points of interest along the route (e.g. "You are on the main street, and on your left is the Town Hall, which is open from 9 to 12"). The LVE tags require no batteries and can be installed in a range of surfaces, including cement, stone, and PVC.
	Date of initiation (Duration)	2014 (still expanding)
	Description of Impact	The use of LVE technology has steadily increased from 70 areas installed in 2014 to 150 in 2016. The system has also expanded to outside Italy, with two paths being installed in Brussels, Belgium, and one in Vaughan, Canada. There are also plans for a second in Vaughan, with the system being featured on local television.

42.	Name of Best Practice	Tactile paths giving voice commands via a smart stick and a mobile phone app in Italy
	Lessons learnt	Personalised navigation system for visually impaired travellers.
	URL and/or relevant documentation	https://20cxh614hon119kmcx49v25h-wpengine.netdna-ssl.com/wp-content/uploads/2018/01/PRA18-1034-ITA-LVE-Smart-Stick-System-Accessible-Word-Version.docx https://zeroproject.org/practice/pra181034ita-factshet/

43.	Name of Best Practice	Accessible Bus Stop Design Guidance
	Country	United Kingdom
	Organisation/ Company	Transport for London (TFL)
	Description	The Accessible Bus Stop Design Guidance sets out requirements and guidance for the design of accessible bus stop environments. The intended audience are those who shape the environment through planning and street design as well as engineers designing bus-specific infrastructure. This document forms one part of Transport for London's Streetscape Toolkit, and should be read in conjunction with other TfL guidance documents: • Streetscape Guidance • London Pedestrian Design Guidance • London Cycling Design Standards • Kerbside Loading Guidance • Station Public Realm Urban Design Guidance 
	Date of initiation (Duration)	Ongoing first published 2006 – Revised edition 2017
	Description of impact	The introduction of low-floor buses fitted with ramps for wheelchair access throughout London, has led to a requirement for appropriate kerbside access at bus stops. Unless all stops along a bus route are equally accessible, passengers may be unable to board or alight a bus at their desired location and the potential benefits from low floor buses will be reduced. This hinders the public transport network being fully inclusive. This guide helps to ensure consistency and that the benefits of low floor buses now used on London routes are gained to maximum effect.

43.	Name of Best Practice	Accessible Bus Stop Design Guidance
	Lessons learnt	An holistic view needs to be taken of the built environment. When selecting a suitable vehicle e.g. a low floor bus, consideration needs to be given to the built environment at bus stops, in respect of the approach and the stop itself so that the benefits of the investment in a fleet of accessible buses is not lost due to the customer journey being inaccessible at any point.
	URL and/or relevant documentation	Accessible Bus Stop Design Guidance http://content.tfl.gov.uk/bus-stop-design-guidance.pdf

3.2 Long-distance transport

1.	Name of Best Practice	EC Regulation 1107/2006 Enforcement: Reputation-driven enforcement
	Country	UK
	Organisation/ Company	UK Civil Aviation Authority (UK CAA)
	Description	Albeit Article 14 of Regulation (EU) No 1107/2006 assigns Member States the task of laying down rules on penalties applicable to infringements of the regulation and take all the measures necessary to ensure that those rules are implemented, actual enforcement of the regulation by means of penalties has been extremely rare ever since it came into force. Despite the significant number of complaints airports and airlines receive every month regarding PRM assistance, to date the only notable case of enforcement Europe-wide is the fine issued by the Spanish NEB AESA against the Spanish air carrier Air Europa. Costs and complexity of the enforcement process are the primary root causes of the lack of other significant examples of enforcement. Per Article 9 of the regulation, all airports whose annual passenger traffic is greater than 150.000 passengers must compile and publish Quality Standards of assistance. In 2016, the UK Civil Aviation Authority began publishing the yearly report of airport Quality Standards of all UK airports. Data allows the NEB to rank airports as Very Good; Good; Taking Steps; Poor.
	Date of initiation (Duration)	2016 (ongoing)
	Description of impact	The first yearly report, 2016, gained exceptional visibility as all mainstream media widely mentioned it. Edinburgh airport, the only one rated poor in the report, took immediate steps to improve the quality of assistance it gives passengers with disabling conditions. The second report, 2017 gained even greater attention as two major airports, Manchester, and London Heathrow, were rated poor. Both airports have immediately taken steps to significantly improve the quality of PRM services.
	Lessons learnt	The UK CAA report is the first Europe-wide example of reputation-driven enforcement, and the most effective unconventional enforcement action to date across all 28 Member States.
	URL and/or relevant documentation	1. http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32006R1107&from=EN 2. https://www.euroweeklynews.com/3.0.15/news/on-euro-weekly-news/spain-news-in-english/129908-airline-fined-over-mobility-assistance-line 3. http://publicapps.caa.co.uk/docs/33/CAP1438_AUG16.pdf 4. http://publicapps.caa.co.uk/docs/33/CAP1577_Airport_Accessibility_Report_FINAL.pdf

2.	Name of Best Practice	PRM enplaning and deplaning process – Manual lifting
	Country	Cyprus, UK, USA
	Organisation/ Company	Various airports (Larnaca, Heathrow, Gatwick) and U.S. based MedAire
	Description	In the aviation industry, passengers with severe mobility restrictions are transferred from aisle chairs to their seat on the aircraft by manual lifting. This often results in an undignified experienced, not to mention a dangerous one for both passenger and helpers. It is common knowledge that numerous passengers with severe mobility restrictions dread manual lifting citing the fear of being dropped as the primary cause. Manual lifting is normally subject to strict health and safety rules. However, these rules seem not to apply to airport service providers. When allowed, manual lifting requires ad hoc training, something most airport helpers do not have access to. At a time when care workers are asked to refrain from manually lifting patients, it is striking that the same level of safeguards and care does not apply to PRM service providers. There are two solutions to bypass the issue of manual lifting. A few airports across the EU (Larnaca, London Heathrow, London Gatwick) purchased the Eagle Hoist, a medical grade hoist specific to the aviation industry. This Australian made hardware is currently in use at many airports outside Europe. Second generation transfer boards designed specifically for the aviation industry are also widely available on the market. In the aviation sector, the most advanced product of this kind is the Movable Disc Board manufactured by U.S. based MedAire.
	Date of initiation (Duration)	Ongoing
	Description of impact	Safe and dignified boarding process for persons with reduced mobility.
	Lessons learnt	If proper awareness exists on modern transfer aids, the PRM service can be improved.
	URL and/or relevant documentation	1 http://www.dailymail.co.uk/news/article-4642632/BA-staff-dropped-disabled-passenger-HEAD.html 2 http://www.reducedmobility.eu/20120727240/The-News/martyn-sibley-flying-against-all-odds.html 3 http://www.hermesairports.com/en/larnakahome/information/persons-with-reduced-mobility 4 https://www.gatwickairport.com/at-the-airport/passenger-services/special-assistance/special-facilities-and-services/ 5 https://www.airport-suppliers.com/supplier/haycomp-pty-ltd/ 6 http://www.medaire.com/medaire-old/airlines/solutions/medical-kits-equipment/medical-equipment-details

3.	Name of Best Practice	Hidden disabilities (Autism, Alzheimer's, dementia, learning difficulties)
	Country	UK, USA
	Organisation/ Company	Civil Aviation authorities and various airports in UK and USA.
	Description	At the time Regulation (EU) No 1107/2007 was drafted, the theme of hidden disabilities did not bear the same relevance it has reached today. As time progressed, air travel became more accessible. Today, increasingly more people with hidden conditions travel by air. From time to time, airports across Europe report cases of dementia sufferers wandering off, as well as passengers with Autism experiencing outbursts because airport staff does not handle them in accordance with existing training protocols. In 2016, the UK Civil Aviation Authority published guidance for airports on providing assistance to people with hidden disabilities. First of its kind in Europe, the CAA's guidance contains best practice examples and useful advice for operators. The CAA's document also recommends operators adopt "option to identify themselves as needing assistance through wearing a suitably designed lanyard, bracelet, or similar." In 2015, Los Angeles World Airport (LAWA) launched the first programme of self-identification for people with autism. LAWA's self-identification program that allows persons with autism to share that they have an intellectual disability by wearing a specially-designed sticker. In 2016, London Gatwick airport was first in Europe to launch the Lanyard Programme. Available on voluntary basis, the lanyard allows self-identification at critical touch points (security, immigration, customs). Staffs, security personnel, and border officers are trained to recognize the lanyard and handle passengers accordingly. To date, Gatwick airport distributed in excess of 8.000 lanyards. Manchester Airport has produced an Autism information and Guide for passengers. There are airports in USA where parents of children on the autism spectrum can take their children to get familiar with the surroundings and procedures in the airport before travelling. Also Virgin Atlantic has a similar familiarisation programme. These customer-centred approaches make a significant contribution to improving services for passengers with invisible conditions and should be replicated elsewhere.
	Date of initiation (Duration)	2015 (ongoing)
	Description of impact	Europe has not seen major incidents to date, there are now two documented cases of dementia sufferers who wandered off airports; one was later found dead. In 2013, dementia sufferer Victoria Kongwandered off Ronald Reagan airport in Washington DC after becoming disoriented. The 83-year-old woman was found dead three days later.

3.	Name of Best Practice	Hidden disabilities (Autism, Alzheimer's, dementia, learning difficulties)
		In 2015, 53-year-old dementia sufferer Josaphat Dupuy wondered off La Guardia airport in New York. He was found one day after disappearing 40 kilometres away from the airport. Such incidents may thus be avoided.
	Lessons learnt	Hidden and cognitive disability needs should not be forgotten.
	URL and/or relevant documentation	1 http://www.dailymail.co.uk/news/article-2320202/Grandmother-dementia-Victoria-Kong-missing-arriving-flight-DC-Barbados.html 2 http://www.reducedmobility.eu/20150826643/TheNews/american-airlines-sued-for-losing-dementia-sufferer 3 https://publicapps.caa.co.uk/docs/33/CAP%201411%20DEC16.pdf 4 https://www.lawa.org/newsContent.aspx?ID=2003 5 https://www.gatwickairport.com/at-the-airport/passenger-services/special-assistance/hidden-disabilities/

4.	Name of Best Practice	Airport Awareness Travel advice for parents and carers of children on the Autistic Spectrum in London Stansted Airport
	Country	UK
	Organisation/ Company	London Stansted Airport & National Autistic Society
	Description	This booklet was created to help parents and carers of children on the Autistic Spectrum understand what will happen on their journey through London Stansted. It is an example of a good practice that could be used in other Airport to facilitate passengers' journey through airport, which are often stressful and even difficult to navigate around. The booklet contains photographs of objects, displays and people that can be met at the airport as well as short, clear explanations. There are also games and checklists for children to tick what they had seen or heard during their journey through the airport.
	Date of initiation (Duration)	2015 (ongoing)
	Description of impact	No further info on its use is available
	Lessons learnt	• Specific accessibility action for PRMs with cognitive disability. • Training of PRMs and companions on long-distance hub operations.
	URL and/or relevant documentation	http://mag-umbraco-media-live.s3.amazonaws.com/1005/airport-awareness-booklet-aw2.pdf

5.	Name of Best Practice	Consultation on Quality Standards with disability organisations
	Country	UK
	Organisation/ Company	Heathrow airport
	Description	Article 9 of Regulation (EU) No 1107/2006 mandates airports set quality standards, and determine resources for meeting them, in cooperation with "organisations representing disabled passengers and passengers with reduced mobility." However, airports usually "consult" individual organisations ad hoc, rarely involving them in the process of setting Quality Standards or when planning major refurbishment of building new infrastructure. Recital 11 of Regulation (EU) No 1107/2006 states "in deciding on the design of new airports and terminals, and as part of major refurbishments, managing bodies of airports should, where possible, take into account the needs of disabled persons and persons with reduced mobility." Lack of real consultation is detrimental to the quality of services airports give passengers with disabling conditions and creates a significant gap when addressing accessibility of refurbished or new infrastructure. The UK Civil Aviation Authority published guidance on quality standards under Regulation (EU) No 1107/2006. Chapter 3 of the guidance document defines the consultation framework airports should adopt, including setting up forums comprising representatives of charities and disability organisations. In September 2017, Heathrow Airport Limited (HAL) took consultation to the next level setting up the Heathrow Access Advisory Group (HAAG), an independent body tasked with providing "bringing a consumer perspective into HAL's decision-making and planning processes." First of its kind in Europe, the HAAG is also tasked to act as Heathrow's "critical friend", define the scope of Special Categories of Passengers' interests in any given issue, and reflect the principles of access, inclusion, information, safety, representation, and redress.
	Date of initiation (Duration)	2017 (ongoing)
	Description of impact	Improvement of accessibility level of Heathrow Airport.
	Lessons learnt	To ensure full interaction with all airport stakeholders, the HAAG comprises representatives of Heathrow, its Airport Operators Committee (comprising the airlines) and the airport's PRM service provider.
	URL and/or relevant documentation	1. http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32006R1107&from=EN 2. https://publicapps.caa.co.uk/docs/33/CAP1228_Quality_standards_Reg_EC1170_2006.pdf 3. https://www.heathrow.com/file_source/Heathrow/Static/PDF/Airport_guide/HAAG-TOR.pdf

6.	Name of Best Practice	A vision for tomorrow – wheelchair accessible aircraft
	Country	USA, UK
	Organisation/ Company	US based All Wheels Up (AWU) and Flying Disabled UK, Virgin Atlantic Airways
	Description	There is a desire for people across the disabled community to travel. But those who simply cannot leave their own wheelchair find the process of travel undignified, unsafe, and sometimes too difficult to even consider. Travel using a wheelchair over land and sea has adapted over the years. Wheelchair spaces are a common sight on buses and trains in many Member States. Wheelchair adapted vehicles drive on every European road. Travelling in an aircraft when you have a disability however, has not evolved as fast. The aviation industry has not been directed to consider, let alone make, such changes for disabled passengers. As the world's population lives longer and more people than ever want to travel, the need for airlines to make provision inside the cabin to meet accessibility requirements must be brought to the forefront of thinking. US based not for profit All Wheels Up (AWU) teamed up with UK based campaign Flying Disabled. Both organisations aim to make airplanes fully accessible soon. Chris Wood of Flying Disabled has been heading the UK campaign to bring air travel in line with other transport modes and aims to get wheelchairs in the cabin in the near future. In September 2017, Virgin Atlantic Airways hosted the Flying Disabled Symposium on accessible air travel. Airbus, Air Canada, All Nippon Airlines, IATA, Delta Airlines, HM Government, the House of Lords and the BBC, among others, were in attendance. In the USA, All Wheels Up conducted Federal Aviation Authority (FAA) testing standards on Wheelchair Tie downs donated by Q"straint. AWU tested according to the FAA standards for in-cabin use - the same test for airplanes seats, drink carts etc. This is a PULSE test, far more demanding than a static test used to test cars. Wheelchair tie downs and wheelchair already pass a 20G static test and AWU proved they also pass a 20G FAA standard PULSE TEST. According to AWU, the European Aviation Safety Agency (EASA) said they do not do testing of this kind, but rather rely on the FAA for testing. Where AWU or another stakeholder get wheelchair tie downs approved by the FAA, they then can apply for certification with EASA.
	Date of initiation (Duration)	2017 (ongoing)
	Description of impact	The research conducted by All Wheels Up shows safely transporting wheelchairs in the aircraft cabin is a viable option. The organisation is currently raising funds to conduct new studies. The research conducted by Flying Disabled shows the need for greater engagement from wheelchair manufactures to ensure.

6.	Name of Best Practice	A vision for tomorrow – wheelchair accessible aircraft
	Lessons learnt	Here research is needed for wheelchair accessible aircrafts, which solutions are feasible but not yet optimal.
	URL and/or relevant documentation	1. https://www.allwheelsup.org/our-solution/ 2. http://flyingdisabled.org.uk/ 3. https://apex.aero/2017/10/02/accessibility-stakeholders-wheelchair-cabin-symposium-virgin-atlantic-hq

7.	Name of Best Practice	PRM Charges in Air Transport
	Country	UK
	Organisation/ Company	UK Civil Aviation Authority
	Description	The "elephant in the room" is an idiom describing an obvious problem no one wants to discuss; in the case of access to air travel, this is the PRM charge. The PRM charge is a small levy, usually €1 or thereabouts, which airports charge airlines on all departing passengers. Proceeds are used to fund purchase of dedicated hardware and pay staff assisting passengers with disabling conditions. On average, passenger traffic has been growing at a rate of 5 per cent year on year. However, PRM traffic has been growing at a much faster pace, approximately 12 percent year on year. In simpler words, if the PRM charge is not adjusted to reflect growth in numbers of those requiring assistance, there is less money to assist more passengers. The typical outcome implies services are scaled back to the detriment of quality standards. Despite their best efforts, airports and service providers often find themselves at a net loss because most airlines are adamant in fighting every attempt to increase the PRM charge. In December 2016, the UK Civil Aviation Authority took the unprecedented initiative to remind operators of their obligations with regard to the PRM charge. In the letter, the National Enforcement Body states "This is a service with a human element; undervaluing it can have a significant detrimental impact on some people's ability to access air travel." The Regulator went on reminding operators that "Ultimately, therefore, an airport can impose the level of the PRM charge upon airlines."
	Date of initiation (Duration)	2016 (ongoing)
	Description of impact	Improved QoS by airlines enforced through Civil Aviation Authority.
	Lessons learnt	Airport managing bodies should be helped imposing the adequate level of PRM charge independently from the commercial pressure of airlines. This can be achieved through a coordinated action of NEBs across

7.	Name of Best Practice	PRM Charges in Air Transport
		Europe by reminding airlines the principle set forth in the European Commission guidelines on Regulation (EU) No 1107/2006: "The regulation states that at the end of the consultation process the airport managing body is the competent authority that may finally decide upon and apply the policy and the level of the charge. The regulation does not allow airports users as defined by the regulation to take the decision on the level of the charge and impose this on airport managing bodies".
	URL and/or relevant documentation	1. Annex 2 Letter from Civil Aviation Authority (UK) regarding PRM Charge, 9 December 2016. 2. https://ec.europa.eu/transport/sites/transport/files/themes/passengers/air/doc/prm/2012-06-11-swd-2012-171_en.pdf

8.	Name of Best Practice	Accessible Airport awards
	Country	EU
	Organisation/ Company	EDF + Airport Council International (ACI) Europe The jury for the Accessible Airport Award was comprised of the EDF Executive Committee Members& representative of DG MOVE of the European Commission.
	Description	This is a yearly award that aims to honour the best airport in Europe in terms of its level of accessibility as well as the range and the quality of the assistance services that it offers. The award is also intended to encourage other airports to continue their work on removing the barriers that people with disabilities and persons with reduced mobility can still face when travelling by air.
	Date of initiation (Duration)	2017 (ongoing)
	Description of impact	It is too early to estimate
	Lessons learnt	Single mode and transport hubs related awards may enhance accessibility guidelines and regulations adoption and control.
	URL and/or relevant documentation	http://www.edf-feph.org/newsroom/news/larnaca-international-airport-wins-2017-accessible-airport-award

9.	Name of Best Practice	Added value services to PMs at Larnaka Airport
	Country	Cyprus (Larnaka)
	Organisation/ Company	Unit of Hermes Airport Ltd
	Description	Larnaka airport received the Accessible Airport Award for 2017. The airport, is characterised by integrated initiatives relating to accessibility for PwD and PRM, both in terms of boarding equipment (e.g. the "Eagle lift" that facilitates the boarding of wheelchairs) and in terms of the accessibility level as regards

9.	Name of Best Practice	Added value services to PMs at Larnaka Airport
		check-in machines and e-Gates. Moreover, it disposes of additional features, such as sockets for electric wheelchairs and free parking for 120 minutes. There is also cooperation with Senior Travel Groups with expertise in the accessibility for PRM, the airport website is characterize by improved accessibility features. Moreover, PRM Unit of Hermes Airport Ltd, operator of Larnaka and Pafos International Airports in Cyprus, has developed and implements staff training on disability awareness and customer service for frontline staff across key airport-based services and facilities. The training takes place in a context of high standard accessible infrastructure and services, which are continuously monitored (according to a specified list of indicators based on relevant regulations) and improved. Among others, spot checks are performed on a frequent basis at the airports of Larnaka and Pafos (three random spot checks on average per week), at every stage of the departure and arrival procedures (drop-off, check-in, PRM desk, shops, boarding etc). The "Disability and Equality Awareness Training" and "Practical Hands-On Training for Lifting Techniques" are provided by Hermes Airports PRM Unit to the PRM Service Provider.
	Date of initiation	2017
	Description of impact	High customer satisfaction from services is expressed in the respective surveys and feedback, while evaluations of trainers and staff trained are very positive.
	Lessons learnt	• Holistic accessibility of information, boking and physical routes in a major transportation hub. • Additional enabling services (for parking, electric wheelchair charging, etc.).
	URL and/or relevant documentation	http://www.edf-feph.org/newsroom/news/larnaca-international-airport-wins-2017-accessible-airport-award http://www.accessibletourism.org/resources/eu-skills-12-hermes-airports-cyprus-case-study.pdf

10.	Name of Best Practice	Above standards accessibility in Dublin airport
	Country	Ireland (Dublin)
	Organisation/ Company	Dublin Airport
	Description	Dublin airport received the Accessible Airport Award for 2016. The judges considered that the airport excels in accessibility features and facilities, including adult changing places, two separate relief areas for guide dogs, fully accessible retail and catering areas alongside with service level agreements for assistance that exceed the standards of ECAC Doc 30, a guidance document by the European Civil Aviation Conference. The judges also cited Dublin Airport's website accessibility, which is according to the AA standard of WCAG 2.0 (currently, the recommended level to ensure accessibility for persons with disabilities).

10.	Name of Best Practice	Above standards accessibility in Dublin airport
	Date of initiation (Duration)	2016 (ongoing)
	Description of impact	The level of service, as experienced directly by persons with disabilities travelling through Dublin Airport was consistently high.
	Lessons learnt	Major transportation hub accessibility that goes beyond the standards in terms of ITS, training, physical accessibility and support services.
	URL and/or relevant documentation	http://www.edf-feph.org/newsroom/news/dublin-airport-wins-accessible-airport-awards-2016

11.	Name of Best Practice	Accessible Airport Link Arlanda Express. Stockholm
	Country	Sweden
	Organisation/ Company	Arlanda Express
	Description	The Arlanda Express train service connects downtown Stockholm with the Arlanda airport and is operated by a private company. Although it is used for a regional train distance, it has more characteristics of a long-distance train with high speed and few stops. The train cars and the surface of the platform are on the same level so that it is easy for motor-impaired people to enter. The staff can bridge the remaining horizontal gap upon request with portal ramps. The central train car of the Arlanda Express is specially designed for wheelchair users with enough space for them and a lavatory equipped for disabled people. Assistants of disabled people can travel free of charge, as can guide dogs for people with visual impairments. As a special service for impaired people the Arlanda Express offers a personal assistant who brings you directly from the platform to the desired terminal at the airport, if the service is ordered at the beginning of the journey. This can be done by contacting the train staff in the Arlanda Express or, if the passenger is arriving by plane, by contacting the airline staff. The "Special Transport Services Card" from Stockholm County Council is also valid for this train service, meaning that there are no extra costs for local people with impairments.
	Date of initiation (Duration)	2007 (ongoing)
	Description of Impact	Fully accessible to all airport-city transfer
	Lessons learnt	Example of an accessible multimodal connection
	URL and/or relevant documentation	http://www.arlandaexpress.com/

12.	Name of Best Practice	Training for railway staff
	Country	Luxembourg
	Organisation/ Company	Luxembourg Railway Company (CFL)
	Description	A training programme has been developed for the staff of the Luxembourg Railway Company (CFL). The training consists of a one-day session, including theoretical information and practical exercises, aiming at improving accessibility in public transport for PwD and PRM. The programme aims at increasing the number of PwD traveling by public transport, by improving the staff behaviour and the quality of the journey. The programme started in 2005. Among the trainers, there are PwD, while the training focuses on mobility, cognitive, hearing and visual impairment. It should be noted that, apart from PwD, older people and foreign visitors can also benefit from the programme, given that –among others – it teaches staff how to communicate without speaking. The Luxembourg Railway Company (CFL) bares the cost of the training.
	Date of initiation (Duration)	2005 (ongoing)
	Description of impact	On the basis of the feedback received from both PwD that travel by rail and from the drivers, the programme is really successful, a fact evidenced by the reduction of complaints and the declared satisfaction among disabled users and staff, as well as by the increased numbers of PwD that travel by rail.
	Lessons learnt	• Nationwide training scheme for staff training on accessibility issues. • PwD among the trainers.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

13.	Name of Best Practice	TransPennine Express in the UK
	Country	UK
	Organisation/ Company	TransPennine Express company
	Description	TransPennine Express is a British train operating company that provides intercity rail services, connecting key Northern cities and towns, through the routes of North Transpennine, South Transpennine, North West and Scotland. The TRANSPENNINE Express follows the "Making Rail Accessible: Helping older and disabled passengers" policy. This includes: • Quality checks on all levels undertaken by appropriately trained staff members. • Feedback analysis by Complaints Handling Process and follow up procedures.

13.	Name of Best Practice	TransPennine Express in the UK
		• "Find it and Fix it" notification system (implemented from the start of 2017), reporting directly to the service desk allowing the passengers to notify on any faults that are noticed. Furthermore, the company considers the blue assist system, which is designed to help anyone who has difficulty communicating no matter what the cause, to find a way for asking for help, or making a request when out and about, http://www.blueassistuk.org.uk/Home/) and trains its staff members to recognize the "Blue Assist" on trains and stations, by that improving the communication and service quality for the ones that may have difficulty travelling. As part of the communication strategy, copies of Passenger's Charter are available on the stations as well as are distributed in local communities, such as libraries and travel centres. Relevant information is also accessible in various formats, while the customers with specific needs are provided with telephone and text phone numbers, through which these customers can ask for additional assistance, book tickets or leave feedbacks. Finally, the website of TRANSPENNINE EXPRESS is designed according to the Level A standard of W3C's Web Accessibility Initiative's Web Content Accessibility Guidelines, and has a number of features and options for colour consideration, resizable fonts, etc..
	Date of initiation (Duration)	2014 (ongoing)
	Description of impact	As of 2014/2015, out of 28,6 million journeys on the service 0.39 complains have been received per 100000 passengers, which is compared positively to the internal target of 0,41.
	Lessons learnt	• Effective passengers' feedback and complaints management scheme. • Specified website accessibility level.
	URL and/or relevant documentation	https://www.google.gr/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwjKj8DdqdLXAhWJpaQKHYpPAIoQFggzMAE&url=https%3A%2F%2Fwww.tpexpress.co.uk%2F~%2Fmedia%2Fpdfs%2Faccessibility%2Ftpexpress-making-rail-accessible-guide-to-policies-and-practices-april-2016.pdf%3Fla%3Den&usg=AOvVaw0q3UafWc7GuJFvwvjLILSV

14.	Name of Best Practice	New Railjet Trains for PRM enhanced travel experience
	Country	Austria
	Organisation/ Company	Austrian national railway ÖBB (Österreichische Bundesbahn)

14.	Name of Best Practice	New Railjet Trains for PRM enhanced travel experience
	Description	Austrian national railway ÖBB (Österreichische Bundesbahn) took the needs of the PRM under special consideration. In the new trains there are special vehicle-bound lifting platforms for mobility-restricted people, which means it is no longer necessary to reserve the ride in advance (but ÖBB additionally introduced a call centre for mobility-reduced people). Within the train three spaces are reserved for wheelchair passengers and the adapted restroom is nearby. A special service inside the cars is the newly available power outlets for wheelchair batteries. For visually impaired persons all buttons on board are additionally equipped with tactile elements and a special place for guide dogs is provided. Via a service button passengers can call a person attendant, and the integrated passenger information system provides information through audio and visual communication.
	Date of initiation (Duration)	2007 (ongoing)
	Description of Impact	Shifts of transport from car to rail has been reported.
	Lessons learnt	Improved rail service quality and experience shifts PRM away from car use.
	URL and/or relevant documentation	http://www.oebb.at/en/leistungen-und-services/railjet-ausstattung

15.	Name of Best Practice	Autonomously usable rail station in Berlin
	Country	Germany
	Organisation/ Company	Deutsche Bahn AG together with Berlin association of blind and visually impaired people (Allgemeiner Blinden- und Sehbehindertenverein Berlin, ABSV, http://www.absv.de/)
	Description	The new main station in Berlin was planned to be autonomously usable for people with reduced mobility. Together the Berlin association of blind and visually impaired people (Allgemeiner Blinden- und Sehbehindertenverein Berlin, ABSV, http://www.absv.de/), the main architect of the station, Deutsche Bahn AG, the Berlin city administration, and the regional representative for handicapped people, designed a station that meets the needs of people with reduced mobility. The navigation system connects all levels and facilitates for people with reduced mobility. It is composed of guidance stripes that are integrated into the floor and can be sensed with the white cane. Special attention blocks made of blistered tiles in the station and of corrugated tiles on the platforms indicate stairs, elevators, intersections and changings of direction. The system includes six panorama-elevators, two more elevators to reach the two outer platforms and 15 special staircases. 770 metres of guidance stripes were laid at the station and another 5.5 kilometres on the platforms.

15.	Name of Best Practice	Autonomously usable rail station in Berlin
		Information pillars are located in front of each panorama elevator and give spoken information about the elevator and its position. Additionally, the spoken announcements include information on the platforms that are served by the elevator and on services that can be reached. Handrails are available on each of the stairs that are included in the system. They have information in Braille and thus further ease the orientation of blind people. The ABSV offers training to be better able to make use of the system. Additionally, the mobility service of the Deutsche Bahn AG and the local station mission is prepared to support people with reduced mobility. Comparable systems were also installed at other newly built stations in Berlin: Südkreuz, Gesundbrunnen, Potsdamer Platz, Lichterfelde-Süd and Jungfernheide.
	Date of initiation (Duration)	2006 (ongoing)
	Description of Impact	Possibility of autonomous travel through the rail station
	Lessons learnt	Stakeholders' collaboration may result in full accessibility.
	URL and/or relevant documentation	ABSV Berlin: Berlin Hauptbahnhof Orientierungshilfen für Blinde und Sehbehinderte (de), http://www.absv.de/hauptbahnhof/download.htm (22/10/2007)

16.	Name of Best Practice	Information Services about the Accessibility of Railway Transport Services in Finland
	Country	Finland
	Organisation/ Company	VR Group (a broad-based Finnish transport company that serves freight service customers and public transport customers with rail and road transport services).
	Description	To better adapt the information services to the needs of different groups, VR offers an information package on VR's supply of on-station and on-train services for different categories of passengers. The following information is available on the Internet: • On-train services: The company provides information in pdf-files for every train type (Pendolino trains, InterCity trains, express trains, regional trains and night trains) with a special focus on services for disabled people. The publications include pictures that illustrate which services the respective train type has and where these services are located. • Station services: Station pages list the opening hours of stations selling train tickets and more information on services and connections at major railway stations. • Timetables: The numerous trains with services for the disabled are indicated in the timetable by the relevant pictogram indicating the relevant supply of on-board services. In the new passenger-car fleet, services for mobility-reduced people have already been taken into account during the design and planning phases.

16.	Name of Best Practice	Information Services about the Accessibility of Railway Transport Services in Finland
		Services for the disabled in InterCity and InterCity2 trains are designed to enable experienced travellers to travel on their own. The new sleeping cars have been designed in cooperation with associations for the disabled.
	Date of initiation (Duration)	2007 (ongoing)
	Description of Impact	The service allows experiences PRMs to travel autonomously (on their own).
	Lessons learnt	Integrated vehicles, stations and operational info on rail service accessibility.
	URL and/or relevant documentation	VR: Services for different passenger categories, http://www.vr.fi/heo/eng/palvelut/palvelut.htm (22/10/2007).

17.	Name of Best Practice	Norway Public Ferries
	Country	Norway
	Organisation/ Company	Public transportation network
	Description	Since 1975, all larger vessels (with a capacity of 75 car units or more) have been built with lifts, accessible toilets and designated car parking spaces near the lifts. It is recognised that it is not practical or economically viable to require full access on smaller ferries, but at least accessible toilets can be located close to the deck area assigned for disabled passengers. Most ferries are wheelchair accessible, while modern ferries are usually equipped with lifts, and most of the older ones have stair lifts for wheelchairs. Almost all ferries have ramps and handicap toilets available. Several ferry terminals are equipped with special queuing areas for disabled passengers.
	Date of initiation (Duration)	1975 (ongoing)
	Description of Impact	Norway is considered as pioneer in terms of transport accessibility.
	Lessons learnt	Gradual and continuous application of accessibility attributes to even small ferries.
	URL and/or relevant documentation	1. https://wheelchairtravel.org/oslo-norway/public-transportation/ 2. http://www.dipb.org/ECMT_Improving_Transport_Accessibility_for__All.pdf 3. https://www.visitnorway.com/plan-your-trip/travelling-with-disabilities/

18.	Name of Best Practice	Accessible River Cruise in Europe
	Country	Europe
	Organisation/ Company	River cruise companies
	Description	In Europe there are options on traditional river cruise ships as well as barge river boats. There are a few companies in Europe that offer accessible travel on some of their river boats. Some European companies which offer accessible cabins on some of their ships are: a) CroisiEurope, b) Shearings, c) Scenic Cruises, d)European Waterways (barge cruising), e) Barge Charters (barge cruising). The accessible cruise lines have cabins that are wheelchair accessible, wheelchair lifts, wide corridors and wheelchair accessible excursions. Several lines offer a small number of accessible or modified staterooms with wide doors. The bathrooms can vary. Some shower stalls have fixed doors with limited access, while the accessible have handy doors that fold right back to create one large area of bathroom space.
	Date of initiation (Duration)	Ongoing
	Description of Impact	Accessible transport and tourism through river cruises.
	Lessons learnt	Usually ferrying companies invoke safety reasons to block ship changes to become accessible. Ferries doing river cruises and generally cruises on closed waters may easier become accessible since they do not run the same risks as those on the open sea.
	URL and/or relevant documentation	1. https://www.rivercruiseadvisor.com/new-start/abcs-of-river-cruising/accessible-travel-river-cruises-2/ 2. https://www.cruisecritic.com/articles.cfm?ID=1959

19.	Name of Best Practice	TRANSIT ACCESS TRAINING TOOLKIT
	Country	International
	Organisation/ Company	World Bank's Disability and Development Team with funding from the Norwegian and Finnish governments
	Description	The World Bank's Disability and Development Team is a part of the Bank's Human Development Network. The Transit Access Training Tookit provides a summary of training methods for bus drivers and transit staff to improve the safety and accessibility of services for passengers. The Toolkit contains the following resources: methods to motivate drivers and staff to provide better service; model pocket-size guides for public transit drivers and staff; posters to promote safe and accessible service; model public service announcements; information on preparing a disability awareness event; and a list of resources for more comprehensive training. Main sections of the toolkit are: 1. Practical methods to motivate transit drivers and staff to provide better service. 2. Model pocket-size guides for use with public transit drivers and staff.

19.	Name of Best Practice	TRANSIT ACCESS TRAINING TOOLKIT
		3. Posters to remind bus drivers and transit staff to provide safe and accessible service. 4. Model public service announcements for transit staff and the broader community. 5. How to prepare a disability awareness event for transit drivers and staff. 6. Resources for more comprehensive training.
	Date of initiation	2009
	Description of Impact	Bus and other transit drivers have a big workload, often dealing with low pay, difficult work hours, stress, heavy traffic, and the demands of passengers. They need all the help they can get. Passengers also need orientation so that they will treat bus drivers with the same courtesy and respect that they expect drivers and transit staff to have for them.
	Lessons learnt	International and multinational collaboration leads to standardised training tools for PT drivers.
	URL and/or relevant documentation	http://wrtwc.org/transit-workforce-development/2017/transit-access-training-toolkit/

3.3 Tourism

1.	Name of Best Practice	Pantou - The Accessible Tourism Directory
	Country	European Union and worldwide
	Organisation/ Company	ENAT asbl. and EWORX S.A.
	Description	The Pantou Accessible Tourism Directory was initially created with EU support funding as a data collection tool for the EC Study on the Supply and Performance Check of Accessible Tourism Services in Europe in 2014. It contains a listing of over 750 accessible tourism service providers across the accessible tourism delivery chain, including accommodation, transport and transfer services, equipment suppliers, travel agents and tour operators, tourist guides… and many more. Service providers can register free of charge. Every service provider must indicate the types of users they can cater for with specific accessible services covering up to 14 user categories based on disability/access needs. The Directory works with over 30 partners who provide Accessibility Information Schemes (AIS) that are shown as links on the profile pages of the respective accessible suppliers. For suppliers who are not members of an AIS, the `Pantou Access Statement' template is provided for owners/managers to provide a self-assessed statement of accessibility. The online platform provides a global interactive map view of accessible tourism suppliers and users can also perform detailed searches using filters for countries, service types, user types, AIS and free-text search. In 2017, after EU project funding from the COSME programme ended, the site has been taken over fully by ENAT and its technical partner, EWORX S.A. and a new business model is now under development to ensure long-term sustainability.
	Date of initiation (Duration)	2014 (ongoing)
	Description of Impact	• Over 750 registered accessible tourism suppliers • Over 30 Accessibility Information Schemes partnering with Pantou. • Over 4000 page views per month, with average duration 1:40 minutes.
	Lessons learnt	• Increasing use of the Pantou Directory by visitors from outside Europe indicates the need for information on accessibility for PWDs and PRMs of European Destinations, regions, cities, attractions, accommodation and transport providers. • A centralised information database on accessible destinations and touristic services is a key tool to promote accessible tourism across Europe. It should be seen as best practice that should be transformed transferred also to the transportation sector.
	URL and/or relevant documentation	https://pantou.org

2.	Name of Best Practice	Design for All Standard in Hotels and Staff Training
	Country	Sweden and several EU countries
	Organisation/ Company	Scandic Hotels
	Description	Scandic is a leading hotel operator in the Nordic countries today with over 300 hotels in its portfolio. Over 15 years ago Scandic started its journey towards making its hotels more accessible for people with disabilities. On top of this a wide-ranging interactive training programme has been developed for all the hotel chain's employees with the aim of fostering an understanding of different types of accessibility challenges and the importance of treating all guests properly. This approach has seen Scandic giving itself a unique position as the leading "accessible" hotel chain in the world.
	Date of initiation (Duration)	Early 2000's (ongoing)
	Description of Impact	Scandic has wide recognition as the world's leading accessible hotel brand, constantly attracting attention in the media for its innovative and economically successful approach in providing accessible services for all guests.
	Lessons learnt	Scandic reported that in the first year of training all staff in disability awareness, the number of bed-nights for groups including PWDs increased by 15,000. Scandic won a large public procurement contract in Norway on account of its ability to provide accessible conferences for government/public events.
	URL and/or relevant documentation	Main website: www.scandichotels.com 135 point Design for All Standard Free online staff training.

3.	Name of Best Practice	Provision of accurate and checked accessibility information to users
	Country	Spain, Portugal
	Organisation/ Company	PREDIF - Spain, Accessible Portugal - Portugal in cooperation with Vodafone Foundations in Spain and Portugal
	Description	All people when travelling and especially those with specific access requirements, need to have reliable and checked information about the physical environment or services available at the facility or destination they would like to visit. Lack of methods and tools to check and to provide the relevant information to users have led many people to disappointment or has even spoiled their trip, as they cannot find accurate information to help them make the right choice and the service they expect to find when reaching the facility or destination they have chosen to visit. Businesses are not well informed about the benefits of improving their facilities and services and do not have tools available to check their offer.
	Date of initiation (Duration)	2012 (ongoing)

3.	Name of Best Practice	Provision of accurate and checked accessibility information to users
	Description of Impact	In 2012, PREDIF and Fundación Vodafone created the very first version of TUR4all the aim of which was to provide users with accurate information checked by experts about the accessibility of tourism establishments across Spain. Up until 2016, TUR4all was simply an application and web page where users were able to consult information, but users wanted to be able to recommend accessible tourism establishments. In a recent upgrade, TUR4all has been developed to include a community of active users and tourists with accessibility needs. As with the first version, TUR4all provides information about the physical, visual, hearing and cognitive accessibility as well as other types of traveller needs. The aim is to improve accessible tourism by empowering tourists with accessibility needs to share information about their accessible destinations and experiences and to give others the confidence to travel. Similarly it is considered very important to raise awareness among tourist destinations and establishments about the advantages of accessibility for the development and growth of their businesses. In conclusion, TUR4all is a solution for tourists, public administrations and private-sector companies alike.
	Lessons learnt	TUR4ALL functioned in Spain for several years before being established in Portugal. An example of public-private-NGO collaboration which is transforming the information landscape for PWDs – both citizens and visitors.
	URL and/or relevant documentation	http://www.tur4all.com/el-proyecto-tur4all

4.	Name of Best Practice	Provision of accurate and checked accessibility information to users
	Country	Italy
	Organisation/ Company	V4A
	Description	All people when travelling and especially those with specific access requirements, need to have reliable and checked information about the physical environment or services available at the facility or destination they would like to visit. Businesses are not well informed about the benefits of improving their facilities and services and do not have tools available to check their offer.
	Date of initiation (Duration)	2008 (ongoing)
	Description of Impact	Village for all – V4A® is the International Quality Brand Hospitality for all that through information disclosed, guarantees to people with disabilities, of mobility or sensory, food or environmental allergies, elderly, dialysis, obese, for families with small children, to be able to make informed choices and informed, where spend their holidays. "Everybody holidays", this

4.	Name of Best Practice	Provision of accurate and checked accessibility information to users
		is the idea that led to the creation of the project Village for all – V4A® that work with one goal: to promote the Accessible Hospitality, the social inclusion and the right to holiday for everyone. Village for all – V4A® certifies under its own Brand tourist structures able to offer Accessible Hospitality for all. It guarantees detailed information, reliable, precise, personally checking each structure before affiliation, ensuring information on measures, dimensions and clearances, without delivering "licensed accessibility" but giving people the chance to choose independently their holiday in the structure that will best meet the needs of the individual and his or her family. V4AInside represents a technological and organisational innovation in the process of collecting and processing data related to accessibility, through the use of advanced technologies. The device, according to the type of structure to be verified, prepares the appropriate cards guided and a simultaneous collection of multimedia data (photos, movies, vector drawings), physical characteristics (slopes, dimensions, obstacles, etc..) and is directly the system to monitor all the activity (the opening of the audit until its closure and sending the data in "Cloud") constantly doing a consistency check on data entered. Each piece of information is approved by the device which does not allow tampering and maintains a high level of control to the operating personnel. Also at the end of a collection, all data is immediately processed and sent to the central system where it is stored and evaluated by qualified personnel. Thanks to a specially developed algorithm, is developed a list of possible improvements (such as reducing structural barriers, such as celiac menus organisational, communication such as communication systems for deaf and / or blind, etc..) aimed at increasing the level of accessibility structures are detected. V4A was honoured with the UNWTO Ulysses Award 2013 in two categories: • UNWTO Ulysses Award for Innovation in Enterprises - International Quality Brand for Hospitality for All, Village for All SRL (Italy) • UNWTO Ulysses Award for Innovation in Research and Technology - V4A Inside, Village for All SRL (Italy).
	Lessons learnt	Accessibility information is included as a feature of the brand in holiday villages and, increasingly in other visitor attractions.
	URL and/or relevant documentation	http://www.villageforall.net/en/ http://www.v4ainside.com/en/ https://www.linkedin.com/company/village-for-all---v4a- http://www.accessibletourism.org/?i=enat.en.news.1511

5.	Name of Best Practice	ALL for ALL National Accessible Tourism Support Programme
	Country	Portugal
	Organisation/ Company	Turismo de Portugal
	Description	The ALL FOR ALL programme is part of the Portuguese Tourist Authority's tourism strategy 2027, which includes an Action Plan on Promotion of "Tourism for all" with an inclusive approach: To provide awareness, training and knowledge for organisations and enterprises about "Tourism for All" and to support projects to improve accessibility of infrastructures equipment and tourism resources. The programme provides information for businesses, training and a fund of €5 million, to support projects of a value up to €200.000 and with 90% of eligible costs covered by government funds. Within 2016-2017 approx. 100 projects will have been funded, covering infrastructure works, adapted vehicles, accessible information and websites, training, studies and consulting (max 10% per project), achieving access to museums and monuments, and many more initiatives. Projects must follow a structured plan of interventions; they must adhere to accessibility guidelines and take a Design for All approach and there may be fundable and non-refundable elements. Eligible beneficiaries can be tourism and transportation operators, municipalities, private foundations (e.g. cultural institutions), etc..
	Date of initiation (Duration)	2016 (ongoing)
	Description of Impact	Impact is not yet measured as the awareness measures, training and project funding are still ongoing.
	Lessons learnt	The demand for project funding in 2016-17 out-stripped the available funds and additional funding was found. Actual achievements from the projects are not yet recorded, as this is a quite new initiative.
	URL and/or relevant documentation	http://www.turismodeportugal.pt/Portugu%C3%AAs/turismodeportugal/all-for-all/Pages/all-for-all.aspx

6.	Name of Best Practice	ZERO Project: Sharing and Rewarding Best Policies and Practices in Accessibility
	Country	Austria and Global
	Organisation/ Company	Essl Foundation
	Description	"Our mission is working for a world with zero barriers. Worldwide, the Zero Project finds and shares models that improve the daily lives and legal rights of all persons with disabilities". The Zero Project, an initiative of the Essl Foundation, focuses on the rights of persons with disabilities globally. It provides a platform where the most innovative and effective solutions to problems that persons with disabilities face, are shared. Its sole objective is to assist in creating a world without barriers.

6.	Name of Best Practice	ZERO Project: Sharing and Rewarding Best Policies and Practices in Accessibility
		Each year we focus our research on a particular theme from the UN Convention on the Rights of People with Disabilities (UN CRPD). We publish a report based on this theme and organize a conference around its results. Held at the UN in Vienna this event typically brings together over 400 delegates from more than 50 countries. The Zero Project research focused on accessibility in 2013/14 and will do so again in 2017/18, with a dedicated section on Accessible Tourism. The results will be presented in Vienna on 21-23 February 2018.
	Date of initiation (Duration)	2012 (ongoing)
	Description of Impact	Together with our continuously growing network of over 3,000 disability experts in over 150 countries, we seek to identify the most innovative and effective Policies & Practices that improve the lives of persons with disabilities. And we tell the world about those Policies & Practices.
	Lessons learnt	Huge global interest has been generated by giving visibility and accolades to best practices and policies affecting the rights of PWDs and their full integration in society.
	URL and/or relevant documentation	https://zeroproject.org/ See also: Accessibility Indicators World Map: https://zeroproject.org/indicator-type/accessibility-2014/

7.	Name of Best Practice	Delivering a sustainable and accessible public transport Games (Olympic Games, London 2012)
	Country	United Kingdom
	Organisation/ Company	Learning Legacy
	Description	A fundamental principle and priority issue of the Olympic Park planning and design process was to enable access via low carbon, sustainable and accessible transport to anyone in London during the Games. The overarching objective was to provide a network of accessible travel modes throughout the Olympic and Paralympic Games and in legacy.
	Date of initiation (Duration)	December 2012
	Description of Impact	Forecasting the demand for accessible transport at Games time: demand forecasting work continued right up to the Games to assist venues in understanding the requirements for disabled spectators. Ticketing information also enabled organisers to understand the expected numbers of disabled spectators and their likely mode of transport. Detailed accessible travel information and maps were published on the London 2012 website in March 2011 to align with the Olympic ticket launch. In July 2011 London 2012 launched the first stage (rail) of the accessible Spectator Journey Planner on the London 2012 website. The legacy benefits include not only the lasting physical

7.	Name of Best Practice	Delivering a sustainable and accessible public transport Games (Olympic Games, London 2012)
		improvement to transport infrastructure and travel information services, but also the educational and inspirational role that the Games can play to create awareness of the environmental, economic and social benefits of sustainable and accessible travel.
	Lessons learnt	The legacy benefits include not only the lasting physical improvement to transport infrastructure and travel information services, but also the educational and inspirational role that the Games can play to create awareness of the environmental, economic and social benefits of sustainable and accessible travel.
	URL and/or relevant documentation	http://learninglegacy.independent.gov.uk/documents/pdfs/sustainability/cs-sustainable-and-accessible-public-transport.pdf

8.	Name of Best Practice	Making Ticket Sales Accessible For Disabled Customers A Best Practice Guide
	Country	United Kingdom
	Organisation/ Company	Society of Ticket Agents and Retailers (STAR)
	Description	Research found that whilst 75% of disabled people preferred to book their tickets online, only 2 out of 10 venues were actually offering online ticketing to disabled customers, opting instead to sell accessible tickets through in-house telephone booking lines, often with limited opening hours. It was established that the UK music industry was losing out on 2.5m tickets sales, or £66m in annual revenue, by not offering online booking to Deaf and disabled customers. Recognised that for more tickets to be made available for disabled customers to purchase online, there needed to be more awareness of accessibility issues and a universal proof of disability system to overcome issues with proving eligibility. With this in mind, Attitude is Everything partnered with the Society of Ticket Agents and Retailers (STAR) to set up a working party involving all of the key ticketing agencies, including Ticketmaster, See Tickets, TicketWeb, The Ticket Factory and Eventim, who made a commitment to consider how booking systems could be made more accessible for disabled people. Since then, the group has worked to support the development of a universal proof of eligibility card.
	Date of initiation	Published 2017
	Description of Impact	Only recently published therefore the full impact has yet to be measured. However, the initiative has Ministerial support for the guidance to be adopted by the events industry.
	Lessons learnt	Use of e-ticketing can improve transport and tourism accessibility.
	URL and/or relevant documentation	www.star.org.uk/wp-content/uploads/2017/10/bpg.pdf

9.	Name of Best Practice	e-learning courses – Accessible Travel Made Easy
	Country	United Kingdom
	Organisation/ Company	ABTA
	Description	The e-learning courses given by ABTA – Accessible Travel Made Easy were developed for use by travel agents and tour operators, in collaboration with and funded by the UK Equality and Human Rights Commission (EHRC), on the basis of UK and EU legislation. Two modules targeted to different occupational groups in tourism sector are included in the program. Namely, Module 1 is targeted to frontline staff, focusing on meeting the needs of PwD and PRM, while Module 2 is targeted to supervisors and managers, aiming at understanding of businesses' legal obligations, while includes advice on staff training and explains how to overcome business barriers and how to develop accessibility policies. The e-learning course sessions are 'accompanied" by case studies (presenting real experiences of tourists with disabilities), "facts about" and "quotes", aiming at better understanding the needs of PwD and PRM, through practical engagement.
	Date of initiation	2010
	Description of Impact	The course is a cost-effective tool, promoting increased skills levels concerning accessibility improvement in tourism industry, but, due to the absence of an evaluation mechanism during the course development, the impact of training on improving accessibility skills for travel agents and tour operators is uncertain. Furthermore, it is neither clear whether the training effectively reached its target audience, due to the absence of available reliable numbers of completed trainings.
	Lessons learnt	e-learning courses are pivoted to deliver good accessible touristic services but need to be accompanied by an effective and objective assessment and long-term available scheme.
	URL and/or relevant documentation	https://www.equalityhumanrights.com/en/advice-and-guidance/course-travel-industry-accessible-travel-made-easy

10.	Name of Best Practice	Inclusive Tourism – hospitality skills to receive and entertain people with special needs
	Country	Portugal
	Organisation/ Company	Perfil – Psicologia e Trabalho
	Description	The training package "Inclusive Tourism – hospitality skills to receive and entertain people with special needs" was developed by Perfil – Psicologia e Trabalho (a private consultancy company), with the support of European Social Funding (ESF). The success of the project is mainly owed to the innovative methodology implemented in the Inclusive Tourism Study (allowing for the accurate and detailed identification of PwD and PRM in tourism sector) and to the important property of the Training Package (that can be used

10.	Name of Best Practice	Inclusive Tourism – hospitality skills to receive and entertain people with special needs
		both in face-to face trainings and b-learning programs) as a ready-to-use tool for tourism professionals training. A blended-learning programme, it combines classroom-based training with e-learning sessions. The target audience of this training package includes not only tourism professionals that deal directly with clients (from management to operational levels) and tourism students, but anyone else interested in attending the training program as well. The project has two main objectives: on the demand side, to activate the right of PwD and PRMs to participate in tourism activities as anybody else and on the supply side, to allow for the tourism industry to "cover" this new market segment of accessible tourism and to "open" the market to all. As promotion channels, social media (Facebook, LinkedIn etc), tourism online newsletter and mailing lists have been used, as well as face-to-face meetings with tourism industry associations, representatives of public sector and of private companies, while the training course was also presented in seminars in order to attract trainees.
	Date of initiation	2014
	Description of Impact	The inclusion of the training in the "Catálogo Nacional de Qualificações" (the National Qualifications Framework) by the Portuguese government is indicative of its value. Furthermore, the Training Package was introduced in 2013 in Escola de Hotelaria e Turismo do Porto (a school managed by Turismo de Portugal, in charge of providing tourism professionals and students with educational and vocational training.
	Lessons learnt	The programme is linked to the 2016 initiative on accessible tourism development, "ALL4ALL" (q.v.) by the Portuguese Tourism Authority.
	URL and/or relevant documentation	http://www.turismodeportugal.pt/Portugu%C3%AAs/AreasAtividade/desenvolvimentoeinovacao1/Documents/Conferencia-UNWTO-turismo-acessivel-apresentacao-TP.pdf

11.	Name of Best Practice	Via Libre
	Country	Spain
	Organisation/ Company	ONCE Foundation
	Description	Via Libre (now ILUNION CONSULTING) is part of the ONCE Foundation, representing the interests of PwD. The company develops and promotes accessibility training in Spain, aiming at increasing the benefits for both the society as a whole and the tourism sector. It developed a strategy relating to staff training for tourism sector, encompassing a training course and an accessibility and design for all course. The possibility to certify the training under formal education is also offered to companies.

11.	Name of Best Practice	Via Libre
		The training courses were mainly based on: • Customer care for PwD and PRM. • Universal accessibility and design for all. • Accessible tourism and accessible natural environments. The training courses aim at providing professional knowledge and skills as regards customer care and at ensuring access to services and facilities, while, in 2012, Via Libre set up a formal catalogue of training, explaining the different activities regarding the training offered. The training is adapted to the needs, location and context of specific companies, and includes working in groups and experiencing real-life situations. Manuals and audio-visual media is also used, but the most important component of this training are the role-playing activities (participants pretend to be PwD and PRM and tourism professionals). For this purpose, Via Libre uses a range of assistive devices and other material to simulate disabilities, so that participants can better understand how to meet the needs of PwD and PRM in case of any disability type.
	Date of initiation	2007
	Description of Impact	The "universal accessibility and design for all course" is targeted at professionals of the tourism sector, the local government and local tourism businesses, while is delivered with a view to providing professionals with tools for diagnosing the accessibility of tourism facilities and for facilitating improvements of the built environment. The course usually includes a city tour (including the analysis of a square or of streets), a building tour (including the detection of barriers within a building) and an accessibility experience when using different means of transport. Finally, apart from the material developed for the aforementioned courses, Via Libre has also produced manuals relating accessibility for PwD and PRM, and has also participated in the elaboration of relevant studies and has contributed to the development of project methodology.
	Lessons learnt	Ongoing consultancy providing support to regions, municipalities and private companies in Spain, promoting access in the tourism sector, including the development and marketing of accessible routes in historical cities, accessible transport and museums/heritage sites.
	URL and/or relevant documentation	http://www.fundaciononce.es/es/noticia/grupo-fundosa-abre-un-nuevo-centro-de-libre-en-valladolid-0

12.	Name of Best Practice	SEATRAC system in Greece
	Country	Greece
	Organisation/ Company	TOBEA
	Description	Seatrac is an one of a kind engineering achievement, since it is the only device (world – wide) that can offer completely autonomous access to the sea by the disabled, in a robust, safe and yet cost – effective design. It is covered by Greek European and U.S. patents. The system consists of a solar-powered ramp and pushchair and is installed on the beach, allowing people with disabilities to enter the sea by using a controller and then return to the beach. The system is aimed at different users such as advanced patients with multiple sclerosis, people with disabilities in the lower limbs or neuromuscular dystrophies, paraplegic - quadriplegic, Parkinson's disease, people with temporary injuries or pregnant women with balance problems.
	Date of initiation (Duration)	2012 (ongoing)
	Description of impact	Seatrac allows people with disabilities to enter the beach and the sea without having the need of accompanying assistance. In 2017 it was available at over 30 beaches in Greece, Cyprus and Italy, funded by mainly by local municipalities.
	Lessons learnt	Besides the Seatrac itself, the company provides guidance on establishing accessible car parking spaces and toilets and at may sites the installations have led to an increase in custom for local cafes and taverns. Municipalities that have a Seatrac report that it has extended the summer season for disabled tourists from northern Europe, giving a financial boost to local businesses.
	URL and/or relevant documentation	http://www.tobea.gr/?q=node/19

13.	Name of Best Practice	Unification of Athens Archaeological Sites and Access to the UNESCO World Heritage Site of the Acropolis of Athens for people with disabilities
	Country	Greece
	Organisation/ Company	Greek Ministry of Culture, Ministry of the Environment, Planning and Public Works, EAXA.
	Description	Unification of Athens Archaeological Sites In 1997, the City of Athens won the right to host the Olympic and Paralympic Games of 2004. This was a turning point for the country and especially for the host city, resulting in great developments in infrastructure and urban planning. The preparations for this world- class event have contributed to significant improvements in the quality of the tourism offer, including new motorways, roads, railways, the new

13.	Name of Best Practice	Unification of Athens Archaeological Sites and Access to the UNESCO World Heritage Site of the Acropolis of Athens for people with disabilities
		international airport, public transport, hotel accommodation and the renewal of the city centre. Although accessibility provisions for persons with disabilities had already been introduced in policies, planning and design works, these requirements were not widely introduced or respected. Due to the Games, access became a key requirement for all projects, including the 'unification' of the archaeological sites by establishing a 5 km. pedestrian walkway and the provision of wheelchair access, for the first time, to the symbol of Greek civilisation, the Acropolis. In August 2004, shortly before the opening of the Olympic Games in Athens, one of the most important monuments of world cultural and architectural heritage, the Acropolis of Athens, became accessible to people with disabilities. A solution was reached by constructing an elevator on (open type - without well) as the least disturbing and reversible at any time. The lift was installed on the north slope of the Acropolis to a new section of the wall (made in the decade of 1930).
	Date of initiation (Duration)	2004 (ongoing)
	Description of impact	The "unification project" really transformed the historical centre of Athens. Improved access in the central heritage areas has brought many benefits to Athens. It has helped to increase tourism flows, allowing small enterprises to become established offering new activities and allowing people to enjoy the city in new ways. Pedestrianisation has been shown to have many benefits for the quality of urban living. The pedestrian route in Athens has contributed to increased and more varied activity in the form of social life, walking, exercising and casual meetings, street markets, buskers, entertainers and others. The historical monuments of Athens and its museums are the most visited sites in Greece. 1,5 million people visited the Acropolis World Heritage site in 2012 and over 5 million visited the New Acropolis Museum in the first 3 years after its opening in 2009. The involvement of a large number of technicians, public authorities' personnel, hotel and other tourism businesses managers and personnel, resulted in a better awareness, knowledge and understanding of accessibility.
	Lessons learnt	This example has shown how Athens, a European metropolis and long-standing tourist destination has re-developed its historical centre, preserving its cultural heritage and making it more accessible for all visitors, including people with disabilities, seniors and families. Better access has brought people back to the city. In general, improving accessibility of the built environment and the overall planning procedures,

13.	Name of Best Practice	Unification of Athens Archaeological Sites and Access to the UNESCO World Heritage Site of the Acropolis of Athens for people with disabilities
		legal requirements and strategy for any future interventions and public works are an important legacy for the further development of a city.
	URL and/or relevant documentation	http://www.accessibletourism.org/resources/case-study-10-ec-athens-historical-centre-greece.pdf

14.	Name of Best Practice	Accessible Tourism Training by Visit Scotland
	Country	Scotland
	Organisation/ Company	Visit Scotland
	Description	A £45,000 online training programme is set to help Scotland's hotels, visitor attractions, pubs and restaurants, better cater for the requirements of people with access needs including those with physical, sensory or learning disabilities, elderly visitors and parents with small children. As well as promoting good practice, the training, which is split into four categories, accommodation, visitor attractions, restaurants and catering, and pubs and bars, will a provide users with a better understanding of the requirements of this growing market.
	Date of initiation (Duration)	2014 (ongoing)
	Description of impact	This training course has been well received by those in the Tourism Industry who have used it as a resource. It is serves the need to allow staff to be trained without the need to be away from work for a long period of time and can be completed at a pace to suit the individual and their availability.
	Lessons learnt	It has introduced businesses to a market that they may either not have been aware of, or lacked confidence in serving due to misconceptions. This type of educational tool is essential if businesses are to be supported and be more aware of the market and how to serve people with access requirements.
	URL and/or relevant documentation	http://www.accessibletourism.org/?i=enat.en.news.1591 http://accessible-training.visitscotland.org

15.	Name of Best Practice	Discover Germany - Barrier Free
	Country	Germany
	Organisation/ Company	German National Tourism Office
	Description	Recognising that Tourism should be accessible to everyone as a matter of course, in 2013 the German National Tourism Office (GNTO) launched their marketing campaign promoting 'barrier free travel in Germany. The campaign is the result of working for many years to develop and promote tourism products and services that make it possible for every traveller to discover all that Destination Germany has to offer. This commitment is reinforced by their close collaboration with partners; the Association of Barrier-free Destinations, the National Coordination Board Tourism for All (NatKo) and the Tourism for All working group of the German Federal States. Barrier-free travel is being developed as part of GNTO's innovations management, highlighting just how important accessibility is for their work, now and in the future.
	Description of impact	Since its launch in 2013 GNTO has seen a growth in its Barrier-free offer, with more destinations, tour operators and specialist organisations being added to their website. Cycling holidays for blind people, "free climbing" in mountain regions, rugby games, quad tours or canoeing for wheelchair users, plus darkened 'sensory' tours are just a few of the activities available, for people with disabilities, being promoted by the NTO.
	Lessons learnt	• The NTO plays a key "Champion" role. • It takes time to develop offers. • Partnerships are essential. • Barrier-Free Destinations is part of the GNTO mainstream marketing website.
	URL and/or relevant documentation	www.germany.travel/en/ms/barrier-free-germany/start/barrier-free-germany.html

16.	Name of Best Practice	Outfitted ships for accessible cruise vacations
	Country	International
	Organisation/ Company	Royal Caribbean International
	Description	Royal Caribbean International is a company founded in Norway and is based in Miami, Florida, United States. The company has some of its cruise ships outfitted to deliver accessible cruise vacation to people with disabilities and special needs. The outfitted features are designed to give access to all guests, who have mobility, hearing, visual and/or other disabilities including children with disabilities and special needs. Royal Caribbean International offers boarding and departure assistance with wheelchairs to guests with mobility disabilities. Wheelchair assistance for boarding is available from the terminal check-in, to the ship.

16.	Name of Best Practice	Outfitted ships for accessible cruise vacations
		For guests with visual disabilities the company has worked to incorporate Braille wherever possible, including staterooms, staircase handrails and public areas. Service dogs are welcome on-board.
	Date of initiation (Duration)	Ongoing
	Description of Impact	Every year thousands of people with disabilities and special needs are accommodated throughout their cruising vacations.
	Lessons learnt	Better integration of PwD in relevant services provision through the introduction of businesses to a market that they may either not have been aware of, or lacked confidence in serving due to misconceptions.
	URL and/or relevant documentation	http://www.royalcaribbean.com/allaboutcruising/accessibleseas/home.do

17.	Name of Best Practice	Accessibility of changing facilities at intermodal transportation hubs
	Country	UK (Merseyside)
	Organisation/ Company	Merseytravel
	Description	Merseytravel, the passenger transport authority for the Merseyside area (UK), is charged with the provision of cutting edge facilities in public transport, in the context of accessibility improvement. The programme aims at increasing the number of PwD able to use public transport, as well as at enabling people with complex toileting or changing needs (for example with incontinence) to be able to travel. Mersey Ferries, a publicly funded body, is also involved in the project. The programme includes a disabled person's adult changing facility at the New Pier Head Ferry Terminal in Liverpool. It is about a dedicated room within the public area of the ferry terminal building, having specialised equipment for the support of the special needs of adults with incontinence and other conditions that necessitate changing clothes. The terminal itself is an interchange hub, linking the waterfront to other transport networks in and out of the city, while restaurants and visitor attractions are also located in the building. It should be noted that PwD were involved in all the phases of the design and the build process. The project is mainly funded by the Merseytravel's funding, the European Regional Development Fund and the Mersey Waterfront Partnership.
	Description of impact	Customer satisfaction surveys and complaint forms, available to customers using the ferry terminal services and facilities, are the means for gathering feedback concerning customer satisfaction, the results of which are really encouraging, while the numbers of visitors to the ferry terminal are growing.

17.	Name of Best Practice	Accessibility of changing facilities at intermodal transportation hubs
	Lessons learnt	• Special care for people with incontinence and needs to have access to specialised changing facilities at intermodal transportation hubs. • Co-creation with PwD.
	URL and/or relevant documentation	Mediate – Methodology for Describing the Accessibility of Transport in Europe Good practice guide http://www.eltis.org/sites/eltis/files/tool/mediate_good_practice_guide.pdf

18.	Name of Best Practice	League of Accessible and Historical Cities
	Country	Italy, Denmark, France, Spain, Bulgaria
	Organisation/ Company	European Foundation Centre
	Description	The project aims at allowing all people with disabilities and others to fully enjoy leisure and cultural activities, and at stimulating tourism among the 80 million people with disabilities living in Europe. From this point of view, the project is therefore expected to contribute to the cities´ long-term cultural and social development. Improved access to a city's cultural heritage makes it more dynamic and attractive to its residents and tourists, and thereby increases its economic profit. The League of Accessible and Historical Cities (LHAC) project is implemented in six cities with the aim of improving the accessibility of historical towns in Europe for all. Being a replicable model, it promotes the development of responsible tourism and the protection of historical heritage at a larger scale. The common element revolves the idea of fully accessible routes that were implemented in each city. The routes include parks, restaurants, shops, tourist information centres and link some of the outstanding heritage sites, museums, buildings and other features of the cities by means of a continuous, signposted, pedestrian pathway provided with interpretive information about the places which are encountered on the route. Although creating an accessible route is to be considered as a goal in itself, it represents only a part of a larger process to ensure a wider accessible urban environment. The LHAC is based on a philosophy that embraces the strength of mutual learning as a way to overcome difficulties. The network acts as a hub for good practice exchange among the foundations and the cities involved. The project therefore focuses not only on the development of innovative solutions, but also on the creation of new forms of interactions to tackle a complex social issue such as the equal and full participation of people with disabilities in society. As a result, a European network has been created, which goes beyond the mere sharing of information by acting jointly with several European countries.
	Date of initiation (Duration)	2010 – 2015

18.	Name of Best Practice	League of Accessible and Historical Cities
	Description of Impact	The LHAC serves as example for other cities willing to improve accessibility. A best practice guide has been published as a tool for actors and stakeholders in other historical cities – including foundations, public authorities, chambers of commerce, tourist destination managers, heritage associations, disability organisations and others – who are interested in exploring and examining the possibility of establishing similar accessible routes. Furthermore, this collaboration sparked another project that has been founded by the European Commission: Three foundations have been collaborating with other organisations (mainly local and regional authorities and travel agencies) to develop the STRING PROJECT (Smart Tourist Routes for Inclusive Groups (http://www.stringbox.eu/en/).
	Lessons learnt	A cities league towards accessibility of routes and historical sites guarantees optimum replication, cross-border synergies and a critical mass in terms of common procurement specifications.
	URL and/or relevant documentation	http://www.lhac.eu/ http://www.accessibletourism.org/resources/2013_lhac-best-practice-guide-accessible-routes-in-historical-cities-1.pdf http://www.efc.be/thematic_network/league-of-historical-and-accessible-cities-lhac/

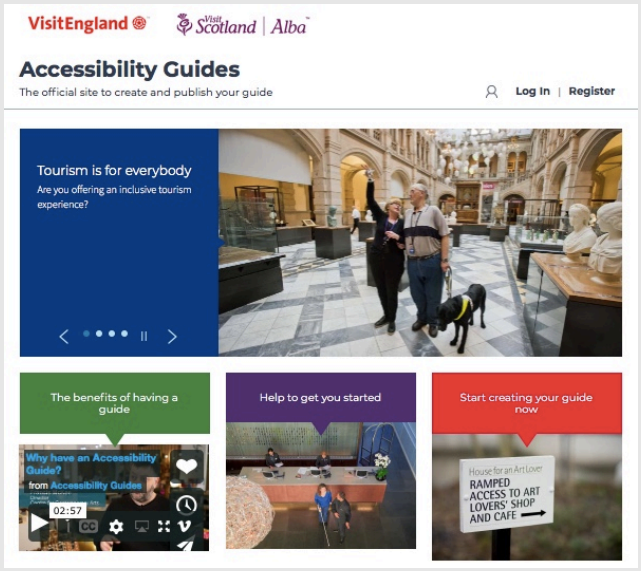
19.	Name of Best Practice	Itinerary and walking maps for visitors with disabilities.
	Country	Belgium (Flanders)
	Organisation/ Company	Visit Flanders
	Description	In 2015, Visit Flanders worked together with all relevant national, regional, provincial and local authorities and the accessibility agency Inter to make the historic town of Bruges more accessible for people with disabilities. The result is a dedicated walking map and itinerary targeted at people with various disabilities and impairments, and at visitors with mobility problems such as parents with strollers. More than 1,100 maps have been distributed to date, and more than 2,000 digital copies were downloaded from the website. Bruges is a historic city with cobblestoned streets and squares, narrow passages, heritage buildings, and many canals. The city attracts national and international tourists; but for elderly people, wheelchair users, and the visually impaired, Bruges presents many obstacles. Bruges wants to be an attractive city for every visitor, and to that end an accessible tourism plan was created and implemented. A wide scope of informants with specific needs has been involved: the blind and visually impaired, wheelchair users, and persons with walking difficulties. Infrastructure was adapted with respect to the historic authenticity of the city; tour guides and museum and reception staff were trained; and practical information about the

19.	Name of Best Practice	Itinerary and walking maps for visitors with disabilities.
		accessibility of the whole service chain was collected. The resulting brochure contains a walking map with ten different routes through the historic city centre, connecting the touristic highlights while avoiding the worst obstacles. The brochure also describes the accessible facilities along the way (accommodation, attractions, restaurants, cafés, public toilets, transport and parking facilities, care and mobility aids, etc.). The wide scope and geographical size of the project are very ambitious since the information offered is not limited to a specific type of facility, but includes the whole tourism value chain, thereby providing information about an entire holiday destination.
	Date of initiation	2015
	Description of impact	The brochure information will be updated every two years, at which time new initiatives will be screened and added. Visit Flanders believes that the project can be easily replicated by other historical cities throughout the world. The personnel of the city of Bruges as well as the municipal council have become deeply involved with the theme of accessibility; and the project analysis has pointed out some bottle necks that have immediately been (or planned to be) tackled by the city. Due to this gathered knowledge, the city now pays much closer attention to a "design for all" when considering new projects. Moreover, following the Bruges example other city boards now feel the urge to invest in the realisation of an accessible tourism chain in their own town. The Bruges example has inspired a similar walking map in Ghent (2017, not in cooperation with Visit Flanders), and upcoming initiatives include Mechelen and Leuven. Thus far, Visit Flanders has invested approximately €150.000 in the project. The project won a "Zero Project" Best Practice Award for Accessibility in February 2018.
	Lessons learnt	Attractive and accessibility city notions go hand in hand and should be approached in tandem by modern cities.
	URL and/or relevant documentation	https://zeroproject.org/practice/pra181058bel-factsheet/ Brochure: **Bruges – Accessible for everyone** http://www.visitflanders.com/en/binaries/TVL-Bruges-accessible-to-everyone-Brochure_EN-1-12-16_tcm13-82213.pdf

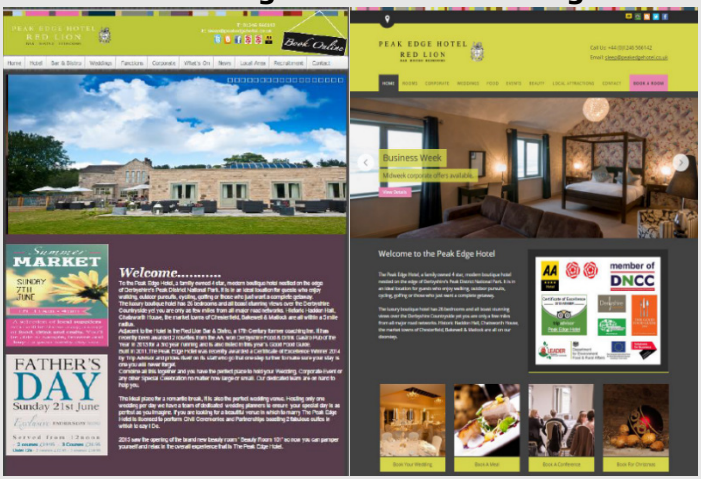
20.	Name of Best Practice	Tactile Paths giving voice commands via a "smart stick" and a mobile phone app.
	Country	Italy
	Organisation/ Company	JKJ Srl and National Associations for Visually Impaired People
	Description	JKJ Srl, an Italian plastic fabrication company and Associazione Disabili Visivi Onlus (National Associations for Visually Impaired People) have developed the Loges Vet Evolution (LVE) tactile path system with integrated communication tags. The path helps persons with visual impairments to navigate safely by giving voice directions to the user's mobile phone about the path and surrounding spaces via a Bluetooth "Smart Stick." Over 450 areas (mostly in Italy) have had the technology installed plus two paths in Belgium and one in Canada.
	Date of initiation (Duration)	2014 - 2017
	Description of impact	Persons with visual impairments have difficulties independently navigating public spaces and buildings, such as malls and hospitals, due to physical obstacles and a lack of accurate guidance information.  The LVE system is made up of tactile paving (textured surfaces that allow visually impaired users to feel the different patterns through their feet, indicating directions and dangers) integrated with radio frequency tags. The user holds a Bluetooth-equipped smart stick, which receives instructions from the radio tags when it touches the path. These instructions are then sent via Bluetooth to an app on the user's mobile phone, which reads out voice instructions, based on a downloadable map. The type of information provided is unlimited, but typically users are notified of intersections, crossings, the direction of travel, and points of interest along the route (e.g. "You are on the main street, and on your left is the Town Hall, which is open from 9 to 12"). Many conventional tactile technologies use infrared or GPS technology that can be confused by rain or large amounts of people in the area. Other navigation technologies are based on beacons powered by batteries, which run the risk of discharge. The LVE tags require no batteries and can be installed in a range of surfaces, including cement, stone, and PVC.

20.	Name of Best Practice	Tactile Paths giving voice commands via a "smart stick" and a mobile phone app.
	Lessons learnt	JKJ Srl works with distribution partners and flooring technology companies to install the system. It is possible to install the paths in a range of scenarios, including public streets, public offices, hospitals, shopping centres, sport centres, airports, museums, and more. To date, the technology has been installed at more than 450 areas (e.g., a number of joined paths) in Italy. The development of the product was carried out with ADV, a national non-profit organisation funded through grants from civil society. The sales and expansion of the product are funded through the company as a commercial product of a private business. The project won a "Zero Project" Best Practice Award for Accessibility in February 2018.
	URL and/or relevant documentation	https://zeroproject.org/practice/pra181034ita-factshet/ **YouTube Link: (Italian)** https://www.youtube.com/watch?v=UnHbCQS9pms&feature=youtu.be

21.	Name of Best Practice	Tourism operators accessible guide
	Country	United Kingdom
	Organisation/ Company	VisitEngland/VisitScotland
	Description	An AccessibilityGuide is produced by tourism operators to provide potential visitors with important accessibility information about a venue, property or service. The guide enables individuals with accessibility requirements, their family and friends to make informed decisions as to where to stay and visit in view of their requirements. This includes not just wheelchair users but people with hearing loss, visual or mental impairment, older people, families with young children and more. • It can help a business to appraise their venue's accessibility, an area where (in the UK) they have legal obligations under the Equality Act 2010. • It provides essential information for people with accessibility requirements. • It's a marketing opportunity to broaden the appeal of your business. • Unless accessibility information is clearly available, visitors may choose to go elsewhere. • It's a minimum requirement for all participants in VisitEngland's National Quality Assessment Schemes. VisitEngland and VisitScotland provide a free to use website for the easy production and publication of Accessibility Guides. A business can produce a guide by answering a series of questions

21.	Name of Best Practice	Tourism operators accessible guide
		on their venue's accessibility, uploading useful photos and inputting any further information. They are given a unique URL to promote their guide, which they can add to their website and also share across social media channels. There is potential for the NTO to create a web portal of these Guides for visitors, thus generating a new marketing channel for businesses, based on promoting their accessibility. 
	Date of initiation	2017
	Description of impact	63% of businesses do not promote the fact they make provisions for guests with access needs (Ref: Eurostat survey). However, 95% of visitors with access requirements look for accessibility information on a venue before deciding to visit (Ref: Euan's Guide survey, 2017). There is therefore a demand which is not currently met by supply. Businesses that produce a published Accessibility Guide stand to gain as do their potential customers.
	Lessons learnt	Research shows that for those people with high access requirements reliable and accurate information about the accessibility of a business is amongst the top 3 things they look for, the other two being a warm welcome and appropriate facilities. Easy to find up to date accessibility information benefits both a business and their customers.
	URL and/or relevant documentation	VisitEngland/VisitScotland Online Accessibility Guide Tool www.visitbritain.org/writing-accessibility-guide

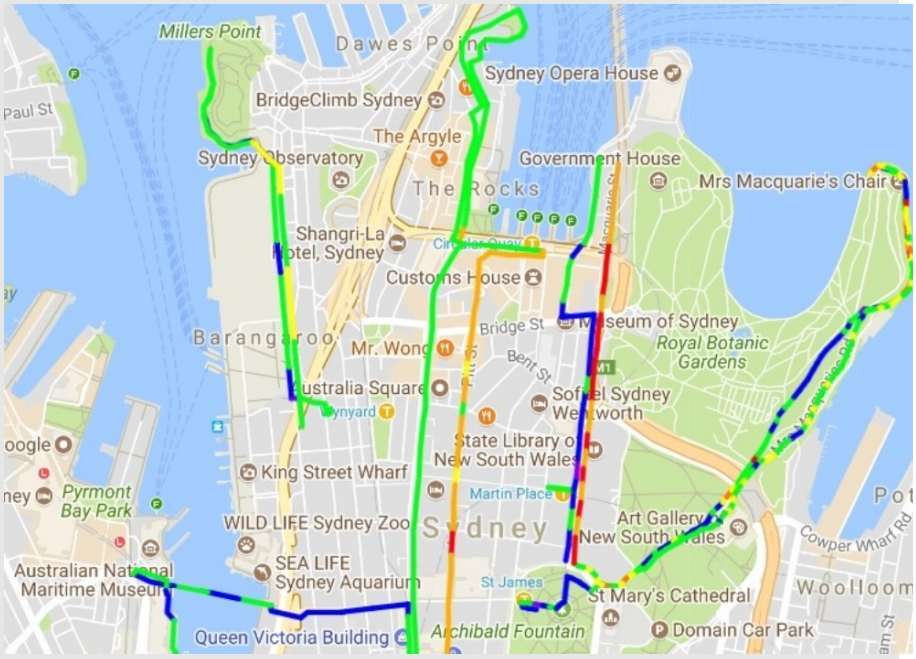
22.	Name of Best Practice	Universal Design for touristic brochures
	Country	United Kingdom
	Organisation/ Company	Nottingham City Council
	Description	Group bookings are important to Nottingham City. Nottingham Council reviewed their written communications in respect of their group visits brochure. The existing brochure was not attractive or easy to use. Looking to increase their group bookings by 10% and believing this will result in an additional £10,000 p.a. increase the brochure was redesigned using guidance provided in a toolkit by VisitEngland. During the redesign process they had in mind that providing a better customer experience for older customers would attract the over 55s who spent 42% more than under 35s on domestic overnight holidays in England in 2014. Key issues in design problems and solutions: • Poor legibility • Avoid placing text over an image or patterned background. • Confusing layout • Information should be easy for your customers to find. • Use a consistent layout and clear formatting, using headings. • Poor visibility • Use a solid background colour to make a document more colourful.
	Date of initiation	2016
	Description of impact	Response to new guide was positive, as it looks clearer and more visually attractive and easier to use. **Old Brochure** **New Brochure** 
	Lessons learnt	Adopting a Universal Design Approach to any printed publication is vital if the maximum benefits, which are aimed for, are to be realised. Universal Design can help to: • Increase number of repeat customers. • Improve word of mouth referrals and online reviews. • Improve how businesses successfully communicate to a wider market. • Increase spend by customers.
	URL and/or relevant documentation	VisitEngland – Universal Design Toolkits, Written Communication Case Study www.visitbritain.org/sites/default/files/vb-corporate/Images/Business-Advice-Hub/nottingham_city_council_universal_design_case_study.pdf

23.	**Name of Best Practice**	**Accessible website of a hotel enhances business overall**
	Country	United Kingdom
	Organisation/ Company	Peak Edge Hotel
	Description	Accessible sites are more visible to search engines, 50% faster to navigate and they can also offer savings through reduced maintenance costs. Peak Edge Hotel were looking to capture more online bookings, lower their website drop-off rate and improve their customer website engagement. Typical reasons for High Drop off Rates: 1. Users leave the site due to usability or design issues. 2. Users found all the information they needed on the entrance page. Review of the Original Home Page Design Problems: • Confusing layout • Too much information, varying image sizes. • Poor legibility • Font too small, large chunks of text. • Confusing navigation • Too many tabs, no indication of which page you are on. Using the VisitEngland Universal Design Toolkit changes were made to help address these issues. **Old Website DesignNew Website Design** 
	Date of initiation	2016
	Description of impact	Old Website Statistics • 18,524 page views between 10/05/15 - 10/06/15. • Average time spent on the site: 1 minute 26 seconds. • 89.68% drop-off rate. Outcomes of Changes to the 'Hotel' Page Google Analytics Comparisons

	Sessions	Duration	Drop-off Rate
Old Website	401	31 seconds	54.6%
New Website	1600	42 seconds	20.4%
% Difference	+ 300%	+ 36%	- 63%

23.	Name of Best Practice	Accessible website of a hotel enhances business overall
		Increase in time duration • People are no longer searching for information, but are looking at the rooms
	Lessons learnt	By adopting Universal Design Principles to their electronic and web communication with their customers, Peak Edge hotel have effectively: • captured more online bookings, • lowered their website's drop-off rate, • improved their customer website engagement. This reinforces that a Universal Design approach will help businesses to: • Increase their number of repeat customers. • Improve word of mouth referrals and online reviews. • Improve how they successfully communicate to a wider market, this includes disabled and older people. • Increase spend by their customers.
	URL and/or relevant documentation	VisitEngland – Universal Design Toolkits, Electronic and Web based Communication Case Study www.visitbritain.org/sites/default/files/vb-corporate/Images/Business-Advice-Hub/peak_edge_hotel_universal_design_case_study.pdf

24.	Name of Best Practice	Tourism Biometrix effort maps
	Country	Australia
	Organisation/ Company	Briometrix Pty Ltd
	Description	Accessibility rating systems for buildings are converging on a few best practice models, but the identification of accessible routes lags far behind the navigation technology available to the wider community. Most wheelchair users report that travel within the home range is manageable due to familiarity. However, going to new places as a tourist is an enormous undertaking of research, fact checking, and logistical planning, with a significant risk of failure. Travelling only where someone of a similar ability had travelled before is a common way to mitigate risk. Briometrix makes devices and apps that collect data to improve fitness, health and accessibility for wheelchair users. The app calculates the level of physical effort that the user is able to sustain to propel their wheelchair. Propulsion effort levels vary widely depending on the user's underlying medical condition, as well as age, gender and fitness.

24.	Name of Best Practice	Tourism Biometrix effort maps
		The Navability system displays colour coded routes showing the level of effort required to navigate each section, from blue denoting freewheeling, through to red denoting maximum effort or assistance required.  Brio Navability offers 3 levels of navigation: 1. A generalised effort map for all wheelchair users. This data is produced by paid "scouts" with Brio's mapping equipment attached to their wheelchair. The scouts travel the routes within the precinct to be mapped, producing the Navability data within days. 2. A cohort effort map for users with the same medical condition e.g. Spinal Cord Injury Classification. This will become available in the future, as the data set grows. 3. A personalised effort map based on data from the individual users' fitness app. This will be available for users of the wearable fitness device.
	Date of initiation (Duration)	• 2017 - Pilot Project with University of Wollongong Smart City Project. • 2017 - Contracted by City of Sydney to provide accessible route maps for New Year's Eve 2017. • 2017 - Awarded "Best Start-up" in Data Innovation Awards, Australia. • 2018 - Negotiating projects with event organisers, municipal councils, tourism authorities, transport operators. • 2018 Smartphone app under development. • 2018 - Awarded "Cool Company Award" for Innovation, Australia.

24.	Name of Best Practice	Tourism Biometrix effort maps
	Description of impact	Using paid Wheelchair Scouts is proving beneficial as they become the spearhead for the broader community. The users find the colour coding easy to follow in planning routes that make the journey possible or less taxing. Trust in routes is high as they have been determined by the community of wheelchair users. The Brio technology addresses the core issues of mobility mapping: • Real world, up-to-date user generated behavioural data; • Personalised effort data for different ability levels • Easily interpreted visuals, no words required • Shows the complete journey – how can I travel there and back within my abilities? • Visual evidence for stakeholders to monitor the inclusiveness of the city – local government, tourism, urban planning, transport authorities.
	Lessons learnt	Accessible routing, with personalised options that greatly enhances accessibility info at urban transport chains and touristic services.
	URL and/or relevant documentation	https://www.briometrix.com/mapping-services/ https://www.briometrix.com/navability/

3.4 Across areas

1.	Name of Best Practice	Wheelmap.org
	Country	Germany
	Organisation/ Company	SOZIALHELDEN
	Description	The wheelmap is a map for wheelchair accessible places. At www.wheelmap.org, anyone can find, register and rate places through a traffic light system - worldwide. The map, which has been available since 2010, is designed to help wheelchair users and people with other mobility impairments plan their day in a more predictable way. Currently, more than 800,000 cafés, libraries, swimming pools and many other public places are covered. Every day over 300 new entries are added. The Wheelmap is also available as a free app for iPhone, Android and Windows Phone. So the map can be conveniently used on the road via the smartphone.
	Description of impact	• Today more than 800,000 places are marked on the map, the majority of them as "fully wheelchair accessible" • Every day over 300 new markings are added • Wheelmap.org is a global project and available worldwide. About 1/3 of the previously marked locations are not in Germany. • The wheelmap is available in 25 languages, i.e. in Arabic, Danish, German, Greek, English, Spanish, French, Icelandic, Italian, Japanese, Polish, Swedish, Turkish, Korean and even Klingon. Other languages will follow. • The wheelmap has received numerous awards. These include the German Citizenship Award 2010 and the German Social Commitment Award 2009 for social heroes e.V. The Wheelmap itself was honoured in 2011 as "Selected Landmark in the Land of Ideas" and in 2013 with the "World Summit Award Mobile" in the m-Inclusion & Empowerment category.
	Lessons learnt	This Website and its related mobile App was one of the first in an ever-increasing number of similar tools for "crowdsourcing" accessibility information at the level of the local environment. Google Maps followed suit in July 2017 when it allowed users (registered as "Local Guides") to add wheelchair access information for locations or business listings. Accessibility information that is gathered by crowdsourcing and displayed on apps has immediate reach to large numbers of visitors and citizens and the "service" can be scaled-up rapidly. The down side is that there are varying interpretations of accessibility and what is labelled as "accessible" for one wheelchair user might not be suitable for another. The addition of photos can partly overcome this problem (as Wheelmap and Google have learnt) but crowdsourcing cannot reliably deliver objective measurements of spaces and facilities by untrained locals or visitors.

1.	Name of Best Practice	Wheelmap.org
	URL and/or relevant documentation	https://wheelmap.org (and https://maps.google.com/localguides/home/)

2.	Name of Best Practice	Information on the accessibility of facilities and ticket machines published by all the main railway stations
	Country	UK
	Organisation/ Company	National Rail Enquiries
	Description	Stations Made Easy is an interactive tool on the National Rail Enquiries website. It is part of a searchable national database, according to a standard set of criteria (http://www.nationalrail.co.uk/stations_destinations), including information on the accessibility of their facilities and ticket machines published by all the main railway stations. The Stations Made Easy feature helps people to find their way around all stations on the national network and, where possible, navigate away from features that make using stations difficult e.g. stairs to find a more suitable route. Photographs are embedded in the information provided. Options offered are: • Station Overview • Accessibility Information • Plan a route It was last updated June 2015.
	Description of impact	Provides essential and useful information for visitors or those not familiar with the accessibility of rail stations within the UK. Can help in decision making and journey planning. At present the website is not supported and therefore not being updated when changes occur, reinforcing the importance of long term funding to ensure the sustainability of vital resources such as this.
	Lessons learnt	The provision of this accessibility information is vital if travel for PWD is to be made possible, either independently or with friends. The data must be constantly reviewed and updated to reflect any changes. A weakness with the current information provision is that the station plans are all represented in a similar format with straight platforms, whereas they are more beneficial when they reflect actual layout.
	URL and/or relevant documentation	www.nationalrail.co.uk/75001.aspx

3.	Name of Best Practice	Public Procurement of Inclusive and Accessible Events – Guidelines Used in Combination with Financial Support by Visit Scotland
	Country	Scotland
	Organisation/ Company	Visit Scotland (VS)
	Description	In 2016, as part of its drive towards inclusive tourism across the country, VisitScotland, commissioned a Guide to Accessible and Inclusive Events, intended for the use for anyone (in Scotland) involved in organising events, regardless of the size, nature or location of the event. The guide may be used by individuals, a business, a voluntary organisation, a charity, or a professional events organisation, and provides guidance for "…a meeting, a conference, a gig, a ceremony, a fundraising event". Creating accessible and inclusive events is a key theme in the national events strategy – "Scotland the Perfect Stage" (www.eventscotland.org/scotland-the- perfect-stage) and event planners are encouraged to use the guide as a reference document whenever planning an event. The guide covers: • your legal obligations • key things to consider when planning your event • providing advice on getting to the event venue • parking provision • accessibility of the event venue – things you should consider • the event programme – how to make sure it is accessible • how to ensure you welcome everyone to your event • communications – making your marketing and information provision as accessible as possible. The guide was published in July 2016. Then, in September 2016 VS decided that any event that sought co-funding for its tourism-related event should demonstrate that it uses the guide to prepare an accessible and inclusive event.
	Date of initiation (Duration)	2016 (ongoing)
	Description of impact	By making public funding dependent on using the Access Guide, this has introduced a comprehensive approach to encouraging access for PWDs and others who need good access, without the need for legislation or statutory regulation.
	Lessons learnt	Where national or regional tourist boards have the possibility to support tourism-related events with public funds, accessibility requirements can be embedded in guidance documents given to destinations and operators. This has the effect of encouraging higher standards of accessibility and driving accessible tourism policy forward as part of the "mainstream" event industry.
	URL and/or relevant documentation	http://www.eventscotland.org/stps/the-national-events-strategy/

4.	Name of Best Practice	Changing Places Toilets: Larger public toilets equipped for changing people with severe disabilities
	Country	UK
	Organisation/ Company	Changing Places Consortium
	Description	In the UK there are 1/4 of a million people who cannot use standard accessible toilets. This includes people with profound and multiple learning disabilities, motor neurone disease, multiple sclerosis, cerebral palsy, as well as older people. They may need a changing bench/table and shower facilities, as well as a hoist for transferring from and to a wheelchair. To use the toilet in safety and comfort, many people need to be able to access a Changing Place, which has more space and the right equipment, including a height adjustable changing bench and a hoist.
	Description of impact	In just over 10 years, the consortium has established over 1000 Changing Places toilets in the UK, to a standard design, ensuring dignity and safety for disabled people when travelling. Changing Places are mainly in shopping centres and airports but also at football stadiums, parks, public buildings and heritage sites. A map and journey planner are available on the Changing Places website, enabling users to find a toilet quickly and easily and to plan their journeys. These facilities have enabled thousands of users and their families and friends to take longer excursions away from home or simply to go shopping without the anxiety and discomfort associated with using regular accessible toilets. Changing Places designs, contact details of equipment suppliers and other resources are available free of charge at the website. Changing Places toilets are funded by local campaigns, usually led by people with disabilities.
	Lessons learnt	A good example of how a specific amenity may become a key element in Accessible Transport and Tourism and needs to be interfaced/integrated in relevant digital information systems.
	URL and/or relevant documentation	http://www.changing-places.org/

4 ANNEX 4: CASE STUDIES ON BEST PRACTICES

4.1 Local transport

4.1.1 Access City Award

The *Access City Award* is the European prize for making cities more accessible to people with disabilities and older people but also beyond them (http://ec.europa.eu/social/main.jsp?catId=1141&langId=en). It is placed in the context of the overall commitment of the European Commission to equality of opportunities for persons with disabilities, towards a more social and inclusive Europe for all. It constitutes a chance for cities to show how they are making their cities easy to live in and see what they should improve, in order to become better for their citizens.

Figure 1: "Access to the City Walls", Chester, Access City Award Winner 2017 (Access City Award 2017, First prize)

Source: Access City Award 2017 booklet

Application & selection process

Figure 2: Access City Award booklet 2017

Source: Access City Award 2017 booklet

Once the call for nominations is launched, cities with a population of more than 50.000 inhabitants can submit their applications via an on-line platform. Before going to the European jury there is a pre-selection on national level with a separate national jury, which suggests up to 3 national finalists. After the national pre-selection, the finalists' applications are sent to the European jury that makes the final decision. All juries, both national and European, are composed of a representative of a Disabled Persons' Organisation (DPO), an accessibility expert, a representative of the national public administration and a representative of an Older Persons' Organisation. The Award covers *4 main aspects of accessibility* that all have to be taken into account

to show a coherent and overarching approach to accessibility: *(1) the built environment and public spaces*, *(2) transport and related infrastructure*, *(3) information and communication (including new technologies (ICTs)) and (4) public facilities and services*. There are a *first*, a *second* and a *third* prize but it is also possible to designate a "special mention" for applicants that have shown a special commitment or distinguish themselves by an innovative practice in a specific area.

The Award ceremony usually takes place as part of the programme of the European Day of Persons with Disabilities.

Access City Award booklet

In 2017, there was a booklet made available on the website of the European Commission, which lists the winners of the year, as well as a series of other good practice examples that could be useful to city planners.

Access City Awards

The first edition of the Access City Awards was launched in *2010*, following an initiative by the Spanish presidency of the Council of the European Union. *66 European cities from 19 EU Member States* participated in the first competition; *the first winning city was Ávila (Spain)*, followed by Salzburg (Austria) in 2012, Berlin (Germany) in 2013, etc. During the first years, the number of participant cities was on the rise (114, 99, 102…) but a slight decline has been shown since then. The *2017 Access City Award Winner was the city of Chester* for its dedication in ensuring that the city and its beautiful medieval walls can be enjoyed by as many people as possible, whereas *the winner for 2018 has been announced to be Lyon*, *"for putting accessibility at the heart of its city life".*

Figure 3: The outdoor space is from and for everyone", Rotterdam, Access City Award Winner 2017 (Access City Award 2017, Second Prize)

Source: Access City Award 2017 booklet

4.1.2 Coordinated accessible mobility across Berlin

Berlin provides good disability access, while being the largest city by area in Germany and Central Europe. Public transport hubs and modes, as well as the many accessible buildings meet the needs of people with activity limitations. Accessible travel to Berlin can be made by plane through Tegel or Schönefeld Airport, by train to the Berlin Hauptbaunhof or one of the other train stations and by bus.

The VBB (Verkehrsverbund Berlin-Brandenburg) transport association offers a special assistance service. If required, an accompanying person is provided for passengers on BVG buses and trains or the S-Bahn (city railway). The service is available for people who use wheelchairs just as much as the elderly, those travelling with prams or buggies, and people with limited mobility, walking disabilities or visual impairments.

Transportation hubs

Both airports have a number of parking spaces reserved for persons with reduced mobility, accessible by lifts within the airports terminals. The operating company of the airports allows people to submit a request for assistance service before planned departure to assist at all point of the stay at the airport, after the arrival for deplaning, transfer to baggage claim transit within the terminal, etc.. The assistant is intended to help the person with disabilities by taking care of their individual requirements. The mobility and support service can be used for the arrival or departure by bus and train with the provision of a detailed plan, as the respective responsibilities of the train service providers are confined to the station.

The city's central terminal where most trains arrive is the Berlin Hauptbahnhof located north of the Tiergarten park and Spree River. The central terminal can be accessed via city bus, U-bahn or S-bahn, while regional or international rail service is also available from here. Deutsche Bahn regional and international rail is wheelchair accessible with information on the disabled accommodation being available on the DB website.

Transportation modes

The S-bahn connects several tourist sights. Majority of the stations have elevators/lifts or ramps making them wheelchair accessible. Trains are level with station platforms, allowing wheelchair users to easily embark or disembark.

Figure 4: S-bahn Berlin

Source: BVG website

Berlin underground has 77 accessible stations with an elevator to provide access from street level to the platform level. Some stations are not wheelchair accessible, but individuals can be informed about these stations from the maps of the U-bahn lines. Newer train models operating on the U-bahn offer level-entry boarding with a small gap. In case of older models which may be uneven with the station platform (max. 6 inches), the user can flag the train's operator to lay down a mobile ramp to permit access.

Most router and tram vehicles are accessible via a ramp that extends from the floor. This ramp is deployed by the operator, so again users should flag the operator. The doors supported with the ramps are marked with appropriate icons.

The Berlin Verkehrsbetriebe (BVG) contains a journal planner on its website, which can be used to plot an accessible route using all accessible public transportation systems.

Figure 5: Berlin City Bus accessibility

The central Bus station in Berlin is the Central Coach Station Berlin (ZOB). The extensive city bus system consists of some 1.300 buses, all of which are wheelchair accessible. The rear/center door is equipped with a manual ramp, which the operator extends for wheelchair users. Many companies do not charge for guide dogs or a person accompanying a passenger with disabilities. Charted coaches also offer buses with accessible solutions if required.

Source: Sage Travelling - The European disabled travel experts

Awards on accessibility

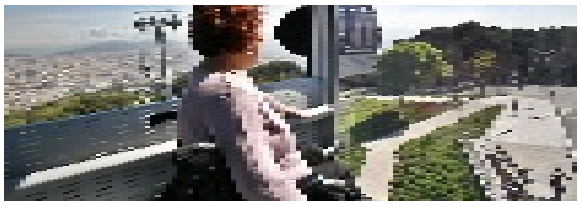
Berlin was honoured in 2013 by the European Commission's Access City award for disabled-friendly cities.

Also the project "Cultural Heritage and Barrier-free Accessibility, Berlin" received an EU Prize for Cultural Heritage/Europa Nostra Award 2017 during a public event held on 5 September at the House of Representatives of Berlin. It aims to raise awareness of issues related to accessibility to a wider public, monument conservators and students.

Notable projects which demonstrate innovative approaches to address accessibility in Berlin

Mobidat

Figure 6: Enjoying the view from Barcelona's Montjuïc Mountain in a wheelchair



It's a free database on barrier-free living with more than 31.000 entries, offering information on the accessibility of facilities in all areas of life. Information includes leisure, culture, health, welfare and lifestyle and is accessible through the project website www.mobidat.net.

Source: Barcelona Turisme website

"Barrier-free City" round table

This is set up under the direction of the "Senate Department for Urban Development and the Environment" to bring together stakeholders from government, business and organisations representing disabled and older people. The aim is to agree on priorities and initiatives which will improve accessibility.

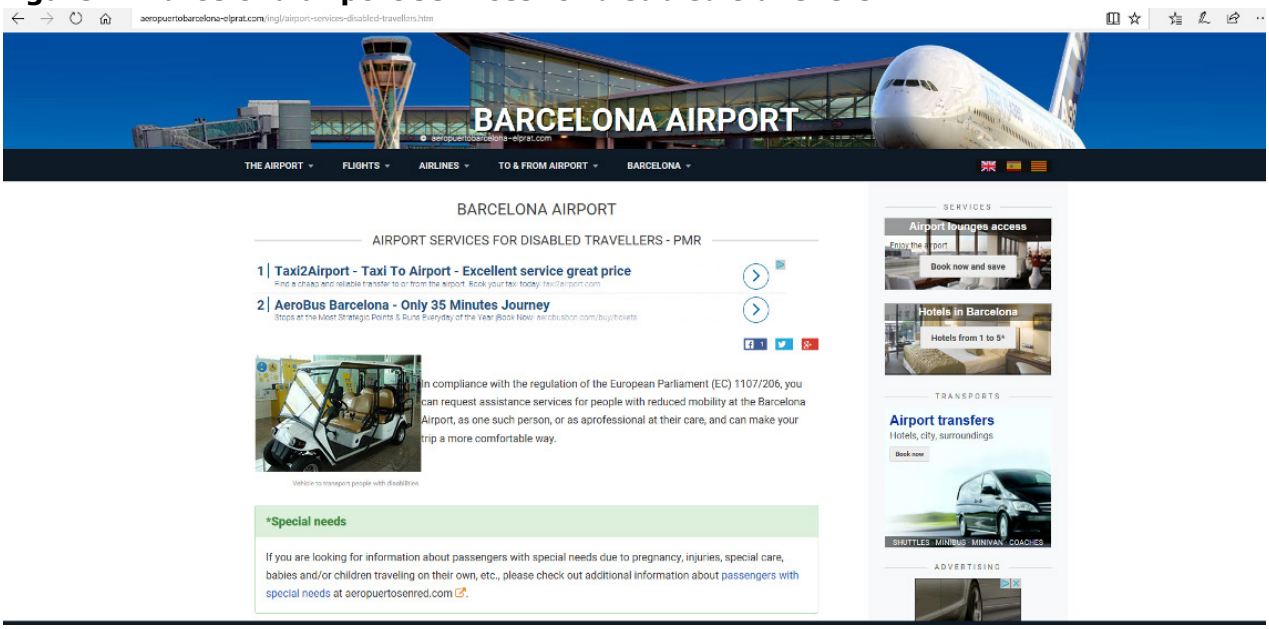
4.1.3 Accessible destination: Barcelona

Barcelona is the capital and largest city of Catalonia and the second most populous municipality of Spain. It is served by El Prat Airport, which provides connections to the city through highway, metro, commuter train and scheduled bus service. Direct connection to the city is also accommodated by the port of Barcelona. Following the paradigm of public authorities, enterprises (of all sizes) have recognised accessibility as an enabler for the social wellbeing of the city but also for their growth.

Transportation hubs

Barcelona Airport provides free assistance to passengers with disability if requested 48 hours in advance. There are clearly signed parking bays for disabled in the areas closest to the terminal buildings, while lifts provide access to the different levels in parking or between the ground floor and top floor in the terminals. The departure and arrivals terminals are accessed by adapted sliding doors. Meeting points have information panels in Braille in English and Spanish, giving instructions about how to request assistance and the button panels feature raised lettering and Braille. Sign language interpreters are available on request to accompany deaf or hearing-impaired passengers, who they can be identified by their green jackets. The car park has 108 disabled bays on level 2 for PwD.

Figure 7: Barcelona airport services for disabled travellers



Source: Barcelona airport website

The port of the city caters for PwD, including those with wheelchairs. The port has lifts at all major locations and the Blue Bus (cruise shuttle bus service) is also adapted for travellers with disabilities. The *cruise port* access is quite good, with step-free access, including ramps and elevators to get onto the cruise ships. 85% of cruise ships dock at the Moll Adossat/Muelle Adosado pier, which has a wheelchair accessible shuttle into town. *ATENDO* is the Spanish *railway's* personalised service to help PwD and PRM passengers and the elderly, board and alight from the trains. Specially designated spaces for wheelchair passengers on trains are called "plazas H". Barcelona Sants Station provides assistance to passengers with disability, with only 30 minutes pre-notification time. Entrances to the station are at street level. Inside the station there are tactile pathways on the floor (also in the platforms) and there are lifts connecting the lower floor with the platforms. Finally, there is a geographical database available, with information for 57.000 accessible places.

Transportation modes

Figure 8: Sidewalk ramps

Source: Barcelona Turisme

There is a large *walking* portion for accessible guided tours, using routes that are proven to be wheelchair and mobility scooter friendly, with sidewalk ramps, avoiding cobblestones, wherever possible.

The entire *bus* fleet has been adapted for people with reduced mobility since 2007. A fleet of over 1.000 fully adapted buses, equipped with wheelchair ramps, serve all areas of the city. Since 2015 the Barcelona Nord Bus Station offers assistance for PwD and PRM passengers, if requested. The Sants Bus station is also accessible to PwD, but does not provide specialised assistance.

Figure 9: Wheelchair ramp for bus

Source: Barcelona Turisme

Barcelona has 3 *metro* lines, with new stations that have been built and renovated since 1992, having included accessibility features. The ticket barriers throughout the Metro network and on the FGC (Catalan Rail) network emit acoustic signals and visual messages to ensure visually and hearing-impaired passengers know if they have validated their tickets correctly. The ticket machines have Braille and voice-activated browsing systems, which guide visually impaired passengers through the purchasing process. This system is activated by pressing a button with the Braille letters *ACC*. The lifts have button panels in Braille and raised lettering and there are station announcements indicating the platform, direction of the train, the lobby, street, etc.. Ciutat Meridiana station on line 11 has two tactile maps in Braille and raised lettering on the platform and in the lobby. The map in the lobby incorporates audio information. In some Metro stations, the platform is not at the same level as the carriage, so wheelchair users may need assistance to board the train. However, mobile ramps are being fitted to solve the problem. There is a number of firms in Barcelona and its surrounding areas that have *adapted vehicles* (mainly minivans).

The Barcelona Declaration Project

At the conclusion of the conference *The City and the Disabled* in 1995, 56 mayors and chairmen of European municipalities signed the Declaration, which had no legal force but committed municipal authorities to a wide range of actions.

4.1.4 Accessible transport within the context of wider urban accessibility in Lyon

Lyon is the third largest city of France and it is located in the country's east-central part, about 470km south from Paris with a population of approx. 500.000. Lyon is served by St. Exupery airport, located 25km from the city centre, which includes a station to connect by train with the other two stations in the city, the Part-Dieu and the Perrache. Through its action, the city of Lyon intends to allow effective participation of people in disability situation in the life of the city. The Extra Municipal Accessibility Commission of the city action is based on a strong partnership with people with disabilities to be closer to their expectations and their concerns and for that it has played a major role in recent years, being both a forum watcher, advisor but also responsible to put in force of the proposals. Its role is to prepare annual reports about the state of accessibility of public establishments and proposals for improvements.

Participating in the life of the city requires access to information, which for some this involves adapted devices. The city of Lyon provides access to municipal news to the largest part of the population by adapting its media information in Braille and audio formats for the visually impaired.

Transportation hubs

Passengers with disabilities using the airport must signal their need for assistance to their airline or their travel agency at least 48 hours before the day of departure. All car parks and other equipment are accessible to disabled persons and those of reduced mobility.

There are reserved spots in each of the airport's car parks. A shuttle service, linking the various car parks to the terminals, is also available, meeting the requirements of the standards laid down for persons with disabilities and those of reduced mobility.

The Part Dieu train station was constructed in 1978 and serves the lines for the TGV (Train à Grande Vitesse) and ICE (Inter-City-Express) trains. The TGV connects this station to Lyon Saint-Exupery train station, which in turn is connected to Lyon Airport by a moving sidewalk. The TGV has spaces reserved for passengers travelling in a wheelchair in all coach classes (1st or 2nd), while the Inter-city trains provide the following amenities:

- Wider entrances to accommodate a wheelchair.
- 4 dedicated areas, with 4 seats featuring armrests and folding seats.
- Independently accessible toilets.

Transportation modes

All Rhônexpress stations, which serve the airport shuttles between Lyon airport and the city centre are accessible at ground level or by lifts. The lifts have Braille control panels indicating each level. Each platform has a tactile strip to inform blind or visually impaired people when they are approaching the edge of the platform. Information terminals give a visual display of the waiting times for the next two Rhônexpress trams. If traffic is disrupted, audio messages may also be broadcasted at the stations. All the access doors are fully accessible and allow wheelchair and pushchair users to enter and exit. The station platforms are designed to leave as little space as possible between the tram access door and the platform. A Rhônexpress steward is always present on each tram who can provide assistance if there is a problem.

Figure 10: Accessible train access to wheelchair users (SBB)

Source: SBB.ch website

The TCL-Sytral network facilitates the transportation modes throughout Lyon. The network comprises 4 metro lines, 3 tramway lines, 2 funicular lines and over 130 bus lines. All lines are allowed to guide dogs. The Optiguide service (reserved for Optibus) allows people with reduced mobility and/or visually impaired to make their journey across the network with a TCL guide.

The tram is fully accessible and coaches are equipped with the following:

- Retractable pallets
- Low floors
- External speakers indicating the line number and the destination
- Spaces reserved for PwD
- Braille door stop request and opening buttons and
- Sound signals when opening and closing the doors.

Figure 11: Taxis adapted for PwD in Lyon

Source: Taxi Lyonnais website

Access to buses is accomplished by a sidewalk raised to 21cm and ramps to the dock. All accessible stops are indicated on time sheets. All metro stations are equipped with elevators with Braille control and sound messages, gated adapted for easy-access to the platforms, while there are retractable components to fill the space between the platform and the coach.
The main metro, funicular, tram and bus lines plan can be pre-downloaded in a sound format.

Private companies provide accessible taxis to and from anywhere in the Lyon region. These vehicles are adapted to special requirements and are accompanied by a fully qualified staff to ensure optimised transport conditions for PwD.

Awards on accessibility

Lyon's was rewarded with 2018 Access City Award for putting accessibility at the heart of its city life. Public buses are 100% accessible and access to culture for all is also ensured, thanks to the inclusion of accessible equipment in libraries, such as reading machines, audiobook readers and magnifying screens. The city has also developed digital tools for people with disabilities, and in terms of work integration, 7,8% of civil servants are people with a disability. This is significantly higher than the legal minimum quota of 6% required by the French legislation.

4.1.5 Accessibility of metro networks from design to maintenance and everyday use in Athens

> *The metro constitutes a miniature of society. A crossroad of different characters and cultures. All of us compose this polyphony. The metro has its own communication codes mainly consisting of glances that people exchange, cars, elevators, etc.. Even when I want to reprove somebody for using the elevator without a reason, I get the chance to communicate and to make myself visible, as a user of a wheelchair who represents all wheelchair users. I gain confidence by learning the destinations. I feel as if I am the master of the metro. I love to give instructions to other users. Then I become useful and my wheelchair disappears.*
>
> Nikos Perdikaris, wheelchair user, interview November 20, 2003 (in Greek, translation by Vasilis Galis).

Though Athens in Greece cannot be seen as an example to lead the way in transport accessibility, it's relatively newly established metro system is definitely an exemption. Athens is a symbol of the transformation of an initially non-accessible underground system into one that could become a model system, in terms of accessibility, for other historic underground systems, as it combines high technical standards and full accessibility with art and cultural exhibits at the stations.

Rationale

Figure 12: Wheelchair user in Athens metro

Source: From Shrieks to Technical Reports: technology, disability and political processes in building Athens metro

The main motivation for this infrastructure initiative has been the Olympic and Paralympic Games of 2004, hosted by Athens. The issue of accessibility in the Olympic Games was one of the key concerns of the overall city renovation that followed.

The construction of the metro in Athens that started in 2000 and is still on-going, has been one of the biggest and most complicated infrastructure projects in Greece. The system started out carrying 300.000 passengers on a daily basis and it was not primarily designed to integrate facilities for PRMs. However, as the metro project unfolded, PRM organisations were involved, so that the final version of the metro system was as much as possible accessible for them.

The metro network

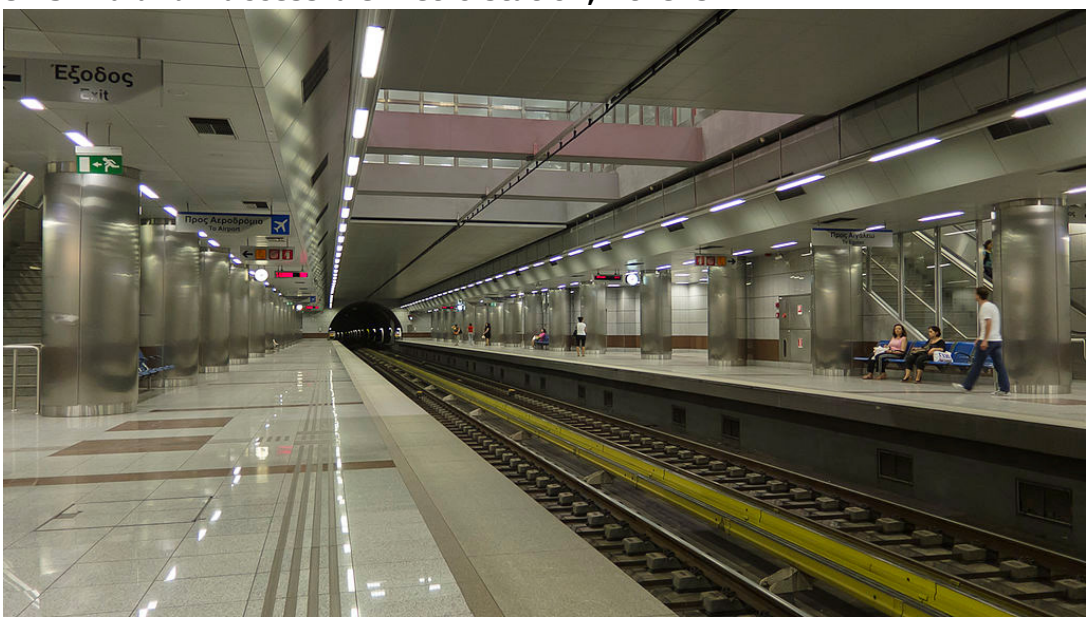
Athens' metro current network consists of three lines. Line 1, being the oldest and originally a railway line, has all its stations being renovated and made fully accessible to persons with mobility and sensory disabilities. Lines 2 and 3, are the newest parts of the network connecting the city centre with Athens Airport. Those are also fully accessible for persons with reduced mobility.

All metro stations are provided with elevators, escalators, ramps, tactile floor guide lines for persons with vision impairments, visual and audible announcement systems (in and out the vehicles), accessible toilets, easily readable signs and accessible connections between platforms. Also, the metro is well connected with the renovated electric railway, serving quite efficiently the historical centre of Athens.

As such, the extent to which accessibility requirements for passengers with disabilities have been integrated in the transport planning, contributes to a very high level of access to, from and throughout the centre of Athens, when compared with other European historical cities.

This confirms the statement of Vasilis Galis, a researcher from the Linköping University, who noted that *"the underground system in Athens symbolises a landmark for accessible systems"*.

Figure 13: Halandri accessible metro station, Athens



Source: www.flickr.com/photos/jaggers/7691738390

4.2 Long-distance transport

4.2.1 Special equipment and services at the Larnaca Airport

In Cyprus, Larnaca International Airport (operated by Hermes Airport Ltd) presents an undoubtedly best practice in terms of accessible friendly initiative and has been awarded in 2017 by EDF and DG MOVE with the Accessible Airports Award.

Larnaca airport has a specialised boarding equipment that facilitates the boarding of wheelchairs (e.g. the "Eagle lift") and accessible check-in machines and e-Gates. The Eagle lift can be used for completely immobile passengers or oversized/overweight passengers, who may not reach their aircraft seat unaided.

In the aviation industry, passengers with severe mobility restrictions are transferred from aisle chairs to their seat on the aircraft by manual lifting. This often results in an undignified experience, not to mention a dangerous one, for both passenger and helpers. Thus, Eagle Passenger Lifter transfers eliminate all manual handling/lifting, thus avoiding the risks involved to both passengers and staff.

It can carry up to 250 kgs weight and it can be used for both departing and arriving passengers at Larnaca International Airport. Transfers with the Eagle Passenger Lifter at Larnaca International Airport are performed by two trained Special Assistance Agents. The time needed to transfer a passenger with the Eagle Lifter from their wheelchair (at the entrance of the aircraft) until their aircraft seat (or vice versa for arriving passengers) is approx. 5 minutes. It can be pre-booked in advance through the airport website.

Figure 14: The Eagle Lifter in Larnaca airport

Source: Larnaca airport website

In addition, Larnaca International Airport offers additional amenities to travellers with disabilities, such as **sockets for electric wheelchairs,** a **free parking for 120 minutes** and cooperation with Senior Travel Groups that have expertise on the **accessibility for persons with reduced mobility,** as well as **accessibility features on the airport website.**

A manual with all the details on "FACILITIES & SERVICES FOR DISABLED PERSONS & PERSONS WITH REDUCED MOBILITY (PRM)" is available through the airport website.

Figure 15: Larnaca Airport help point for people with reduced mobility

Source: Airport Focus International

Moreover, PRM Unit of Hermes Airport Ltd, operator of Larnaka and Pafos International Airports in Cyprus, has developed and implements since 2008 staff training on disability awareness and customer service for frontline staff across key airport-based services and facilities (including SMEs, such as cafes and shops). The training takes place in a context of high standard accessible infrastructure and services, which are continuously monitored (according to a specified list of indicators based on relevant regulations) and improved. Among others, spot checks are performed on a frequent basis at the airport (3 random spot checks on average per week), at every stage of the departure and arrival procedures (drop-off, check-in, PRM desk, shops, boarding etc.). The "Disability and Equality Awareness Training" and the "Practical Hands-On Training for Lifting Techniques" are provided by Hermes Airports PRM Unit to the PRM Service Providers.

The content of this training is presented as a case study by the European Commission, Enterprise and Industry Directorate General (DG ENTR) titled "Mapping skills and training needs to accessibility in tourism services" (published in March 2014).

The total number of passengers with reduced mobility assisted at the Larnaca airport in 2012 was 34.000, among which there were 5 complaints and 13 appreciation letters.

4.2.2 Best practice for support to people with cognitive and hidden disabilities in airports

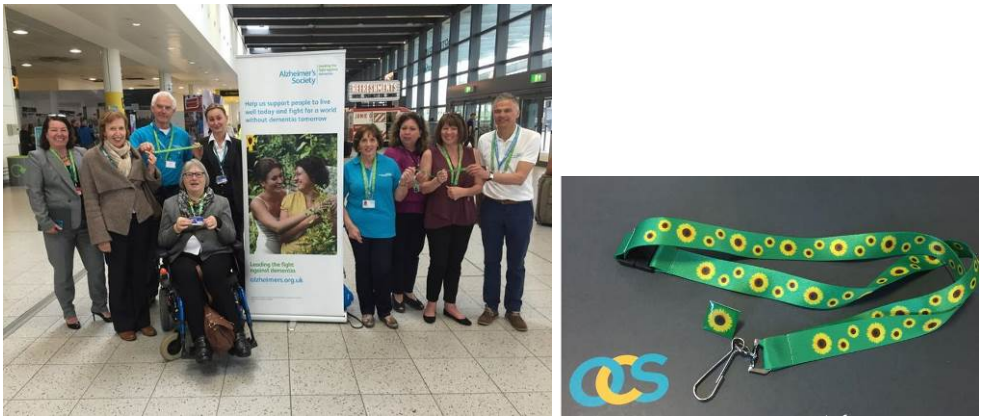
In 2016, London Gatwick airport was the first in Europe to launch the Lanyard Programme. Available, on voluntary basis, the lanyard allows self-identification at critical touch points (security, immigration, customs). The introduction of a distinctive lanyard for passengers with such problems enables travellers to discreetly identify themselves to staff and ensure tailored help and support, offered throughout their journey. It is being supported by leading charities like the Alzheimer's Society, the National Autistic Society and Action on Hearing Loss. Gatwick Airport has been working closely with the above UK charities and OCS that provide passenger assistance services at Gatwick, to promote greater awareness and understanding of the challenges, which passengers with hidden disabilities may experience when travelling through busy environments.

As part of the initiative, Gatwick is increasing awareness and training of airport staff and appointing 'workplace champions' to provide enhanced assistance for passengers with hidden disabilities. The lanyard will ensure staff is aware that passengers may:

- Need more time to process information or more time to prepare themselves at security.
- Need to remain with family at all times.
- May react to sensory overload i.e. be surrounded by too much information.
- Need staff to use clear verbal language, as it may be difficult to understand facial expressions and/or body language.

- Need staff to be visual with instructions and use closed questions to assist passengers effectively through the airport.
- Benefit from a more comprehensive briefing on what to expect as they travel through the airport.

Figure 16: The Special lanyard for passengers with hidden disabilities



Source: OCC website

Assistance staff security personnel, and border officers at Gatwick have been trained to provide the appropriate level of help when they see a passenger wearing the unique lanyard or badge. For example, staff is able to support passengers, who may need more time to process information or to prepare their belongings ahead of security screening.

The number of passengers with hidden disabilities requesting assistance at Gatwick airport has risen by 47% year-on-year since the launch of the voluntary lanyard by OCS Group, as passengers and their families feel more confident about flying and requesting assistance at the airport.

To date, over 5.000 lanyards have been given out at Gatwick, and have launched it in Manchester, Glasgow, Bristol, Belfast and Birmingham. Similar measures are applied by other airports too for treating people with hidden disabilities, such as special sticker for the Lon Angeles airport, etc..

As part of the airport's ongoing commitment to improve accessibility, Gatwick is also looking to invest in two new sensory rooms for people with sensory processing difficulties, such as autism, brain injury and dementia. The airport is seeking to build a sensory room in each terminal to help improve the mental or physical well-being of passengers. The new sensory rooms will be dedicated spaces designed to block out noise, control space, temperature and lighting to stimulate the senses, promote pleasure and feelings of well-being. The rooms can be transformed from a calming and soothing place, to an exciting and engaging interactive space full of light and sound according to the needs of the passengers that use them.

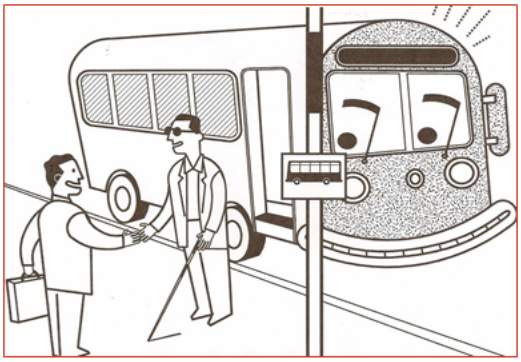
Furthermore, a booklet has been created by the London Stansed airport, in conjunction with advice from the National Austic Society. It aims at helping parents and carers of children on the Autistic Spectrum understand what will happen on their journey through Stansted Airport. The booklet contains photographs of objects, displays and people that can be met at the airport. There are also games and checklists for children to tick.

Figure 17: The booklet for autistic children of Stansted airport

Source: Airport awareness booklet

4.2.3 Transit Access Training Toolkit for bus and coach drivers

In 2009, the World Bank, with funding provided by the Norwegian and Finnish governments, developed a training toolkit on accessible transport for bus, coach and other transit transport drivers and staff.



Source: Airport awareness booklet

The toolkit is composed of 6 Sections covering the following content:

- Practical methods to motivate bus drivers and other transit staff to better serve seniors and passengers with disabilities.
- Pocket-size guides for bus, taxi and other transit drivers.
- Posters.
- Public service announcements.
- How to plan a "disability awareness" training session.
- Selected annotated courses: where to go for more information beyond the scope of this introductory toolkit.

It thus encompasses a set of innovations such as:

→ Instead of developing a one-tool-fits-all; it provides guidance on how to build such training and where to find readily available training courses to learn from or to use (in several languages).

→ It provides due emphasis on how to motivate drivers and staff to be trained; thus how to make the training effective and its results sustainable. Only if drivers and staff take "ownership" of the training and believe in it (understanding why they do it), will they really learn and apply their knowledge. A relevant example for such motivation is the pin awarded to the "Driver of the Month", selected by passengers with disabilities in San Francisco, USA.

Figure 18: Pin awarded to the "Driver of the Month"

Figure 19: Poster provided in the toolkit

Source: World Bank

→ Pocket-size guides help drivers and staff to refresh their memory and have support whenever they serve a passenger with a specific disability. This is especially good in case they do not transfer passengers with disabilities often (i.e. for rural transport or taxi drivers) and may have forgotten what they learnt.

→ Use of posters that remind the driver and the general public of their obligations towards their fellow passenger with disabilities and also inform such passengers that the driver has taken relevant awareness courses.

4.2.4 Accessible river cruises in Europe

There are a few companies in Europe that offer accessible travel on some of their river boats, mainly on the Rhine and the Danube River. Accessible travel refers to being able to meet the needs of individuals with physical impairments. This includes hearing and visually impaired, as well as those with mobility issues, which tend to be more complex, particularly for those passengers who are wheelchair bound. For this reason accessibility of cruise boats mainly refers to the obstacles that limit physical mobility of these people.

It should be underlined that usually ferrying companies invoke safety reasons to block ship changes to become accessible. Ferries doing river cruises and generally cruises on closed waters may easier become accessible since they do not run the same risks as those on the open sea.

Accessible hubs

Accessible cruise tours on the Rhine and the Danube require accessible ships to moor at wheelchair-accessible dockings and excursions, such as those in Bratislava, Budapest, Linz, Vienna, Cologne, etc..

Companies in Europe that provide accessible river cruises

The relevant companies and their outfitted boats to meet accessible requirements include:

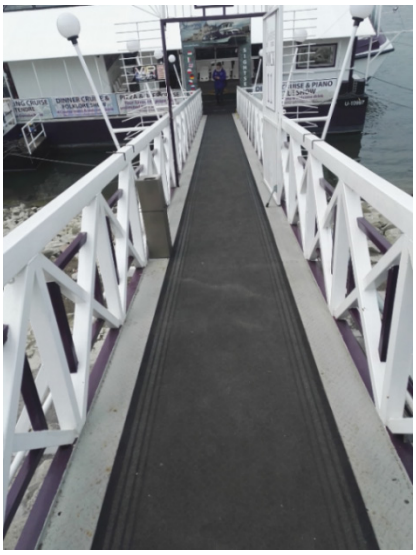
- CroisiEurope
  - MS Botticelli and MS France
  - MS MS Beethoven, MS Gérard Schmitter, MS L'Europe, MS Lafayette, MS Modigliani, MS Vivaldi
  - MS Cyrano de Bergerac
  - MS La Belle de Cadix
- Shearings
  - MS Alegria
- Scenic Cruises
  - All of its 13 ships have accessible cabins
- European Waterways
  - La Nouvelle Etoile (barge)
- Barge Charters
  - La Reine Pedauque (barge)

Accessible boat features

There are several features, which make a boat accessible to wheelchair users. As an example, MS Alegria can accommodate up to 10 wheelchair users per sailing. Manual and electric wheelchairs, foldable electric scooters and walking frames can be used on board. Cabins for wheelchair-dependent passengers feature large doorways and "wet room'' type bathrooms, with seats in the showers. Other cabins have wheelchair-accessible doorways and shower stools, which can be provided on request. Travellers can select to rent mobility equipment, such as walking frames to use on the ship and stools for showers that are not already equipped with them. The MS Alegria features 3 elevators that link the passenger decks and 2 chair lifts take disabled passengers to the sun deck.

Figure 20: Accessible type toilet

Figure 21: Accessible boat entry on the Danube cruise in Budapest



Source: Budapest river cruise

The River Cruise Experience on the Thames river, UK, also provides accessible cruises starting and finishing from the Waterloo Millennium Pier. While on the boat, it offers to the passengers the opportunity to hear–or see for the hearing impaired passengers- information about the history of London and the buildings, as passing by St Paul's

Cathedral, the Houses of Parliament, Tower of London, HMS Belfast, Shakespeare's Globe, Tate Modern and the Millennium Bridge. The boat is accessible for people using wheelchair, while a wheelchair lift helps these passengers to get to the upper sundeck with unlimited view and the lower deck. There are accessible toilets and restrooms on board.

Figure 22: The River Cruise Experience

Source: Enabledlondon website

4.2.5 TransPennine Express in the UK

TransPennine Express is a British train operating company that provides intercity rail services, connecting key Northern cities and towns, through the routes of North Transpennine, South Transpennine, North West and Scotland. The company has proceeded to the configuration of a Disabled People's Protection Policy (DPPP), which assists disabled passengers throughout all stages of their trip (from planning to supply the required assistance on route).

Accessible hubs

Most of the 19 stations on which the company has management responsibility, provide several features to makes them accessible. Information regarding station accessibility is clearly provided by the company with a summary of facilities available on their website. The railways are continually investing in accessibility improvements.

Table 2: Diffused station accessibility

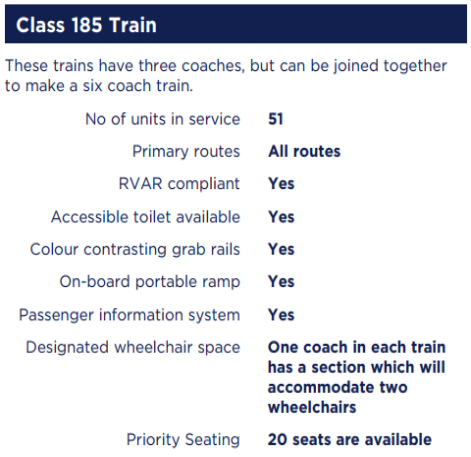
Station	Access to station entrance and ticket office	Ticket Office Accessibility	Platform Accessibility	Wheelchair Available	Disabled Badge Holder Parking	Accessible Toilet	Public Telephone	CCTV	Public Address	Customer Information Screens	Additional Help Points	When Staff are available to help
Huddersfield	All entrances fully accessible	Induction Loop, Low Counter	Lifts and/or ramps to all platforms	✔	✔	✔	✔	✔	✔	✔	✔	Mon-Sun 24hrs
Hull	Main entrance fully accessible	Induction Loop, Low Counter	All platforms accessible from concourse	✔	✔	✔	✔	✔	✔	✔	✔	Mon-Sun 24hrs
Lancaster*	Main entrance fully accessible	Induction Loop, Low Counter	Lifts to all platforms	✔	✔	✔	✔	✔	✔	✔	✖	Mon-Sat 0450-0000 Sun 0800-0000
Leeds*	All entrances fully accessible	Induction Loop, Low Counter	Lifts and/or ramps to all platforms	✔	✖	✔	✔	✔	✔	✔	✖	Mon-Sun 24hrs
Liverpool Lime Street*	All entrances fully accessible	Induction Loop, Low Counter	Lifts and/or ramps to all platforms	✔	✔	✔	✔	✔	✔	✔	✔	Mon-Sat 0700-2200 Sun 0800-2000
Liverpool South Parkway*	All entrances fully accessible	Induction Loop, Low Counter	Lifts to all platforms	✔	✔	✔	✔	✔	✔	✔	✔	Mon-Sat 0550-0033 Sun 0755-0033

Source: TRANSPENNINE EXPRESS website

Accessible modes

All services are provided in aural and visual information for each journey. The visual display shows the train's stopping pattern and other relevant journey information. The company also provides on-board announcements. These are made in sufficient time for passengers, especially those with reduced mobility, to prepare to alight.

Figure 23: TRP Trains - Class 185



Class 185 Train

These trains have three coaches, but can be joined together to make a six coach train.

No of units in service	**51**
Primary routes	**All routes**
RVAR compliant	**Yes**
Accessible toilet available	**Yes**
Colour contrasting grab rails	**Yes**
On-board portable ramp	**Yes**
Passenger information system	**Yes**
Designated wheelchair space	**One coach in each train has a section which will accommodate two wheelchairs**
Priority Seating	**20 seats are available**

Source: TRANSPENNINE EXPRESS website

Reservations for seats and for dedicated wheelchair spaces are available on all routes. These can be made when purchasing tickets or requesting assistance. They are indicated by pictograms or notices on adjacent windows. Accommodation for disabled passengers is indicated by the wheelchair symbol on windows and on the exterior of the carriage. The Assisted Travel Team can arrange assistance and make seat reservations for the journey of passengers with disabilities both on TPE trains and on trains run by other train companies, which provide this facility. Some trains provide trolley service and customers can be served refreshments at their seats. Folded or dismantled scooters are accepted on all services and assistance to be carried onto the train is provided.

Special services

When platform alterations occur at short notice:

- station staff, where available, will assist to the correct platform and will also carry the luggage, if necessary;
- staff will update visual information systems and make voice announcements;
- staff will look out for visually-impaired passengers, who need assistance and will help where required; the Blue Assist Card makes this easier for hidden disabilities; and
- the staff will try to give enough time to allow people, who need extra help, to board the re-platformer train, but should any changes result in a change to the journey they will coordinate this to the passenger.

The company can provide assistance to and from the station entrance, forecourt, car park, taxi rank or connecting bus service, if this is within the forecourt when a station is staffed. At Manchester Airport rail station, for example, there is a meeting point for their assistance providers. The agent who manages the taxi requirements retains a number of taxi companies across the company's network to ensure the availability of accessible taxis which can carry standard wheelchairs and those scooters, which have TPE Scooter Cards.

Commitment to accessible policy

Disability awareness is an integral part of business activity. The Customer Experience Director is responsible for the company's Disabled People's Protection Policy (DPPP), and will ensure that the policy is integrated into business plans at the planning stages of all projects. The Franchise Manager and Customer Relations Manager work together to develop and ensure delivery of policies and procedures with regards to accessibility. This will include involving passengers and advocacy groups in design and navigation exercises regarding train interiors, ensuring that they are easy to get on and move around. The company undertakes assessments of trains and stations to ensure that they are compliant from a safety perspective but can also offer the best service possible for passengers with different

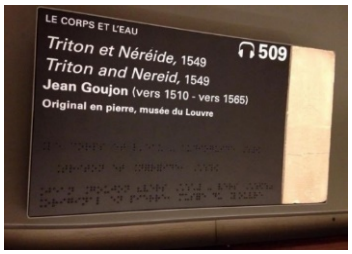
access needs. Disability awareness training is part of learning and development schedule, which is available to all managers and staff who work directly with passengers.

Commitment has been made to comply with the TSI-PRM (Technical Specification for Interoperability for Persons with Reduced Mobility) and the Code of Practice when installing or refurbishing rolling stock and facilities at stations. The company follows ATOC's (Association of Train Operating Companies) "Guidelines for Development Management for Stations" and the Department for Transport/Disabled Persons Transport Advisory Committee (DfT/DPTAC) Design Standards for Accessible Stations in planning new works, including considering the Equalities implications of all plans.

4.3 Tourism

4.3.1 ALL for ALL National Accessible Tourism Support Programme, Portugal

Figure 24: Example of information in Braille



Source: Turismo de Portugal

The ALL FOR ALL Programme is part of the Portuguese Tourist Authority's tourism strategy 2027, which includes an Action Plan on Promotion of "Tourism for all" with an inclusive approach: *To provide awareness, training and knowledge for organisations and enterprises about "Tourism for All" and to support projects to improve accessibility of infrastructures equipment and tourism resources*.

The programme provides information for businesses, training and a fund of €5 million, to support projects of a value up to €200.000 and with 90% of eligible costs covered by government funds. Within 2016-2017 approx. 100 projects have been funded, covering infrastructure works, adapted vehicles, accessible information and websites, training, studies and consulting (max 10% per project), achieving access to museums and monuments, and many more initiatives. Projects must follow a structured plan of interventions; they must adhere to accessibility guidelines and take a Design for All approach and there may be fundable and non-refundable elements. Eligible beneficiaries can be tourism and transportation operators, municipalities, private foundations (e.g. cultural institutions), etc..

The Programme is supported entirely by the funds from the Portuguese National Lottery, authorised by a government decree in support of actions to promote the competitiveness of the tourism sector.

Figure 25: Presentation of the room in tactile

Source: Turismo de Portugal

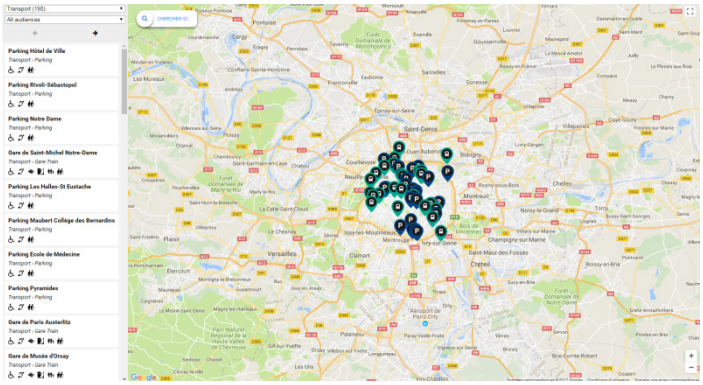
Impact of the Programme is not yet measured, as the awareness measures, training and project funding are still ongoing. The Programme is accompanied by a publicity campaign including videos and social media activities. Also the country's first Accessibility Information Scheme is being developed in association with the NGO "Accessible Portugal" and the Portuguese Vodafone Foundation, which is supporting the new TUR4All app, in association with TUR4All, devise by the NGO PREDIF (Spain).

The demand for project funding in 2016-17 out-stripped the available funds and additional funding was found. Actual achievements from the projects are not yet recorded, as this is a quite new initiative.

4.3.2 VisitParisRegion – Business Support, Paris, France

The regional tourism board of Paris Ile-de-France has worked with accessible tourism since 2002. The initial objective was to render accessible the world's number one tourist destination. As part of this strategy, the regional board was involved in the work on the "tourism and handicap label". Introduced in 2001, this label has the aim of awarding the institutions and businesses that have made their businesses accessible. The label is divided into four categories, taking into account the main types of disability.

Figure 26: Presentation of the Handistrict website



Source: accessiblenet website

The Ile-de-France region covers the whole tourism supply chain to some extent. It acknowledges several weak links, including accommodation and catering, where the will to invest resources and time in accessibility often is missing due to the limited size of businesses, with exceptions of larger hotel or restaurant chains. Another weak link is public transportation, and in regards to Paris particularly, the Metro network. On the other hand, accessibility in museums and cultural institutions is better and improving further, and extensive work has been done in information and communication, e.g. through the launch of the Handistrict website (now Accessible.net) providing a database on 370 accessible tourism businesses.

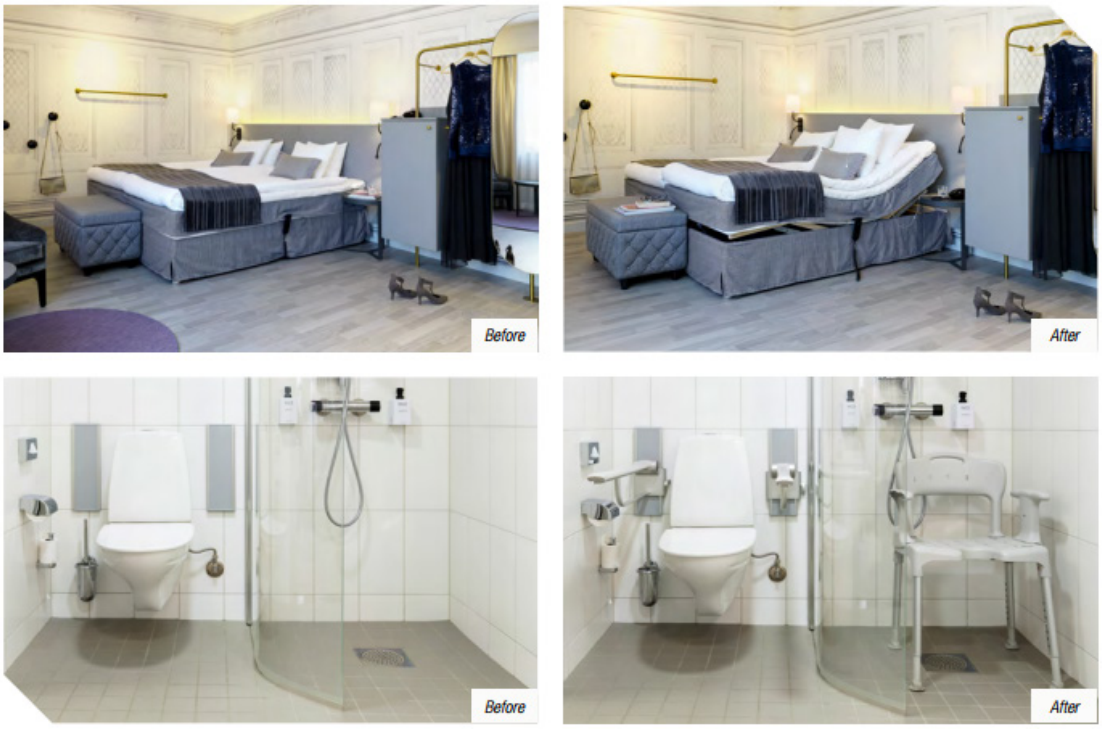
- The challenge of ancient infrastructure including streets, Metro and heritage buildings requires a long-term strategy.
- Training sessions are given to businesses in "Benefits of a welcome for all" and free online learning, "Réflexe Accesibilité".
- French national regulatory framework provides firm basis of accessibility with legal enforcement.
- The French Label system for accessible Tourism, "Tourisme et Handicap" (T&H) serves as an underpinning function in the classification and labelling of accessible venues.
- Additional pictograms for families with small children and older citizens are now used in addition to the original 4 categories of disability in the T&H labelling system:

4.3.3 Design for All Standard in Hotels and Staff Training, Scandic Hotels, Sweden

Scandic is a leading hotel operator in the Nordic countries today with over 300 hotels in its portfolio. Over 15 years ago Scandic started its journey towards making its hotels more accessible for people with disabilities. On top of this, a wide-ranging interactive training programme has been developed for all the hotel chain's employees with the aim of fostering an understanding of different types of accessibility challenges and the importance of treating all guests properly. This approach has seen Scandic giving itself a unique position as the leading "accessible" hotel chain in the world. Scandic's transition was led from the beginning by disability manager, Magnus Berglund, who faced the prospect of a disability pension at a young age when diagnosed with a disabling health condition. He challenged the CEO to hire him, with the aim of marketing the hotel to all customers, including people with disabilities. He has developed a 135 point accessibility guideline for new and existing hotels, based on Design for All principles and the hotel chain also trains all its 13.000+ staff in disability awareness and customer service, with its prize-winning e-learning course (which is available online to all).

Scandic is now widely recognised as the world's leading accessible hotel brand, constantly attracting attention in the media for its innovative and financially successful approach in providing accessible services for all guests.

Figure 27: Design for All concept



Source: Scandic Hotels website

Scandic reported that in the first year of training staff in disability awareness the number of bed-nights for groups including PWDs increased by 15.000. Scandic won a large public procurement contract in Norway on account of its ability to provide accessible conferences for government/public events.

4.3.4 Provision of accurate and checked accessibility information to users: TUR4ALL, Spain and Portugal

PREDIF - Spain, and Accessible Portugal - Portugal in cooperation with Vodafone Foundations in Spain and Portugal have developed a common web platform and information tool for providing citizens and tourists with information on the accessibility of venues and attractions.

All people when travelling and especially those with specific access requirements, need to have reliable and checked information about the physical environment or services available at the facility or destination they would like to visit. Lack of methods and tools to check and to provide the relevant information to users have led many people to disappointment or has even spoiled their trip, as they cannot find accurate information to help them make the right choice and the service they expect to find when reaching the facility or destination they have chosen to visit.

Businesses are not well informed about the benefits of improving their facilities and services and do not have tools available to check their offer.

Figure 28: Presentation of the application

Source: ApkGk website

In 2012, PREDIF and Fundación Vodafone created the very first version of TUR4all the aim of which was to provide users with accurate information, checked by experts, about the accessibility of tourism establishments across Spain. Up until 2016, TUR4all was simply an application and webpage, where users were able to consult information. But users wanted to be able to recommend accessible tourism establishments. In a recent upgrade, TUR4all has been developed to include a community of active users and tourists with accessibility needs. As with the first version, TUR4all provides information about the physical, visual, hearing and cognitive accessibility as well as other types of traveller needs. The aim is to improve accessible tourism by empowering tourists with accessibility needs to share information about their accessible destinations and experiences and to give others the confidence to travel. Similarly it is considered very important to raise awareness among tourist destinations and establishments about the advantages of accessibility for the development and growth of their businesses. In conclusion, TUR4all is a solution for tourists, public administrations and private-sector companies alike.

TUR4ALL functioned in Spain for several years before being established in Portugal. The new development is an example of public-private-NGO collaboration, which is transforming the information landscape for PWDs – both citizens and visitors.

4.3.5 Pantou - The Accessible Tourism Directory

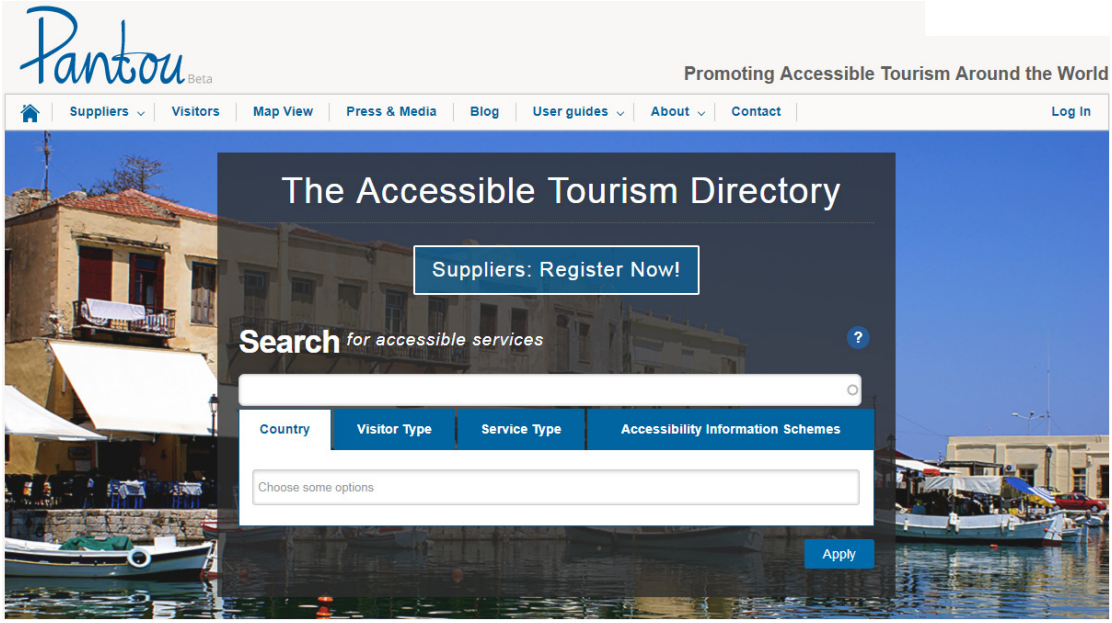
The Pantou Accessible Tourism Directory was initially created with EU support funding by ENAT and EWORX S.A. as a data collection tool for the EC Study on the Supply and Performance Check of Accessible Tourism Services in Europe in 2014. It now contains a listing of over 750 accessible tourism service providers across the accessible tourism delivery chain, including accommodation, transport and transfer services, equipment suppliers, travel agents and tour operators, tourist guides… and many more.

Service providers can register free of charge. Every service provider must indicate the types of users they can cater for with specific accessible services covering up to 14 user categories based on disability/access needs. The Directory works with over 30 partners, who provide links to their Accessibility Information Schemes (AIS) that are shown as URLs on the profile pages of the respective accessible suppliers. For suppliers who are not members of an AIS, the "Pantou Access Statement" template is provided for owners/managers to provide a self-assessed statement of accessibility. The online platform provides a global interactive map view of accessible tourism suppliers. Users can perform detailed searches using filters for countries, service types, user types, AIS and free-text search.

In 2017, after EU project funding from the COSME programme ended, the online Directory has been taken over fully by ENAT and its technical partner, EWORX S.A. and a new business model is now under development to ensure long-term sustainability.

The website holds profiles for over 750 registered accessible tourism suppliers. Currently over 30 Accessibility Information Schemes are partnering with Pantou and providing the necessary validation of accessible venues and services. Pantou receives over 4.000 page views per month, with average duration 1:40 minutes, indicating that users are spending time to browse and search the site, as intended.

Figure 29: Pantou - European Accessible Tourism Directory



Source: Pantou website

Increasing use of the Pantou Directory by visitors from outside Europe indicates the need for information on accessibility for PWDs and PRMs of European Destinations, regions, cities, attractions, accommodation and transport providers. While visitors and travellers are using the directory to find and select places to visit, many suppliers meet each other through contacts on Pantou. The Pantou Blog is also used by many visitors as a source of news and inspiration in the accessible tourism field.

5 ANNEX 5: SURVEYS TEMPLATES

5.1 Best practices collection template

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

Name:

Institute-Company:

Position:

E-mail:

Phone number:

Country:

II. Description of Practice

1) Please indicate the Country in which the practice is located (if it's more than one please mention all).

_____
_____
_____

2) Please provide a title for this practice:

_____
_____
_____

3) Please indicate sector (tick all relevant options)

Urban bus ❒
Interurban bus ❒
Metro ❒
Train ❒
Airplane ❒
Private car ❒
Taxi ❒
Ship ❒
Pedestrian/ Cyclist ❒
Transportation Hubs (Terminals) ❒
Multimodal ❒
Tourism accommodation ❒

Tourism events ❒
Tourism attractions ❒
Tourism services, e.g. travel booking ❒
Other (indicate which sector) ❒

4) Please indicate an online reference source (website, webpage or document), if any.

_____
_____
_____

5) Please indicate the body/organisation/authority that is responsible for the practice, if any.

_____
_____
_____

6) Is this practice in the area of <u>Policies</u>, broadly speaking, (i.e. policies, legislation, priorities, standards, etc.) or in actual <u>Practices</u>, (e.g. infrastructure, accessibility aids, training, procedures, etc.)

Policy ❒
Practice ❒

7) This practice has been applied for…….. (number of months/ years)

_____

8) Is the application of this practice is obligatory or voluntary?
❒Obligatory

❒Voluntary

❒ Other (please specify…..):

9) Where has this practice been applied?

a) Indicate the number of places

_____
_____
_____

b) *List the names of the places*

10) Please provide a short description of this practice:

a) *What does it offer?*

b) How does it work?

c) Who are the beneficiaries?

***d)* Who are the partners (if applicable)?**

***e)* Describe the main benefits**

11) Please provide a short description of the relevant to the practice costs:

a) What is the cost (approximately) of developing this practice?

b) What are the running costs?

c) How are the costs covered?

_____
_____
_____

III. Evaluation of the Practice

1) This practice has been tested with …… (number of users)

_____
_____

2) This practice has been tested with (type of users) ……

Please indicate the user groups who benefit from this practice (find the definition of the below mentioned user groups in Annex A: User Groups classification)

Lower limb disability ❒
Wheelchair users ❒
Upper limb disability ❒
Upper body disability ❒
Physiological disability ❒
Psychological disability ❒
Cognitive disability ❒
Vision disability ❒
Hearing disability ❒
Communication producing and receiving difficulties ❒
Age-related declines in abilities ❒
Anthropometric features (i.e. People of very large or small stature) ❒
Factors leading to social exclusion ❒
Temporal difficulties (i.e. pregnant women, person with broken limbs, person traveling with heavy luggage, etc.) ❒
Stakeholders ❒

3) Is there any evaluation report available regarding this practice? If, yes please note its reference (e.g. URL or if the report can be made available on request).

❒ Yes ❒ No

_____
_____
_____

IV. Acceptance level of the Practice

1) Has this practice been recognised by……(other projects/users organisations)

❒ Yes ❒ No

If yes, please give details of the organisation(s)

_____
_____
_____
_____
_____

2) Has this practice been proposed for an international, European, or national standard?

❒ Yes ❒ No

If yes, type of standard:

❒pre-standard (i.e. CEN Workshop or technical note)

❒full standard (i.e. CEN, ISO)

❒ other (please specify…..):

V. Transferability level of the Practice

1) Can this practice be transferred to other geographic locations?

❒ Yes ❒ No

If Yes, please give some examples or state under what conditions it may be transferred

_____
_____
_____
_____
_____
_____

If No, please specify the reasons why.

_____
_____
_____

2) Can this practice be transferred to other user categories?

❒ Yes ❒ No

If yes, please indicate which one(s).

Lower limb disability	❒
Wheelchair users	❒
Upper limb disability	❒
Upper body disability	❒
Physiological disability	❒
Psychological disability	❒
Cognitive disability	❒
Vision disability	❒
Hearing disability	❒
Communication producing and receiving difficulties	❒
Age-related declines in abilities	❒
Anthropometric features (i.e. People of very large or small stature)	❒
Factors leading to social exclusion	❒
Temporal difficulties (i.e. pregnant women, person with broken limbs, person traveling with heavy luggage, etc.)	❒
Stakeholders	❒

3) If this practice concerns the transportation sector, can it be transferred to other transport modes?

❒ Yes ❒ No ❒ N/A

If yes, please indicate which one(s).

Urban bus	❒
Interurban bus	❒
Metro	❒
Train	❒
Airplane	❒
Private car	❒
Taxi	❒
Ship	❒
Pedestrian/ Cyclist	❒
Transportation Hubs (Terminals)	❒
Multimodal	❒
Other (please specify…)	❒

4) If this practice concerns the transportation sector, can it be transferred to other types of traffic environment?

❒ Yes ❒ No ❒ N/A

If yes, please indicate which one(s).

Urban	❒
Rural	❒

Highway ❒

Other (please specify…) ❒

VI. Overall rating of the Practice

1) In your opinion, should this practice be included in the Best Practices database of this Research Study?

Yes ❒

No ❒

Under conditions (please specify…) ❒

It would be better to be considered as a "lesson learnt" ❒

Describe briefly any key learning points arising from:

a) Development of this practice

_____
_____
_____
_____
_____

b) implementation of this practice

_____
_____
_____
_____
_____

5.2 Survey on local transport accessibility

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

Name:

Institute-Company:

Position:

E-mail:

Phone number:

Country:

II. Questionnaire

1. **Is your country overcoming the obstacles in local transport with regards to access to information and bookings?**

   ❒ Yes ❒ No

   a. ***If Yes, how? Please describe*** *(what has been done to improve the situation? What are some of the facilities that exist for persons with disabilities and PRMs when making a booking?)*

   _____
   _____
   _____
   _____
   _____
   _____
   _____

   b. ***If No, why not?***

   _____
   _____
   _____
   _____
   _____
   _____
   _____

2. **Please present the main sources of financing and the levels of investment for the transport sector. Where do the investments come from?** ***(for example: Connecting Europe Facility / TEN-T / EU Regional Development Fund / Cohesion Fund / European Social Fund / Horizon 2020 / COSME / Creative Europe Programme).***

_____
_____
_____
_____

3. **Is the investment sufficient and appropriate? Please explain.**

❒ Yes ❒ No

_____
_____
_____
_____
_____

4. **Are you aware of any relevant "National Enforcement Bodies" (NEBs) to your country?**

❒ Yes ❒ No

a. If Yes, please note which one(s).

_____
_____
_____
_____
_____

b. If Yes, are the NEBs fulfilling their role and are effectively enforcing the rights of persons with disabilities and PRM? Do they receive a lot of complaints from this group of passengers? Which mode is usually the most problematic for them?

_____
_____
_____
_____
_____
_____

c. In your opinion, do NEBs need more power to act in order to improve/correct the situation and to impose consequences? Should the work of the NEBs be advertised more clearly so passengers know who to contact?

_____
_____
_____
_____
_____
_____

5. **Is the training of the local transport staff available and adequate, concerning the servicing of people with disabilities and PRM?**

❒ Yes ❒ No

   a. ***If No, What are the shortcomings? What more do you think is necessary?***

_____
_____
_____
_____
_____
_____

6. **Please describe the role of Information and Communication Technology (ICT) in barrier-free transport. As an overview, what has been done and what is still missing at local and national level? Are the existing solutions accessible? What examples demonstrate what is being done to remedy the lack of information or the lack of reliable information?**

_____
_____
_____
_____
_____
_____
_____

7. **Are there any discounts or reductions available for persons with disabilities or PRMs?**

❒ Yes ❒ No

   a. ***If Yes, please describe. If you know, please mention which authority/organisation is in charge of granting the discounts and how the system works.***

_____
_____
_____
_____
_____
_____

8. **Are there disability cards available in your country and do they include discounts for transportation of people with disabilities and PRM?**

❒ Yes ❒ No

b. If Yes, are they recognised within different types of local public transport? Do they cover all modes of local transportation?

❒ Yes ❒ No

_____
_____
_____
_____

9. Is there any legislation relevant to transport accessibility in your country/ region?

❒ Yes ❒ No

a. If yes, are the legislations that exist to guarantee the rights and accessibility to public transport in the EU for persons with disabilities and PRMs and the provisions for non-discrimination respected and the accessibility requirements met in practice?

❒ Yes ❒ No

i. <u>If No, please provide some examples</u>

_____
_____
_____
_____
_____

b. Specifically for the transport infrastructure:

i. <u>Is there legislation for the accessibility of pedestrian/ cycling infrastructure?</u>

❒ Yes ❒ No

ii. <u>Is there legislation for the accessibility of passengers/ travellers infrastructure?</u>

❒ Yes ❒ No

10. Are there any contradictions between EU and national rules of your country regarding the accessibility of local transport? If yes, please describe.

❒ Yes ❒ No

_____
_____
_____
_____
_____
_____

11. Regardless of the legislation, is accessibility taken into account from a holistic point of view, covering all types of disabilities and different accessibility needs?

❒ Yes ❒ No

a. If No, please provide some examples

_____
_____
_____
_____
_____
_____

12. Specifically for the road transport sector, as an overview, how big and/or successful do you believe is the market for specially designed personal cars for persons with disabilities and PRMs? And to what extent do these individually designed cars improve the mobility of persons with disabilities and persons with reduced mobility?

_____
_____
_____
_____
_____
_____

13. In your country, are there financial advantages given to help with the acquisition of such cars?

❒ Yes ❒ No

_____
_____
_____
_____
_____
_____

14. What is the level of user friendliness and the level of satisfaction of the accessibility options available for persons with disabilities and PRMs regarding the local transport in your country?

_____
_____
_____
_____
_____
_____

15. For the rail transport sector, the Technical Specification for Interoperability (TSI) exist at EU level (common priorities) and at Member States level (established national implementation plans). Are you aware of this law? Is there a coordinated effort to renew and upgrade subsystems to take into account persons with disabilities and PRMs in your country? Are there operational measures effectively deployed? Please describe.

❒ Yes ❒ No

_____
_____
_____
_____

16. Are there any efforts on national or regional level to explore the possibility of using self-driving cars to improve the accessibility of the transport system?

❒ Yes ❒ No

a. If yes, please describe

_____
_____
_____

5.3 Survey on long-distance transport accessibility

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

Name:
Institute-Company:
Position:
E-mail:
Phone number:
Country:

II. Questionnaire

1. **Are Member States overcoming the obstacles in transport with regards to access to information and bookings?**

   ❒ Yes ❒ No

   a. ***If Yes, how? Please describe*** *(what has been done to improve the situation? What are some of the facilities that exist for persons with disabilities and PRMs when making a booking?)*

   _____
   _____
   _____
   _____
   _____
   _____
   _____

   b. ***If No, why not and what can be done to improve the situation?***

   _____
   _____
   _____
   _____
   _____
   _____
   _____

2. **Is the multiplier effect (the fact that persons with disabilities and PRMs often cannot travel or visit alone) taken into account by all sectors? Is it usually mainstreamed into business models?**

   ❒ Yes ❒ No

   _____
   _____
   _____
   _____
   _____
   _____

3. **Are there any contradictions between EU and national rules regarding the accessibility of transportation modes? If yes, please provide some examples.**

❒ Yes ❒ No

_____
_____
_____
_____
_____
_____
_____

4. **Please present the main sources of financing and the levels of investment for the transport sector. Where do the investments come from? *(for example: Connecting Europe Facility / TEN-T / EU Regional Development Fund / Cohesion Fund / European Social Fund / Horizon 2020 / COSME / Creative Europe Programme).***

_____
_____
_____
_____

5. **Is the investment sufficient and appropriate? Please explain.**

❒ Yes ❒ No

_____
_____
_____
_____
_____

6. **In your opinion are the "National Enforcement Bodies" (NEBs) fulfilling their role and are effectively enforcing the rights of persons with disabilities and PRM? Please describe.**

❒ Yes ❒ No

_____
_____
_____
_____

7. **Do NEBs receive a lot of complaints from this group of passengers? Which mode is usually the most problematic for them?**

❒ Yes ❒ No

_____
_____
_____
_____
_____
_____

8. **In your opinion, do NEBs need more powers to act in order to improve/ correct the situation and to impose consequences?**

❒ Yes ❒ No

_____
_____
_____
_____
_____
_____

9. **Is the training of the transportation staff available and adequate, concerning the servicing of people with disabilities and PRM?**

❒ Yes ❒ No

a. If No, What are the shortcomings? What more do you think is necessary?

_____
_____
_____
_____
_____
_____
_____

10. **Please describe the role of Information and Communication Technology (ICT) in barrier-free transport. As an overview, what has been done and what is still missing at local, national and European level? What examples demonstrate what is being done to remedy the lack of information or the lack of reliable information?**

_____
_____
_____
_____
_____
_____
_____

11. **Present whether there currently exist examples of mutual recognition of Member States' disability cards, reductions, entitlements, especially in cross-border situations. Is there an "inclEUsive card"?**

_____
_____
_____
_____
_____

12. **Are the legislations that exist to guarantee the rights and accessibility to EU transportation for persons with disabilities and PRMs and the provisions for non-discrimination respected and the accessibility requirements met in practice?**

❒ Yes ❒ No

a. If No, please provide some examples

_____
_____
_____
_____
_____

13. Specifically for the road transport sector, as an overview, how big and/or successful do you believe is the market for specially designed personal cars for persons with disabilities and PRMs? And to what extent do these individually designed cars improve the mobility of persons with disabilities and persons with reduced mobility?

_____
_____
_____
_____

14. Are there financial advantages to EU Member States given to help with the acquisition of such cars?

❒ Yes ❒ No

_____
_____
_____
_____

15. Is there equality of access for passengers with disabilities and passengers with reduced mobility within the different transport modes? Are the provisions for non-discrimination respected?

❒ Yes ❒ No

a. If No, please provide some examples

_____
_____
_____
_____

16. What is the level of user friendliness and the level of satisfaction of the accessibility options available for persons with disabilities and PRMs?

_____
_____
_____

17. Are there passengers that were refused booking or boarding for example for each mode?

❒ Yes ❒ No

a. *If Yes, please provide some examples*

_____
_____
_____

18. What are the consequences and/or penalties when there is proven to be discrimination?

_____
_____
_____

19. For the rail transport sector, the Technical Specification for Interoperability (TSI) exist at EU level (common priorities) and at Member States level (established national implementation plans). Is there a coordinated effort to renew and upgrade subsystems to take into account persons with disabilities and PRMs in your country? Are there operational measures effectively deployed? Please describe.

❒ Yes ❒ No

_____
_____
_____
_____
_____

20. For the air transport sector, are the accessibility standards at EU airports adequate and sufficiently ambitious?

❒ Yes ❒ No

a. If No, please provide some examples

_____
_____
_____

5.4 Survey on tourism accessibility

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

Name:
Institute-Company:
Position:
E-mail:
Phone number:
Country:

II. Questionnaire

1. **Does your country have example(s) of how to overcome obstacles in tourism with regard to access to information and bookings?**

   ❒ Yes ❒ No

   a. ***If Yes, how? Please provide some examples (what has been done to improve the situation? What are some of the facilities that exist for persons with disabilities and PRMs when making a booking?)***

   _____
   _____
   _____
   _____

   b. ***What information, if any, is provided about accessibility of transport services? (including terminals, transport modes, vehicles and possible website URLs)***

   _____
   _____
   _____
   _____

   c. **What information, if any, is provided about accessibility of tourism venues/accommodation/infrastructure? (including possible website URLs)**

   _____
   _____
   _____
   _____

   d. ***Are tourism providers encouraged to publish Accessibility Guides / Access Statements?***

   _____
   _____
   _____
   _____

e. Do booking procedures take into account disability requirements?

_____
_____
_____
_____

f. Are there any special requirements for people with disabilities while making their bookings?

_____
_____
_____
_____

g. If there are no relevant examples in your country, please indicate why not and what can be done to improve the situation?

_____
_____
_____
_____

2. Are there any additional costs incurred by disabled people when travelling or when using tourism services? If yes, please describe.

❒ Yes ❒ No

_____
_____
_____
_____

3. Are there any services for disabled tourists free of charge (e.g. entry to public museums, archaeological sites, etc.? If yes, please describe (as well as any conditions for free entry).

❒ Yes ❒ No

_____
_____
_____
_____

4. Are personal assistants charged entry fees in public museums and other attractions? (please describe conditions for free entry)

❒ Yes ❒ No

_____
_____
_____
_____

5. **Are people with disabilities given priority when queuing e.g. in banks, post offices, at visitor attractions, etc.?**

❒ Yes ❒ No

_____
_____
_____
_____

6. **Is the multiplier effect (the fact that persons with disabilities and PRMs often cannot travel or visit alone) taken into account by all sectors? Is it usually mainstreamed into business models (please describe)**

❒ Yes ❒ No

_____
_____
_____
_____
_____

7. **Are there any contradictions between EU and national rules in your country regarding the accessibility of tourism? If yes, please provide some examples.**

❒ Yes ❒ No

_____
_____
_____
_____

8. **Please present the main sources of Community financing and the levels of investment for the tourism sector. Where do the investments come from?** ***(for example: Connecting Europe Facility / TEN-T / EU Regional Development Fund / Cohesion Fund / European Social Fund / Horizon 2020 / COSME / Creative Europe Programme).***

_____
_____
_____
_____

9. **Is the investment sufficient and appropriate? Please explain.**

❒ Yes ❒ No

_____
_____
_____
_____

10. Are the "National Enforcement Bodies" (NEBs) fulfilling their role and are effectively enforcing the rights of persons with disabilities and PRM? (please explain).

❒ Yes ❒ No

_____
_____
_____
_____

11. How many complaints are registered from people with disabilities / PRMs (annually, most recent year)? Give breakdown by transport mode if possible.

a. Rail
b. Bus and coach
c. Air
d. Ferry / Maritime
e. Taxi
f. Tram
g. Metro
h. Other….

_____
_____
_____
_____

12. Please indicate the prevalence of complaints, if possible.

a. Lost assistive equipment
b. Damaged assistive equipment
c. Personal injury
d. Denied boarding
e. Delayed departure - compensation claims for delays
f. Other complaints about PRM services (describe_____ _____ _____)

13. Which transport mode is usually the most problematic for people with disabilities or PRMs and why?

_____
_____
_____
_____

14. Do NEBs need more powers to act in order to improve/ correct the situation and to impose sanctions (please describe)?

❒ Yes ❒ No

_____
_____
_____
_____

15. **Is the training of the staff of touristic infrastructure and services available and adequate, concerning the servicing of people with disabilities and PRM?**

❒ Yes ❒ No

a. ***If No, What are the shortcomings? What more do you think is necessary?***

_____
_____
_____

16. **If there any service training provided in your country regarding customer service and hospitality for people with disabilities / PRMs? If yes, please describe who is trained, how they receive the training and who delivers it.**

❒ Yes ❒ No

_____
_____
_____
_____

a. ***If yes, does this training provides any certification or accreditation? Please mention.***

❒ Yes ❒ No

_____
_____
_____

17. **Please describe the role of Information and Communication Technology (ICT) in barrier-free tourism. As an overview, what has been done and what is still missing at local, national and European level? What examples demonstrate what is being done to remedy the lack of information or the lack of reliable information?**

_____
_____
_____
_____
_____

18. **Does current legislation in your country guarantee the rights and accessibility to EU tourism for persons with disabilities and PRMs? Are the provisions for non-discrimination respected and the accessibility requirements met in practice?**

❒ Yes ❒ No

a. ***If Yes, please explain how the rights and requirements are monitored and legislation is enforced.***

_____
_____
_____

b. If No, please provide some examples

_____
_____
_____

19. What is the level of user friendliness and the level of satisfaction of the accessibility options available for persons with disabilities and PRMs? (please refer to any customer surveys or studies which have addressed these issues in the past 3 years).

_____
_____
_____
_____

20. As an overview, what has been done or what is currently being done to improve accessibility in tourism in your country? Is there a national legal framework for accessibility of accommodations or attractions for example? Does the tourism sector in your country (e.g. public National or Regional Tourism Authority or private bodies in the tourism sector) have programmes in place to address and improve tourism accessibility?

_____
_____
_____
_____

21. Are there any examples of an inclusive approach in tourism (such as "Universal Design / Design for All") that have led to innovation and benefits everybody (not just persons with disabilities and PRMs)? If yes, please describe.

❒ Yes ❒ No

_____
_____
_____
_____

22. How are customer complaints handled in the tourism sector and how does this affect levels of service for customers with disabilities / PRMs. (please describe how national, regional or local tourist authorities receive and handle complaints from tourists, give examples, if any).

_____
_____
_____
_____

23. Please mention some EU accessibility standards for tourists with disabilities and tourists with reduced mobility that you are familiar with (i.e. standards that are used in your country) and provide some details describing them.

_____
_____
_____
_____

24. In your opinion, would there be advantage to having an EU-wide label for accessible tourism services?

❒ Yes ❒ No

_____
_____
_____

25. Are there any examples from your country (or others) that could serve as best practice models for EU Member States?

_____
_____
_____
_____

26. In general terms, how does accessible tourism helps to reduce seasonality? To what extent do tourists with disabilities or tourists with reduced mobility have an impact on the seasonality of the EU tourism sector? (Please provide data or other evidence of this)

_____
_____
_____
_____

27. Regarding travel insurance for older people and/or people with disabilities, please give names (URLs) and brief details of schemes that target these customers in your country, for domestic, EU and overseas travel.

_____
_____
_____
_____

28. Are there any award schemes for accessible tourism in your country? If Yes, please describe who gives the award, any URLs, how many participate, or other information.

❒ Yes ❒ No

_____
_____
_____
_____

29. In your opinion, are award schemes a useful way to encourage more tourism suppliers to focus on accessibility in tourism?

❒ Yes ❒ No

_____
_____
_____
_____

5.5 Survey on user needs

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

Institute/Company/Organisation (optional)

Country of residence:

Age:
❒ *21 and under*
❒ *22-34*
❒ *35-44*
❒ *45-54*
❒ *55-64*
❒ *65 and over*
❒ *N/A*

Nature of Disability (tick all that apply):

Lower limb disability	❒
Wheelchair users	❒
Upper limb disability	❒
Upper body disability	❒
Physiological disability	❒
Psychological disability	❒
Cognitive disability	❒
Vision disability	❒
Hearing disability	❒
Communication producing and receiving difficulties	❒
Age-related declines in abilities	❒
Anthropometric features (i.e. People of very large or small stature)	❒
Factors leading to social exclusion	❒
Temporal difficulties (i.e. pregnant women, person with broken limbs, person traveling with heavy luggage, etc.)	❒
N/A	❒
Other (please specify…)	❒

II. Questionnaire

Local transport

1. **Are you aware about your rights as a passenger?**

❒ Yes ❒ No

2. **Which transportation mode(s) do you use most frequently and how frequently?**

Transportation mode	Everyday	3-5 Times a week	1-2 Times a week	Once a month	Other (Please specify
Car					
Bus					
Coach					
Tram					
Train					
Metro / Tube					
Taxi					
Ferry / Boat					
Other (please specify…)					

3. **For public transport mode you use please describe briefly some key features that makes it accessible for you to use and for those that are not accessible what are some of the key barriers?**

Transport	What makes it very / fairly accessible	What makes it not Very / or not accessible at all
Bus		
Coach		
Tram		
Train		
Metro / Tube		
Taxi		
Ferry / Boat		
Other (please specify…)		

4. **How important are the following factors for you when considering public transport?**

	Very Important	Important	Moderately Important	Little Importance	Not Important
Ease of Accessibility					
Information about the transportation					
Information about the travel options					
Ease of interchange between different modes of transport					
Distance from bus stop/train station to final destination					
Cost					
Length of Journey					
Reliability					
Staff Assistance that is offered					
Safety					
Frequency of Service					

5. **In your opinion, is the accessibility status of your country's local transportation system (i.e. public transport services such as buses, trams, metro, and short-distance rail transport but also the use of personal cars) satisfactory?**

❒ Yes ❒ No ❒ N/A

a. If No, please explain

_____
_____
_____

b. If yes, are there any corrections or changes you think are appropriate and/ or necessary? Please describe.

_____
_____

_____

6. **How helpful are staff in dealing with your access requirements?**

Transport	Very helpful	Fairly helpful	Not very helpful	Not helpful at all
Bus				
Coach				
Tram				
Train				
Metro / Tube				
Taxi				
Ferry / Boat				

7. **Is there any specific incident that you can refer to, describing one or more accessibility issues relevant to the local transportation system of your country (or another country)? If yes please proceed with the following questions. If more than one please describe more. If No, go directly to question 8.**

❒ Yes ❒ No ❒ N/A

If Yes, please answer the following questions:

a. ***In which transport mode(s) and in which country did the incident occur?***

_____
_____
_____

b. ***As far as you now, was this incident caused by the lack of relevant legislation or by failure to apply it?***

_____
_____
_____

c. ***Did you lodge a complaint afterwards? If yes, to whom (i.e. the transport provider, the competent authorities, etc.)***

❒ Yes ❒ No

_____
_____
_____

d. ***How did they react? Did you get any reply? Did you get compensation?***

❒ Yes ❒ No

_____
_____
_____

e. ***In your opinion, what could be improved to avoid these situations in the future?***

_____
_____
_____

Long-distance transport

8. **How frequently do you use Long-distance Transport (That is to travel beyond the town or city where you live to other destinations either inside your country or beyond)?**

_____
_____
_____
_____

9. **Which transportation mode(s) do you use most frequently for your long-distance journeys and how frequently?**

Transportation mode	3-5 Times a week	1-2 Times a week	Once a month	Other (Please specify
Car				
Bus/ coach				
Train				
Ship/ Ferry / Boat				
Airplane				
Other (please specify…)				

10. **For each transportation mode you use on long distance travel please describe briefly some key features that makes it accessible for you to use and for those that are not accessible what are some of the key barriers?**

Transportation mode	What makes it very / fairly Accessible	What makes it not very / or not accessible at all
Car		
Bus/ coach		
Train		
Ship/ Ferry / Boat		
Airplane		
Other (please specify…)		

11. How important are the following factors for you when considering long distance transport?

	Very Important	Important	Moderately Important	Little Importance	Not Important
Ease of Accessibility					
Information about the transportation					
Information about the travel options					
Ease of interchange between different modes of transport					
Cost					
Length of Journey					
Reliability					
Staff Assistance that is offered					
Safety					
Frequency of Service					

12. How helpful are staff in dealing with your access requirements?

Transport	Very helpful	Fairly helpful	Not very helpful	Not helpful at all
Bus/ coach				
Train				
Ship/ Ferry / Boat				
Airplane				
Other (please specify…)				

13. In your opinion, is the accessibility status of EU long-distance transportation system (including road, rail, air, and maritime transport) satisfactory?

❒ Yes ❒ No ❒ N/A

a. If No, please explain

_____

_____

_____

b. If yes, are there any corrections or changes you think are appropriate and/ or necessary? Please describe.

_____
_____
_____

14. Is there any incident that you can refer to, describing one or more accessibility issues relevant to the EU long-distance transportation system? If yes please proceed with the following questions. If more than one please describe more. If No, go directly to question 15.

❒ Yes ❒ No ❒ N/A

a. In which transport mode(s) and in which country did the incident occur?

_____
_____
_____

b. As far as you know, was this incident caused by the lack of relevant legislation or by failure to apply it?

_____
_____
_____

c. Did you lodge a complaint afterwards? If yes, to whom (i.e. the transport provider, the competent authorities, etc.)

❒ Yes ❒ No

_____
_____
_____

d. How did they react? Did you get any reply? Did you get compensation?

❒ Yes ❒ No

_____
_____
_____

e. Are you aware of the relevant national enforcement bodies (NEBs) that can help you with the enforcement of your rights?

_____
_____
_____

f. In your opinion, what could be improved to avoid these situations in the future?

_____
_____
_____
_____

Tourism

15. Would you like to be able to travel more and be a tourist?

❒ Yes ❒ No ❒ I don't know

16. Would you like to be able to travel more in your own country as a tourist?

❒ Yes ❒ No ❒ I don't know

17. Would you like to be able to travel more overseas as a tourist?

❒ Yes ❒ No ❒ I don't know

18. In your opinion, is the accessibility status of the tourism sector in your country satisfactory?

	Very accessible	Fairly accessible	Not very accessible	Not accessible at all
Accommodation				
Attractions				
Hospitality e.g. Restaurants, Cafes, Bars				

a. Please explain

_____
_____
_____

b. Are there any corrections or changes you think are appropriate and/ or necessary? Please describe.

_____
_____
_____

19. In your opinion, is the accessibility status of the tourism sector in EU satisfactory?

	Very accessible	Fairly accessible	Not very accessible	Not accessible at all
Accommodation				
Attractions				
Hospitality e.g. Restaurants, Cafes, Bars				

a. Please explain

_____
_____
_____

b. Are there any corrections or changes you think are appropriate and/ or necessary? Please describe.

_____
_____
_____

20. How important are the following factors for you when considering booking your holiday or short break?

	Very important	Important	Moderately important	Not important
Ease of Accessibility				
Information about the transportation				
Information about accessible facilities of the accommodation				
Information about accessibility facilities of the attraction				
Information about accessible facilities of the restaurant, café, bar				
Cost				
Staff Assistance that is offered				
Safety				

21. Is there any incident that you can refer to, describing one or more accessibility issues relevant to provision of touristic services, touristic infrastructure, etc.? If yes please proceed with the following questions. If more than one please describe more. If No, please end the questionnaire.

❒ Yes ❒ No

a. In which country did the incident occur and what it concern?

_____
_____
_____

b. Was this incident caused by the lack of relevant legislation or by failure to apply it?

_____
_____
_____

c. Did you lodge a complaint afterwards? If yes, to whom (i.e. the service provider, the competent authorities, etc.)

❒ Yes ❒ No

_____
_____
_____

d. How did they react? Did you get any reply? Did you get compensation?

❒ Yes ❒ No

_____
_____
_____

e. In your opinion, what could be improved to avoid these situations in the future?

_____
_____
_____

5.6 National enforcements bodies survey – Air

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

National Enforcement Body:
Country:

II. Questionnaire

1. **Please describe how is your entity organised and how it operates. (i.e. are you responsible for several Passengers' Rights legislation? Do you have powers to enforce the legislation on behalf of the passenger? Is your opinion legally binding? Do you have powers to initiate mediation or alternative dispute resolution procedures? Is your NEB sufficiently staffed and resourced? Do you collaborate with other national authorities?)**

_____
_____
_____
_____

2. **How many complaints from air transport passengers do you receive on average per year?**

_____
_____
_____
_____

   a. ***What percentage of these complaints (approximately) concern issues related to persons with disabilities and persons with reduced mobility?***

   _____
   _____
   _____

   b. ***Could you refer/ describe the most common issues (related to accessibility issues) that you need to address? Please also mention those that are not under the scope of the Regulation, i.e. about lack of accessibility.***

   _____
   _____
   _____

3. **Could you describe the standard procedure (if any) that you follow after you receive a complaint from passengers and/or people who accompany them?**

_____
_____
_____
_____

4. **In your opinion, are passengers (and the public in general) sufficiently aware of the existence and role of NEBs?**

❒ Yes ❒ No

5. **In your opinion, do NEBs need more powers to act, in order to improve /correct the situation and to impose sanctions?**

❒ Yes ❒ No

a. If yes, could you provide some suggestions?

_____
_____
_____

5.7 National Enforcements Bodies Survey – Maritime

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

National Enforcement Body:
Country:

II. Questionnaire

1. **Please describe how is your entity organised and how it operates. (i.e. are you responsible for several Passengers' Rights legislation? Do you have powers to enforce the legislation on behalf of the passenger? Is your opinion legally binding? Do you have powers to initiate mediation or alternative dispute resolution procedures? Is your NEB sufficiently staffed and resourced? Do you collaborate with other national authorities?)**

   _____
   _____
   _____
   _____

2. **How many complaints from maritime transport passengers (i.e. passengers travelling by sea and inland waterways) do you receive on average per year?**

   _____
   _____
   _____

   a. ***What percentage of these complaints (approximately) concern issues related to persons with disabilities and persons with reduced mobility?***

      _____
      _____
      _____

   b. ***Could you refer/ describe the most common issues (related to accessibility issues) that you need to address? Please also mention those that are not under the scope of the Regulation, i.e. about lack of accessibility.***

      _____
      _____
      _____
      _____
      _____
      _____
      _____
      _____

3. **Could you describe the standard procedure (if any) that you follow after you receive a complaint from passengers and/or people who accompany them?**

_____
_____
_____
_____

4. **In your opinion, are passengers (and the public in general) sufficiently aware of the existence and role of NEBs?**

❒ Yes ❒ No

5. **In your opinion, do NEBs need more powers to act in order to improve /correct the situation and to impose sanctions?**

❒ Yes ❒ No

a. If yes, could you provide some suggestions?

_____
_____
_____

5.8 National enforcements bodies survey – Rail

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

National Enforcement Body:
Country:

II. Questionnaire

1. **Please describe how is your entity organised and how it operates. (i.e. are you responsible for several Passengers' Rights legislation? Do you have powers to enforce the legislation on behalf of the passenger? Is your opinion legally binding? Do you have powers to initiate mediation or alternative dispute resolution procedures? Is your NEB sufficiently staffed and resourced? Do you collaborate with other national authorities?)**

_____
_____
_____
_____
_____
_____
_____
_____

2. **How many complaints from rail transport passengers do you receive on average per year?**

_____
_____
_____
_____

   a. ***What percentage of these complaints (approximately) concern issues related to persons with disabilities and persons with reduced mobility?***

_____
_____
_____

   b. ***Could you refer/ describe the most common issues (related to accessibility) that you need to address? Please also mention those that are not under the scope of the Regulation, i.e. about lack of accessibility.***

_____
_____
_____

3. **Could you describe the standard procedure (if any) that you follow after you receive a complaint from passengers and/or people who accompany them?**

_____
_____
_____

4. **In your opinion, are passengers (and the public in general) sufficiently aware of the existence and role of NEBs?**

❒ Yes ❒ No

5. **In your opinion, do NEBs need more powers to act in order to improve /correct the situation and to impose sanctions?**

❒ Yes ❒ No

a. If yes, could you provide some suggestions?

_____
_____
_____
_____

5.9 National Enforcements Bodies Survey – Road

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

National Enforcement Body:
Country:

II. Questionnaire

1. **Please describe how is your entity organised and how it operates. (i.e. are you responsible for several Passengers' Rights legislation? Do you have powers to enforce the legislation on behalf of the passenger? Is your opinion legally binding? Do you have powers to initiate mediation or alternative dispute resolution procedures? Is your NEB sufficiently staffed and resourced? Do you collaborate with other national authorities?)**

   _____
   _____
   _____
   _____

2. **How many complaints from road transport (i.e. bus and coaches) passengers do you receive on average per year?**

   _____
   _____
   _____
   _____

   a. ***What percentage of these complaints (approximately) concern issues related to persons with disabilities and persons with reduced mobility?***

      _____
      _____
      _____

   b. ***Could you refer/ describe the most common issues (related to accessibility) that you need to address? Please also mention those that are not under the scope of the Regulation, i.e. about lack of accessibility.***

      _____
      _____
      _____

3. **Could you describe the standard procedure (if any) that you follow after you receive a complaint from passengers and/or people who accompany them?**

_____
_____
_____
_____

4. **In your opinion, are passengers (and the public in general) sufficiently aware of the existence and role of NEBs?**

❒ Yes ❒ No

5. **In your opinion, do NEBs need more powers to act in order to improve /correct the situation and to impose sanctions?**

❒ Yes ❒ No

a. If yes, could you provide some suggestions?

_____
_____
_____

5.10 Tourism boards' survey

I. Personal Data

Details of the person who can be contacted about information given in this document (if possible):

Name:
Ministry / Organisation / Agency
Position:
E-mail:
Phone number:
Country:

II. Questionnaire

Accessibility of Tourism Services

1. **Does your country have a national policy (action plan or programme) on accessibility of people with disabilities to tourism services?**
   ❒ Yes ❒ No

If yes, please indicate the name, date of commencement and where information about the policy/practice is published, if possible in the English language.

a. Name of policy/plan /programme /

_____

b. Start date (year) and deadline(s) for completion of accessibility plans/actions, (if any)

_____

c. Reference (e.g. Website URL)

_____

c. Please give the specific name of Law(s) or Circular(s) which govern the accessibility of tourism services and briefly indicate their content.

i.

ii.

iii.

iv.

v.

2. Please describe how your entity is organised and how it operates.

a. Which department or section deals with accessibility of tourism services ?

b. Is your department or section responsible for monitoring of Disability Rights legislation?

❒ Yes ❒ No

c. Does your department or section have powers to enforce legislation related to the rights of tourists with disabilities?

d. Is the opinion of your department or section legally binding?

e. Does your department or section have powers to initiate mediation or alternative dispute resolution procedures?

f. Is your department or section sufficiently staffed and resourced to handle matters related to rights of visitors with disabilities?

g. Does your department or section collaborate with other national authorities on matters concerning accessibility of tourism services for people with disabilities?

_____
_____

3. Is tourist information specifically for persons with disabilities provided on the Website of the national (or regional) tourist board?

❒ Yes ❒ No ❒ Don't know

If yes, please indicate which public agency /NGO / partner organisation provides this information:

_____
_____
_____

4. Do Tourism Information Offices provide tourist information specifically for persons with disabilities?

❒ Yes ❒ No ❒ Don't know

a. If yes, please indicate which public agency /NGO / partner organisation provides this information:

_____
_____
_____

b. If yes, please indicate which kinds of tourist information are provided for persons with disabilities (please tick)

❒ National accessibility labelling scheme(s) for tourist accommodation
❒ Regional / City accessibility labelling scheme for tourist accommodation
❒ National accessibility labelling scheme(s) for other tourist services
❒ Regional / City accessibility labelling scheme for other tourist services
❒ Information about accessible international transport services
❒ Information about accessible local transport services
❒ Information about assistive/accessibility equipment supply and rentals
❒ Information about medical and/or personal assistance services for people with disabilities
❒ Information about availability of accessible tourist itineraries and activities
❒ Possibility to book accessible tourism services online (e.g. book accessible hotels via NTO website)

Other _____

5. **How many complaints do you receive from customers, on average per year, regarding tourism services? (All complaints).**

_____
_____
_____
_____

   a. ***What percentage of these complaints (approximately) concern issues related to persons with disabilities and persons with reduced mobility?***

_____
_____
_____

   b. ***Please indicate / describe the most common issues (related to accessibility issues) that you need to address?***
   E.g. accessibility of: accommodation, restaurant services, retail premises and services, booking services, admission of guide dogs, attractions, guided tours, public toilets, information …

   Please also mention issues that are not under the scope of existing accessibility legislation.

_____
_____
_____

6. **Please describe the standard procedure (if any) that you follow after you receive a complaint from visitors / tourists passengers and/or people who accompany them?**

_____
_____
_____
_____

7. **In your opinion, are passengers (and the public in general) sufficiently aware of the existence and role of your department / section?**

❒ Yes ❒ No

8. **In your opinion, does your department / section need more powers to act, in order to improve /correct accessibility of tourism services and to impose sanctions?**

❒ Yes ❒ No

   a. ***If yes, could you provide some suggestions?***

_____
_____
_____

6 ANNEX 6: WORKSHOP MINUTES

6.1 Minutes of workshop on accessible transportation (September 2017, Thessaloniki, Greece)

Location:	CERTH/HIT premises - 6th Km Charilaou - Thermi Rd. PO Box 361 - 57001 Thermi, Thessaloniki – Greece
Date/Duration of Meeting:	27/09/2017, 15:00 -17.00
Recorder of Minutes:	Matina Loukea (CERTH/HIT)
Version No./Date	1.1 - 04/10/2017

List of Participants:

Surname	Forename	Institution	Country
Bekiaris	Evangelos	CERTH/HIT	Greece
Loukea	Matina	CERTH/HIT	Greece
Panou	Maria	CERTH/HIT	Greece
Papamichail	Katerina	ENAT	Greece
Ambrose	Ivor	ENAT	Brussels
Touliou	Katerina	CERTH/HIT	Greece
Mourouzis	Alexandros	National Confederation of Disabled People	Greece
Peters	Bjorn	VTI	Sweden
Tsalis	Panagiotis	TSRG/AuTh	Greece
Moirasgenti	Theodora	Union of the Deaf of Northern Greece	Greece
Koltsakidou	Theofani	Union of the Deaf of Northern Greece	Greece
Vougias	Spyros	Aristotle University of Thessaloniki	Greece
Anastasiadou	Konstantina	Aristotle University of Thessaloniki	Greece
Haltouta	Nikoleta	Panhellenic Blind Association	Greece
Avgoustidis	Georgios	Panhellenic Association of Paraplegics	Greece
Basdekopoulou	Maria	Panhellenic Association of Paraplegics	Greece
Joseph	Lucy	Hasselt University	Belgium
Halkas	Bill	Managing Director & CEO of Attikes Diadromes SA/President of HELLASTRON/1st V. President, ASECAP	Greece

At the beginning of the Workshop, Dr. Evangelos Bekiaris (CERTH/HIT) welcomed the participants and started chairing the workshop. He briefly presented the aim of the study, focusing on the current priorities and the need for ensuring accessibility, as well as the trends and challenges regarding accessibility in local and long-distance transport (with a

brief also reference to the tourism sector). Moreover, the goals of this research study regarding the accessibility of the local & long distance transportation systems of Europe were described.

After that, Dr. Mary Panou (CERTH/HIT), made a presentation consisting of the initial findings of the study, as they have begun to be shaped by the analysis of the questionnaires and the literature review. Emphasis was mainly given to the presentation of users' needs and expectations, as well as the reference to indicative best practices concerning the accessibility of the transportation sector across EU Members States.

Then, a brief presentation of tourism accessibility in Europe has been made by Mr. Ivor Ambrose (ENAT), providing concise and comprehensive information about the definition of accessible tourism and the main problems that tourists with disabilities often face.
After the end of the presentations, the presenters answered some questions from the participants and then the interactive part was launched.

For about 30 minutes, the attendees were invited to discuss about the following issues:

1. **User needs and expectations** for an accessible PT system and for long-distance transportation systems
2. **Best practices** in the EU and national policies, technical innovations, and services provided.
3. Recommendations for a **common legal framework** in the EU on the accessibility of transport systems and to mainstream accessibility in all new and revised EU legislation How can education systems better and faster integrate new technologies.
4. How both **decision-makers and the industry are benefitted** by the involvement of users in delivering better transport services.
5. **Research questions** regarding the transportation systems accessibility that still need to be addressed.

A relevant discussion and brainstorming followed, while also for each one of the issues above, participants were asked to write down their opinion, thoughts, experiences and suggestions in post-its, which after that were collected for each discussion category.

Source: Author's own elaboration

During the last half hour of the Workshop, Dr. Evangelos Bekiaris made a brief summing up and grouping of all the feedback collected during the interactive session. The main input/results emerging from the interactive session and the panel discussion are presented below.

I. LOCAL TRANSPORT

User needs and expectations for an accessible PT system	Financial flexible support (seamless, cross border)
	Digital media with sign language
	Transport personnel knowledge of sign language
	Full acceptance of guide dogs (also in metro, train, etc.)
	Special traffic lights/adaptable lights in PT
	Interchanges access
	Quota of accessible bus/PT vehicles
	Tool for accessible transportation design & planning
Best practices in the EU and national policies, technical innovations, and services provided.	NHS benefit system for personal allowances (UK)
	Accessible taxis ("white taxis") (Greece)
	New lines of Athens metro systems (Greece)
	PwD as employees in public transport (UK, Spain)
Recommendations for a common legal framework in the EU on the accessibility of transport systems	Full assessment of transportation systems accessibility and services by third parties/independent bodies – No self-assessment.
	Development of a cross-border/Europewide standard to create AI market
How both decision-makers and the industry are benefitted by the involvement of users in delivering better transport services.	Full interaction between NGOs and Industry
Research questions regarding the transportation systems accessibility	Definition of accessibility levels→Not only on/off accessibility
	Development of accessibility ISO
	Development of Door2Door accessibility measures and strategies

II. Long-distance transport

User needs and expectations for an accessible PT system	Support personnel for accompanying PwD, properly trained
	Parking spaces for PRMs in PT interchanges
	Accessible parking spaces in proper quota
	Accessibility needs to be defined by access possibility but also by usability.
	Tool for accessible transportation design & planning
Best practices in the EU and national policies, technical innovations, and services provided.	NY Transport Unit: Monitoring system on black spots with PwD accidents and redesign (USA)
	El. Venizelos Airport and Athens metro (Greece), has been co-designed with the support of ESAEA (ESAEA website)
Recommendations for a common legal framework in the EU on the accessibility of transport systems	Emphasis on air transportation: Collaboration among airlines
	Full accessible info/data published for users (self-assessment)
How both decision-makers and the industry are benefitted by the involvement of users in delivering better transport services.	Inclusion of accessibility issues in social tourism
	Mobilisation of users for data creation – crowdsourcing - social media
Research questions regarding the transportation systems accessibility	Travellers training on accessibility issues.

Source: Author's own elaboration

At about 17.00, Dr. Evangelos Bekiaris closed the workshop and thanked the audience for the valuable input and the interesting exchanges of knowledge.

During the whole session, Matina Loukea and Mary Panou helped in the coordination of the workshop and in its articulation with whole session (mainly its interactive part).

6.2 Minutes of workshop on accessible transportation & tourism (October 2017, Tallinn, Estonia)

Location:	Eesti Puuetega Inimeste Koda (EPIKODA) - Toompuiestee 10, Tallinn 10137, Estonia
Date/Duration of Meeting:	08/10/2017, 13.30-16.00
Recorder of Minutes:	Matina Loukea (CERTH/HIT)
Version No./Date	1/ 10/10/2017

List of Participants:

Surname	Forename	Institution	Country
Wagenaar	Gerdinand	Sign language interpreter	Netherlands
Zeviar	Lissa	Sign language interpreter	Netherlands
Insolera	Humberto	EDF	Italy
Mugliette	Marthese	MFOPD	Malta
Micallef	Venera	MFOPD	Malta
Griffo	Giampero	DPI Europe/EDF	Italy
Lie	Cato	FFO	Norway
Gyselinck	Pierre	Action Européenne des Handicapés (AEH)	Belgium
Clarke	Pat	EDSA/EDF	Ireland
Denninghaus	Marie	EDF	Belgium
Juodkaite	Dovilė	LNF	Lithuania
Ingunn	Waaler	FFO, PA	Norway
De Kimpe	Martine	Action Européenne des Handicapés (AEH)	Belgium
Frangouli	Athena	Social Firms Europe CEFEC	Greece
Hajdukova	Michaela	Slovak Disability Council	Slovakia
Mamojka	Branislav	Slovak Disability Council	Slovakia
Mamojkova	Elena	Slovak Disability Council	Slovakia
Miric	Marica	SOIH	Croatia
Ewing	Saskia	EDF	Belgium
Surname	Forename	Institution	Country
Mahlamäki	Pirkko	EDF	Finland
Bekiaris	Evangelos	CERTH/HIT	Greece
Panou	Mary	CERTH/HIT	Greece
Loukea	Matina	CERTH/HIT	Greece

At the beginning of the Workshop, Dr. Evangelos Bekiaris (CERTH/HIT) welcomed the participants, presented himself and started chairing the workshop. He made a presentation of the scope of the study, the current priorities and the need for ensuring accessibility, as

well as the trends and challenges regarding accessibility in European transportation and tourism systems. Moreover, reference was also made and about the current status of European legislation and standardisation issues, focusing of the European Accessibility Act, as well as relevant issues from extra-European countries (i.e. the US Disability Act).

After that, Dr. Mary Panou (CERTH HIT), made a presentation consisting of the initial findings of the study, as they have begun to be shaped by the analysis of the questionnaires and the literature review. Emphasis was mainly given to the presentation of users' needs and expectations, as well as the reference to good examples and best practices concerning the accessibility of the transportation and tourism sector across EU Members States.

After the end of the presentations, the interactive part was immediately launched and an extensive discussion began among all participants.
From the discussion that lasted for more than 1 hour, the following major issues were pointed out:

A. <u>Main user needs/problems and expectations</u>

1. ***Not appropriate/accessible transport vehicles & touristic venues and accommodation***. For example:
    a. low floor buses and trams (i.e. in Finland)
    b. in most countries only some buses are accessible and PwD and PRM passengers do not know which ones are (in order to choose them). 1/3 needs to be accessible.
    c. ships where PwD and PRM can move inside but not at the outer area.
    d. ships with not necessary systems for people with hearing impairments (i.e. for notice for door knocking or for emergency reasons, etc.). The same applies for touristic venues and accommodations also.
    e. in many cases of cruises (i.e. in Italy), while PwD and PRM can use the cruise ship facilities, they are not allowed to visit the various ports/ destinations due to lack of necessary accessible services that will allow them to do so.
    f. not appropriate information systems for persons with cognitive impairments in both transport and touristic venues and accommodations.
    g. existence of heavy and not easy to use ramps in trains. In Norway, an initiative has been launched for the use of portable and easy-to-use ramps in trains (necessary also for evacuation reasons).
2. ***Not appropriate/accessible transport platforms*** → some examples concerning Finland were (indicatively) described:
    a. New metro lines have been created with more narrow entrance points (for safety reasons as indicated by the relevant countries authorities) where however wheelchair users are not able to cross.
    b. Some train lines have been re-classified as local trains and so no personnel exists there to many stations (i.e. in Helsinki and Tampere)
    c. There is no common agreement in EU concerning platform height of train platforms.

3. ***Not accessible booking services:***
    a. Relevant mobile applications are more and more used by the PwD travellers and passengers, as the transport operators booking services are not accessible. However, many people cannot use such applications either (i.e. IT illiterate ones).
    b. Booking services (where accessible) are also differentiated among countries, resulting in confusion for users.
    c. Websites to book hotels and/or travel packages should contain all information on accessibility of hotels and transports
4. ***Lack of support and assistance by trained staff*** in many transport modes (i.e. trains and buses in comparison to air transport), as well as in touristic venues and accommodations.
5. ***Denial of service in some cases*** with the invocation due to security reasons (i.e. refusal to board a plane of many people with hearing impairments).
6. ***Services provided in a discriminative way*** in other cases (i.e. security checks at some airports are often differentiated for PwD and PRM, which can be very uncomfortable for them).
7. ***Non-existence of common rules*** regarding the relation between accessibility and security (mainly in transportation system).

B. <u>Best practices concerning transport and tourism infrastructure and services</u>

During the interactive session of the Workshop, the following best practices have been mentioned, to be further examined and analysed:

1. ***Dublin tram system*** (designed in cooperation with the National Disability Organisation).
2. ***Collective platforms*****,** supported by the European Commission aimed at designing and piloting online platforms creating awareness of sustainability problems and offering collaborative solutions based on networks (of people, ideas, sensors, etc.) enabling new forms of social innovation
3. ***Milan municipality tool*** for providing accessibility information for tourists and citizens.
4. ***Oslo airport*****,** with accessible Universal Design in its new terminal.
5. ***Toll free use of*** highways in Croatia. However, it's mentioned that this regulation is been abused a lot.
6. ***Emergency evacuation procedures and tools,*** developed within the SAVE EU Research Project.
7. ***Scandic Hotels***: very accessible and with very valuable information provided regarding accessibility issues (also available for people with vision impairments).
8. ***SEATRAC system*** developed by TOBEA (in Greece), providing access to the beach and sea for PwD and PRM.
9. ***Washington DC traffic system*** → very accessible for wheelchair users and people with vision disabilities.

10. ***Washington DC metro made more accessible for deaf users thanks to a warning system made of lights flashing on the platform ground to warn passengers of a train entering the station.***

C. <u>General remarks & suggestions</u>

1. ***There is difficulty to collect information and statistics*** for PwD and PRM using the transportation and tourism systems, as many of them cannot use them at all (due to accessibility restrains).
2. ***The participation of users is necessary*** for any new initiative (i.e. concerning legislation, practices, infrastructures, etc.).
3. It is often assumed that accessibility is only related to the use of wheelchairs, ignoring other PwD.
4. **A good classification system is required**, for both the accessibility of transportation a tourism services and infrastructures, which will concern the accessibility assessment by specific and accredited experts (third parties), avoiding self-assessment.
5. Emphasis needs to be provided to ***intermodal hubs accessibility***.
6. All services provided to PwD and PRM do not only need to be accessible. ***Accessible services need to be offered in equal terms***, with equal quality and dignity.

At about 16.00, Dr. Evangelos Bekiaris closed the workshop and thanked the audience for the valuable input and the interesting exchanges of knowledge.

6.3 Minutes of workshop on accessible tourism (November 2017, Paris, France)

Location:	Comité Régional du Tourisme Paris Ile-de-France, 11, rue du Faubourg Poissonnière – 75009 Paris, France
Date/Duration of Meeting:	22/11/2017, 10.00-13.30
Recorder of Minutes:	Matina Loukea (CERTH/HIT)
Version No./Date	1 - 24/11/2017

List of Participants:

Forename	Surname	Institution	Country
Ivor	Ambrose	ENAT	Belgium
Katerina	Papamichail	ENAT	Greece
Evangelos	Bekiaris	CERTH/HIT	Greece
Matina	Loukea	CERTH/HIT	Greece
Marco	Pizzio	Associazione Italiana Sclerosi Multipla	Italy
Paudie	Healy	Universal Access	Ireland
Anna Grazia	Laura	ENAT	Belgium
Roberto	Castiglioni	Reduced Mobility Rights Limited	UK
Marie	Yahiel	Paris Region – Comite Regional du Tourisme	France
Saskia	Ewing	EDF	Belgium
Charlotte	Vella	Paris Region – Comite Regional du Tourisme	France
Mieke	Broeders	INTER – Flemish Agency for Accessibility	Belgium
Sonia	Garcia-Fraile	Fundacion ONCE	Spain

At the beginning of the Workshop, Mr. Ivor Ambrose (ENAT) welcomed all participants, and started chairing the workshop. After the "Tour de Table", where all participants presented themselves, Dr. Evangelos Bekiaris made a presentation of the scope of the study, the current priorities and the need for ensuring accessibility, as well as the trends and challenges regarding accessibility in European transportation and tourism systems.

After that, Mr. Ivor Ambrose made a presentation concerning tourism accessibility in Europe, focusing mainly on the fact that only 9% of European Tourism Suppliers have "accessible" offers, while also emphasis was given to the following (among others):

1. New standards or standards under development like:
    - PRM Standard (EN) 2017 "Railway Applications: Design for PRM Use" - Sections on Information, Contrast, Optical Characteristics and Obstacle fee routes
    - CEN: "Public Procurement for an Accessible Built Environment" (Mandate M/420) *(in progress)*
    - ISO Standard on Accessible Tourism for All *(In progress)*
    - Australian Tourism Data Warehouse – New standard for access data
2. New initiatives were also mentioned (i.e. All for All" Accessible Tourism Development in Portugal)
3. National studies on accessibility and tourism (i.e. Danish tourist board, on May 2017)
4. EUAN's Guide, including key results of a survey of disabled people and their friends and families (EUAN's Guide website)
5. AMADEUS report for long-distance transport
6. ENAT NTOs' learning group – sharing best practices in accessible tourism among national and regional tourist boards and cities.

During the discussion that followed this presentation, emphasis was also given to the "reputation driven enforcement" of the accessibility laws and requirements, mentioning as an example the Heathrow airport, which has been ranked very poorly due to accessibility issues and this forced the responsibles to put accessibility at the forefront (e.g. including the user group accessibility already from the stage of preparing the blueprints for terminal 6).

The Paris Region Tourist Board accessibility presentation followed by Mrs. Marie Yahiel and Mrs. Charlotte Vella, in which efforts that have been made for accessibility were described, in the Paris region, such as the following:

- Infomobi.com → info for elevators accessibility and PT hubs for the Paris region
- Accessible.net → info for accessibility services, staff training, etc. (370 places registered with objective access information in Paris region)
- Pro.visitregion.com
- Pro.visitregion.com/optimisation → guidance on how to apply the law

A presentation also made by Dr. Evangelos Bekiaris consisting of some of the findings of the study, as they have occurred by the analysis of the questionnaires, the literature review

and the workshops. Emphasis was mainly given to the presentation of users' needs and expectations, as well as to the formulation of recommendations and research priorities.
A discussion among all participant take place after the presentation, where the following issues were included:

- Information about EU Disability Card from EDF
- Accessibility info integrated into the MaaS
- Access to DRT and the local accessible services to tourists with disability
- Airports emergency evacuation plans
- Group transportation of PRM (i.e. in buses there are 1-2 wheelchairs)
- Suggestion for a European Accessible Transport Award for services providers, like Access City Award (new "smart cities tourism award")
- Accessible taxis
- Special scooters for PRM
- The non-accessible complaint procedures of NEBs

At about 13.30, Mr. Ivor Ambrose closed the workshop and thanked all participants for the valuable input and the interesting exchanges of knowledge.

7 ANNEX 7: LIST OF DIGITAL TOOLS

Table 3: List of digital tools regarding accessibility

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
EU	**Sage Traveling**	1. Accessibility reviews of European destinations and disabled travel advice	http://www.sagetraveling.com/	All	desireev@sagetraveling.com sarahb@sagetraveling.com
		2. Wheelchair Accessible Train Travel	http://www.sagetraveling.com/Train/	Rail transport	
	SIMON	3. Information about accessibility in public transport	http://simon-project.eu/	Local & long distance road transport	
	Wheelmap.org	4. Assessment reviews of bus and train stations, ports and airports	http://wheelmap.org/en	All	
	Rail Europe	5. Map of Europe for building and customizing European train itineraries.	https://www.raileurope.com/europe-travel-guide/	Rail transport	
	Eurail	6. The Eurail Pass is an all-in-one train ticket to access multiple trains in multiple European countries.	https://www.eurail.com/en/plan-your-trip/travel-resources/airport-train-station-connections	Air transport	customerservice@eurail.com
			https://www.eurail.com/en/help/planning-your-trip/there-any-extra-help-or-service-disabled-people	Rail transport	

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
	Rick Stevens Europe	7. Information regarding Traveling in Europe.	https://www.ricksteves.com/travel-tips/transportation/trains/train-stations	Rail transport	Tel: 425-771-8303 Email: rick@ricksteves.com
			https://www.ricksteves.com/travel-tips/trip-planning/travelers-with-disabilities		
Austria	**Vienna**	1. Information about public transport accessibility in the city of Vienna	https://www.wien.info/en/travel-info/accessible-vienna/accessible-public-transport	Local Road transport	Tel: +43 1 610 70-0 Email:fahrtendienst@blaguss.com www.blaguss.com
	Vienna airport	2. Accessibility information	http://www.viennaairport.com/en/passengers/airport/disabled-accessible_travel	Air transport	Tel: +43-1-7007-0
	ÖBB group	3. Austria's largest mobility services provider	http://www.oebb.at/en/leistungen-und-services/im-zug/barrierefreies-reisen	Rail transport	Tel:+43 (0) 5 1717-5 Email: msz@pv.oebb.at
Belgium	**NMBS/SNCB**	1. Passengers with reduced mobility	http://www.belgianrail.be/en/customer-service/passengers-with-reduced-mobility.aspx	Rail transport	http://www.belgianrail.be/en/customer-service/contact.aspx
Croatia	**ZHPP**	1. Support/transport for persons with disabilities and persons with reduced mobility	http://www.hzpp.hr/en/disabled-persons-and-persons-with-reduced-mobility	Rail transport	Tel: +385 1 378 2583 Email: informacije@hzpp.hr
		2. Benefits for persons with disabilities and their companion	http://www.hzpp.hr/osobe-s-invaliditetom		

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
		3. For the single train it is stated whether it is suitable for a wheelchair	https://prodaja.hzpp.hr/hr/Ticket/Journey?StartId=72480&DestId=74003&DepartureDate=2017-12-19&DirectTrains=True&Class=2&ReturnTrip=False&Passenger1Count=1&Passenger2Count=0&Benefit1Id=11		
Denmark	**Rejseplanen**	1. Country-wide travel planner with some functionality directed at disabled people	http://www.rejseplanen.dk	All	CEO Christina Hvid
Finland	**Finnish Transport Agency**	1. Road transport network	https://www.liikennevirasto.fi/web/en/	Local & long distance road transport	E-mail: firstname.lastname@fta.fi Tel:+358 295 34 3000
	wheelmap.org	2. A map with accessible places like train stations, bus stations, parking, restaurants, shopping stores, etc in Finland.	http://wheelmap.org	Several modes	https://news.wheelmap.org/en/contact/
	The Official Travel Guide of Finland		http://www.visitfinland.com/	All	
	Finavia	3. Assistance services in Airports	https://www.finavia.fi/en/	Air transport	Tel:+358 20 708 000 Email: firstname.lastname@finavia.fi
			https://www.finavia.fi/en/travelling/before-travelling/passengers-with-reduced-mobility/		

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
	HSL/HRT	4. The Helsinki Regional Transport Authority is the governmental authority that maintains the public transportation network of Greater Helsinki, Finland.	https://www.hsl.fi/en	Local Road transport	Tel: +358 (0)9 4766 4000
	City of Helsinki	5. Accessibility in public transport in the city of Helsinki	https://www.hel.fi/hkl/en/this-is-hkl/accessibility-and-the-environment/accessibility/	Local Road transport	Main telephone number: 09 310 1691
France	**SNCF** (www.sncf.com/en/sub-home/58943)	1. Disability access services	https://www.hsl.fi/en/information/how-use-public-transport/accessibility	Rail transport	Accès plus (SNCF) Phone: +33 (0) 890 640 650 (€0,12 TTC/min) for emergencies : +33 (0)9 69 32 26 26 Email: accesplus@sncf.fr http://numerot.hel.fi/?newlang=en_GB
		2. On-board services & special amenities	http://www.sncf.com/en/services/disability/special-amenities-on-board		
		3. Information & booking – disability access	http://www.sncf.com/en/services/handicap/information-booking		
	Saphir France (Air France) (www.airfrance.fr/FR/en/common/transverse/footer/contact_saphir.htm)	4. Reduced mobility and other disabilities-Booking	https://www.airfrance.fr/FR/en/common/guidevoyageur/assistance/pmr_reservation_airfrance.htm	Air transport	mail.saphir@airfrance.fr
		5. Reduced mobility and other disabilities-At the airport	https://www.airfrance.fr/FR/en/common/guidevoyageur/assistance/pmr_aeroport_airfrance.htm		
		6. Reduced mobility and other disabilities-On board	https://www.airfrance.fr/FR/en/common/guidevoyageur/assistance/pmr_a_bord_airfrance.htm		

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
		7. Reduced mobility and other disabilities-Your disability	https://www.airfrance.fr/FR/en/common/guidevoyageur/assistance/pmr_handicap_airfrance.htm		
	RATP (ratp.fr/en/accessibilite)	8. Sensorial accessibility	https://www.ratp.fr/en/accessibility/sensorial-accessibility	Rail transport	mission.accessibilite@ratp.fr
		9. Network accessibility	https://www.ratp.fr/en/accessibility/network-accessibility		
		10. Audio Atlas Project: guide yourself more easily through our stations	https://www.ratp.fr/en/accessibility/audio-atlas-project-guide-yourself-more-easily-through-our-stations		
		11. Building awareness about mobility	https://www.ratp.fr/en/accessibility/building-awareness-about-mobility		
	Accessible net	12. Free directory of establishments accessible(approachable) to the people at specific needs (people in situation of handicaps, families, seniors)	http://accessible.net/	Tourism	
	J'accède	13. Accessibility reviews of hotels, cafés, restaurants, etc.,	www.jaccede.com		Tel: +33 (0)1 43 71 98 10 Email: contact@jaccede.com
	Paris Region – ID Futees	14. Touristic information for accessible establishments in Paris and other regions	http://www.idfutees.com/A-voir?category=Accessible	Tourism	https://www.facebook.com/idfutees/

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
Germany	**BAHN**	1. Accessible Deutsche Bahn	http://www.germany.travel/en/ms/barrier-free-germany/how-to-book/deutsche-bahn.html	Rail transport	Mobility Service Centre (MSZ): Phone: +49 1806 512 512 Email: msz@bahn.de
	Lufthansa	2. Accessible Lufthansa	http://www.germany.travel/en/ms/barrier-free-germany/how-to-book/lufthansa.html	Air transport	Phone: +49 69 696 55 079 Email: specialservice@dlh.de
	Accessible Public Transport		http://www.germany.travel/en/ms/barrier-free-germany/what-to-know/public-transport.html	All	Tel. +49 (0)69 974640 Email: info@germany.travel
	Accessible Airports		http://www.germany.travel/en/ms/barrier-free-germany/what-to-know/airports.html	Air transport	
	Angloinfo	3. Travel and Parking for People with Disabilities	https://www.angloinfo.com/how-to/germany/healthcare/people-with-disabilities/travel-parking	Local Road transport	https://www.angloinfo.com/contact-us
	Accessibility in Berlin	4. Information on accessible public transport	http://www.berlin.de/sen/soziales/themen/menschen-mit-behinderung/barrierefreiheit/	Local Road transport	https://www.berlin.de/sen/ias/ueber-uns/formular.541467.php

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
Greece	**Athens International Airport**	1. Information bulletin (in blue/ white/ yellow colour for the needs of visually impaired people) and audible investment for people with hearing impairment, which includes accessibility points and issues of service for people with disabilities and people with disabilities and with reduced mobility.	https://www.aia.gr/el/traveler/travellers-info/special-assistance	Air transport	Tel: (+30) 210 35 30 000 Email: airport_info@aia.gr
		2. Detailed information on the rights of persons with disabilities and reduced mobility.	http://www.ypa.gr/passenger-rights		
Ireland	**Transport for Ireland (TFI)**	1. Travel information for people with mobility difficulties	http://www.transportforireland.ie/accessible-travel/	Long distance road & Rail transport	Tel: +353 1 879 8300 Email: info@nationaltransport.ie
Italy	**ItaliaRail** (italiarail.com)	1. Travellers with Disabilities	https://www.italiarail.com/travellers-disabilities	Rail transport	Tel: (+39) 06 9763 2451 Email: info@italiarail.com
		2. Assistance Services in Stations	http://www.rfi.it/rfi-en/For-persons-with-disability/Services-assistance-in-stations		
		3. No barriers stations	http://www.rfi.it/rfi-en/For-persons-with-disability/No-barriers-stations		

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
	Malpensa Airport	4. Reduced mobility passengers	http://www.milanomalpensa-airport.com/en/passenger-guide/passengers-with-reduced-mobility	Air transport	Tel:+39 02 232323
	Angloinfo	5. Overview of the facilities, organisations and support available for people with mobility, sight or hearing impairments in Italy.	https://www.angloinfo.com/how-to/italy/healthcare/people-with-disabilities	All	Tel: +44 (0)1491 836 394
Luxembourg	**CFL**	1. Information for persons with reduced mobility (PRM)	http://www.cfl.lu/espaces/voyageurs/en/gares-et-services/personnes-%C3%A0-mobilit%C3%A9-r%C3%A9duite	Rail transport	Tel: (+352) 2489 2489
	Data.public.lu	2. National open data platform for every mean of public transport available to the public, including information in terms of vehicle accessibility	https://data.public.lu/en/organizations/mobiliteitszentral/#datasets	Local and long distance road transport	Email: info@data.public.lu
Norway	**WheelchairTravel.org**	1. Accessibility information in the city of Oslo	https://wheelchairtravel.org/oslo-norway/	Air transport, Local Road transport & Tourism	
	Norwegian State Railways	2. Assistance for disabled passengers on the train	https://www.nsb.no/en/on-board/disabled-passengers	Rail transport	Tel: (+47) 61 05 19 10 Email: hjelp@nsb.no.
	SAS	3. SAS special assistance	https://www.sas.no/en/travel-info/assistance	Air transport	Tel: 9150 5400 From abroad: +47 9150 5400 https://www.sas.no
	Wideroe	4. Wideroe special needs assistance	https://www.wideroe.no/en/travel/special-needs	Air transport	Email: support@wideroe.no

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
	Ruter	5. Accessibility information for local public transport trips in the Oslo area	https://ruter.no/en/journey/accessibility/	Local Road transport	Tel: +47 22 05 70 70 https://ruter.no/fa-hjelp/kontakt-oss/kontaktskjema/ (only available in Norwegian)
	Vegdata.no	6. Accessibility data, mainly on public transport stops, and road side stop facilities	http://www.vegdata.no/bruk-av-data/ www.vegvesen.no/vegkart	Local Road transport	
	Statens Vegvesen	7. Register of parking lots including specific handicap parking and all road traffic related open data	https://www.vegvesen.no/trafikkinformasjon/Reiseinformasjon/parkeringsregisteret www.vegvesen.no/data	Local Road transport	Tel: +47 22 07 30 00 Email: firmapost@vegvesen.no
	Difi	8. Register of all open access data sources, including descriptions for leisure walks with accessibility information	http://data.norge.no		Email: opnedata@difi.no Tel: +47 22 45 10 00
Slovenia	**Municipality of Ljubljana**	1. Different modes of transport that are tailored to people with mobility impairments	https://www.ljubljana.si/sl/moja-ljubljana/osebe-z-oviranostmi/dostopnost-za-vse/	Local Road transport	https://www.ljubljana.si/sl/o-nas/kontakti/
	Municipality of Maribor	2. Information on accessible transportation and accessible tourism	http://www.maribor.si/podrocje.aspx?id=744	Local Road transport	Email: mestna.obcina@maribor.si
Spain	**Renfe**	1. ATENDO Guide	http://www.renfe.com/EN/viajeros/atendo/servicio_atendo.html	Rail transport	Tel: +34 91 774 40 40.
		2. Stations and trains with ATENDO service	http://www.renfe.com/EN/viajeros/atendo/estaciones.html		

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
	AENA	3. Assistance service for persons with reduced mobility	https://wwwssl.aena.es/csee/Satellite?pagename=PMR&Language=EN_GB	Air transport	Tel: 902 404 704 and (+34) 91 321 10 00. https://www.telesor.es/indextelesorweb.php
	ADIF	4. Stations accessibility	http://www.adif.es/en_US/infraestructuras/accesibilidad_estaciones/accesibilidad_estaciones.shtml	Rail transport	Tel : 902 43 23 43 https://www.telesor.es/indextelesorweb.php
	CONSORCIO TRANSPORTES MADRID	5. Accessible transport	http://www.crtm.es/muevete-por-madrid/transporte-accesible.aspx?lang=en	Local Road transport & Rail transport	
	ALSA	6. Accessibility Plan for people with disabilities	https://www.alsa.com/en/web/bus/alsa-experience/plan-your-journey/special-assistance#	Road transport	
	Accessible Spain	7. Accessible Spain Travel works with a range of well-established local suppliers in order to offer a comprehensive selection of wheelchair accessible vehicles all over Spain.	https://www.accessiblespaintravel.com/accessible-transfers/	Road transport	E-mail: info@accessiblespaintravel.com Tel: 0034 696 821 479
	Municipality of Madrid	8. Accessible tourist map	https://puntodis.com/maps/idiomas.php?url=madriddestino	Public transport	
		9. Information on accessible transportation	https://www.esmadrid.com/en/accessible-madrid?utm_referrer=https%3A%2F%2Fwww.google.es%2F		

COUNTRY	ORGANISATION/ COMPANY	SERVICES	LINK	MODE	CONTACT
	Municipality of Barcelona	10. Information on accessible transportation	http://www.barcelona-access.com/ACCESSIBLE/Transports/Transports---Inicial/_qTOdJvTDy-LyYqCJbP2t2A0QDanbveT0F3G3gBUK5Mw	Public transport	http://www.barcelona-access.com/ACCESSIBLE/Altres-p%C3%A0gines/Varis-Contacta/_XHxTrasl4-ariNVK5OjsymHrkdjk15ZA5KUhfxICA9QXXT-UbtiDfw
	Municipality of Bilbao	11. Available accessible transfers with accessible minibuses or large accessible coaches	https://www.accessiblespaintravel.com/accessible-transfers/	Local & Long distance road transport	Email: info@accessiblespaintravel.com
The Netherlands	**NS**	1. Traveling with a functional disability.	https://www.ns.nl/en/travel-information/traveling-with-a-functional-disability	Rail transport	Tel: +31 30 751 51 55 https://www.ns.nl/en/forms/contact.html
		2. Assistance during your journey	https://www.ns.nl/en/travel-information/traveling-with-a-functional-disability/assistance-while-travelling.html		
		3. Extra station facilities	https://www.ns.nl/en/travel-information/traveling-with-a-functional-disability/extra-station-facilities.html		
UK	**Eurostar**	Wheelchair space bookings	https://www.eurostar.com/uk-en/book-wheelchair	Rail transport	Email: Insurance@allianz-assistance.co.uk

8 ANNEX 8: METHODOLOGY FOR MULTI-CRITERIA ANALYSIS

8.1 Methodology for Multi-Criteria Analysis

The framework for multi-criteria analysis as defined within ADVISORS (GRD1-1999-10047) project (De Brucker et al, 2001) has been adapted for use herein. The multi-criteria analysis (MCA) sensu stricto starts with the construction of the so-called evaluation matrix and then continues with the aggregation of the information contained in it. The MCA sensu stricto finally yields a ranking of the alternatives under evaluation, which in this case are namely the gaps/needs that were identified in transport and tourism domains.

The evaluation table forms the input for the synthetic phase of the multi-criteria analysis framework. Generally, this table can be visualised as indicated below. Each alternative, c.q. each gap/need in our case (a1), is evaluated on each criterion (ci). The result of each of these partial evaluations is represented in the table by "e".

Table 4: Evaluation table (general case)

	c_1	c_2	...	c_i	...	c_m
a_1	e_{11}	e_{12}	...	e_{1i}	...	e_{1m}
a_2	e_{21}	e_{22}	...	e_{2i}	...	e_{2m}
...						
a_l	e_{l1}	e_{l2}	...	e_{li}	...	e_{lm}
a_n	e_{n1}	e_{n2}	...	e_{ni}	...	e_{nm}

Source: MAMCA Methodology

Whereby: c_i = a criterion (expected impact) (i = 1, …, m)
m = the total number of criteria;
a_l = an alternative (i.e. application area) (l = 1, …, n);
n = the total number of alternatives (application areas);
e_{li} = the evaluation of alternative (application area) l on criterion i.

When the criteria included in the evaluation table above are constructed for each level of analysis, it is possible to arrange them into different groups so that each specific group corresponds to the objectives of a specific level. This means that the evaluation table can be partitioned into specific parts, as shown in Table **5**5 below.

Within the evaluation matrix, however, clusters of criteria may be distinguished. One cluster may be related to effects that can be expressed in monetary units; another cluster may be related to non-monetary safety effects, etc.

The information represented in the evaluation matrix seldom makes it possible to select one alternative in an unambiguous fashion. In most cases, the scores obtained by the alternatives on the various criteria (partial evaluations) are conflicting, which means that they so not unanimously point to a single "best" alternative, that would be superior in terms of all criteria. This situation is sometimes referred to as the "multi-criteria imbroglio"

(Scharlig, 1985:4). An aggregation method is therefore needed in most cases, to synthesise the conflicting information. Each aggregation method relies on specific assumptions regarding the comparability of the partial evaluations and the relations between criteria. In most cases, criteria should be given explicit weights. Within each aggregation method, several MCA approaches can be used to aggregate the partial evaluations.

The partial evaluations (i.e. the criterion scores) are expressed in different units, using different evaluation scales. In order to permit comparisons between criterion scores, these scores should be normalised, especially when cardinal MCA methods are used. Various normalisation procedures can be applied. Normalisation methods and MCA methods are intrinsically related. The specific normalisation procedure used may affect the results of the final aggregation procedure.

The normalisation procedure selected in our case is the *Normalisation by dividing each score by the column total.* This normalisation procedure is shown in the following formula.

$$e_{ij} = \frac{e_{ij}}{\sum_{i=1}^{n} e_{ij}} \quad (1)$$

With this normalisation procedure, the sum of the normalised scores is always equal to 1. Both cardinality and proportionality are respected. The normalised scores in this method are concentrated, since they span a more narrow range of possible values. This normalisation method is used in the standard AHP method (analytic hierarchy process), presented in the following section.

Not all objectives pursued in the policy process have the same importance. The criteria included in the evaluation matrix, should therefore, be weighted. A larger number of weighting procedures are closely related to the MCA method used. A widely used method for determining weights is the pairwise method, which is used in the AHP of Saaty (1988). In the pairwise method, criteria are compared in pairs. For each pair, the decision maker (in this case the experts of this study) has to state whether the first criterion is as important as the second one or whether the dominance in terms of importance of the first over the second criterion is moderate, strong or "complete". The pairwise comparison is a widely used subjective method and useful for obtaining one sound weight vector for a sole decision maker as well as for a group, like in our case, in an uncertain decision context, and while respecting the different individual opinions in case of a participating group as much as possible.

This information gathered from the corresponding templates is then transformed into a numeric scale. On the basis of this information, the relative priorities or weights are calculated, using, the eigenvector method. Since a number of pairwise comparisons are redundant, the overall consistency of the pairwise comparisons can be determined. The implied meaning of weight in the standard AHP procedure is the relative value attached to the scores on the different criteria.

Table 5: Partitioned evaluation table

	s_1						**...**			**s_k**						**...**			**s_h**					
	c_1	**c_2**	**...**	**c_i**	**...**	**c_m**				**c_1**	**c_2**	**...**	**c_i**	**...**	**$c_{m'}$**				**c_1**	**c_2**	**...**	**c_i**	**...**	**$c_{m''}$**
a_1	e_{111}	e_{121}	**...**	e_{1i1}	...	e_{1m1}	...	...	...	e_{11k}	e_{12k}	...	e_{1ik}	...	$e_{1m'k}$	...	...	...	e_{11h}	e_{12h}	...	e_{1ih}	...	$e_{1m''h}$
a_2	e_{211}	e_{221}		e_{2i1}	...	e_{2m1}	...	...	...	e_{21k}	e_{22k}	...	e_{2ik}	...	$e_{2m'k}$	...	...	...	e_{21h}	e_{22h}	...	e_{2ih}	...	$e_{2m''h}$
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
a_l	e_{l11}	e_{l21}	...	e_{li1}	...	e_{lm1}	...	...	...	e_{l1k}	e_{l2k}	...	e_{lik}	...	$e_{lm'k}$	...	...	...	e_{l1h}	e_{l2h}	...	e_{lih}	...	$e_{lm''h}$
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
a_n	e_{n11}	e_{n21}	...	e_{ni1}	...	e_{nm1}	...	...	...	e_{n1k}	e_{n2k}	...	e_{nik}	...	$e_{nm'k}$	...	...	...	e_{n1h}	e_{n2h}	...	e_{nih}	...	$e_{nm''h}$

Source: MAMCA Methodology

Whereby: s_k = a stakeholder (k = 1, …, h);
h = the total number of stakeholders;
c_i = a criterion (i = 1, …, m or m' or m" according to the stakeholder considered relevant);
m = the total number of criteria used by a particular stakeholder (this number can be different for each individual stakeholder);
a_l = an alternative (i.e. deployment scenario) (l = 1, …, n);
n = the total number of alternatives;
e_{lik} = the evaluation of alternative (gap/need) l on criterion i of stakeholder k.

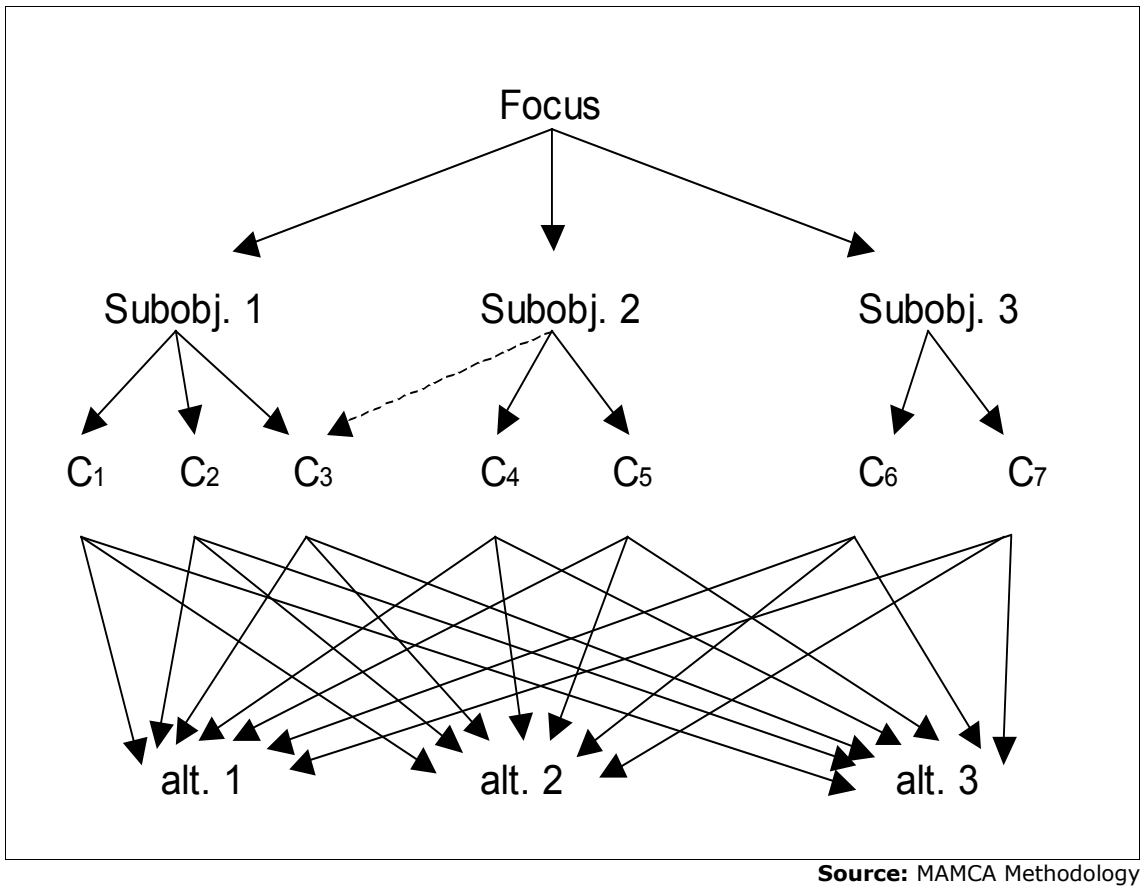
8.1.1 The Analytical Hierarchy Process (AHP) for socio-economic evaluation

The analytical hierarchy process (AHP) (Saaty, 1982, 1988 and 1995) is probably the most widely known and widely used MCA method in decision-making. The AHP method is based on three principles, which form the subsequent steps of the method, namely: (1) construction of the hierarchy, (2) priority setting and (3) logical consistency.

Construction of the hierarchy

Humans have the ability to perceive things and ideas, to identify them, and to communicate what they observe. For detailed knowledge, our minds structure complex reality into its constituent parts, and these in turn into their parts, and so on hierarchically. A hierarchy is, therefore a complex system in which the constituent parts are hierarchically structured. An example of a simple hierarchy is given below.

Figure 30: Example of a hierarchy in the AHP method



Source: MAMCA Methodology

The top of the hierarchy consists of one single element, which represents the overall objective or focus. The intermediate levels represent the sub-objectives and their constituent parts (if possible, as measured by operational criteria). The lowest level of the hierarchy consists of the final alternatives that are considered. The arrows represent the causal relationships within the hierarchy. This causal relationship means e.g. that the lower level element ("children" node) contributes to the higher level element ("parent" node) or that it contains a property included in the higher level element. The AHP involves system thinking. Each "parent" node in the hierarchy together with all its "children" nodes can be considered as a subsystem of a larger system (or hierarchy).

There is no general rule for developing hierarchies, they can be constructed top-down or bottom-up. Often, a combination of both is applied. The top-down method starts at the top, identifying the decision maker's fundamental objective and develops sub-elements of value, proceeding downward until all measures of value are included (weeding out redundancies and measures that do not discriminate among available alternatives). At the bottom of the hierarchy, available alternatives can be added. The aim of this approach is to gain as wide a spectrum of values as possible. Once they are attained, the process of weeding and combining can begin. This approach is comparable to what Keeney (1996, pp. 47-52) considers as "value-focused thinking".

The bottom-up approach starts with given alternatives and asks the decision makers (or the stakeholders) those features which make these alternatives good or bad choices. For instance, the decision maker would be asked for a list of those attributes that distinguish between available alternatives. The bottom-up approach will generate a large unstructured list of attributes, which can be clustered into groups of common elements (subsystems), leading to potentially the same hierarchy (system) as the top-down approach.

The top-down approach is most likely best when dealing with strategic decisions, where the available alternatives are not necessarily yet identified. The bottom-up approach works well when the set of alternatives are fairly well fixed and given, and the decision problem is to select from among them.

Priority setting

The relative priorities of each element in the hierarchy are determined by comparing all the elements of the lower level in pairs against the criteria with which a causal relationship exists. The pairwise comparison expresses how much more strongly an element does contribute to (or possess, etc.) the property of the criteria studied than does the element with which it is being compared. The decision maker is therefore provided with a comparison mechanism which has a pairwise set-up as indicated in the following tables.

Table 6: Pairwise comparison of elements in the AHP

c_i	a_1	...	...	$a_{l'}$	...	a_n
a_1	1					
...		[1]				
a_l			[1]	$Pc_i(a_l,a_{l'})$		
...				[1]		
...					[1]	
a_n						1

Source: MAMCA Methodology

Table 7: Pairwise comparison scale in the AHP

Intensity of importance $Pc_i(a_l,a_{l'})$	Definition	Explanation
1	Both elements have **equal importance**	Both elements contribute equally to the criterion under consideration
3	**Moderate importance** of the row element over the column element	Experience and judgment reveal a slight preference of the row element over the column element
5	**Strong importance** of the row element over the column element	Experience and judgment reveal a strong preference of the row element over the column element
7	**Very strong or demonstrated importance** of the row element over the column element	The row element is very strongly favoured over the column element, and its dominance has been demonstrated in practice
9	**Absolute importance** of the row element over the column element	The evidence favouring the row element over the column element is of the highest possible order of affirmation
2,4,6,8	Intermediary values	A compromise between two assessments
Reciprocals (1/2, 1/3, 1/4, ... 1/9)	When the column element is compared with the row element, it is awarded the reciprocal value of the row/column element comparison	
Rationals	Ratios arising from the scale	If consistency were to be forced by obtaining *n* numerical values to span the matrix
1.1-1.9	For tied activities	The row element and the column element are nearly indistinguishable; moderate is 1.3 and extreme is 1.9.

Source: Author's own elaboration based on MAMCA Methodology

Table 6 gives the preference intensity (Pc_i) for a specific pair of (sub)objectives (i.e. a_1, a_2) whereby the decision maker prefers the row element (a_l) to the column element ($a_{l'}$) in terms of the higher level objective under consideration (if possible, measured by an operational criterion c_i) under consideration. The preference intensity is expressed on a scale from 1 to 9, derived from Saaty's subjective comparison scale (see Table 7). A similar approach is taken for the constituent components within each objective and sub-objective (in case the hierarchy would have more than three levels). Finally, there is also a pairwise comparison of the alternatives (the elements of the lowest level in the hierarchy) against the criteria (c_j) (on the next higher level).

Within each subsystem, the relative priorities of the elements are determined through the pairwise comparison mechanism described above. The relative priorities are calculated

using the theory of eigenvectors and eigenvalues. The relative priorities (weights) are given by the eigenvector corresponding to the highest eigenvalue. In case the pairwise comparison matrices are completely consistent, then the highest eigenvalue (λ_{max}) always corresponds to the number of elements (n) compared in the matrix. In case of complete consistency, the eigenvector corresponding to the highest eigenvalue (λ_{max}=n), i.e. the vector containing the relative priorities, can simply be obtained by normalizing any column of the pairwise comparison matrix (by dividing each element by column total). One will always obtain the same vector with relative priorities. In the paragraphs below, the eigenvector method will be briefly illustrated.

The pairwise comparison matrix is represented by the letter A. Its standard element is $Pc_i(a_l,a_{l'})$. The vector containing the relative priorities (weights) is represented by W. Its standard element is w_i. According to the eigenvector method, the following relation holds (Formula 2).

$$A.W = n.W \qquad (2)$$

Whereby: A = the pairwise comparison matrix;
W = the vector with the relative priorities (or weights);
n = the number of elements compared in the pairwise comparison matrix A (which,in case of complete consistency, is equal to the highest eigenvalue of A, n=λ_{max}).

When the matrix A is filled in directly with the ratios of the weights ($w_i/w_{i'}$), instead of the subjective expert evaluations given by the scale of Saaty, $Pc_i(a_l,a_{l'})$, which form an estimator of this ratio, one will obtain the following relation (Formula 3).

$$\begin{pmatrix} \frac{w_1}{w_1} & \frac{w_1}{w_2} & \cdots & \frac{w_1}{w_{i'}} & \cdots & \frac{w_1}{w_n} \\ \frac{w_2}{w_1} & \frac{w_2}{w_2} & \cdots & \frac{w_2}{w_{i'}} & \cdots & \frac{w_2}{w_n} \\ \cdots & \cdots & \cdots & \cdots & \cdots & \cdots \\ \frac{w_i}{w_1} & \frac{w_i}{w_2} & \cdots & \frac{w_i}{w_{i'}} & \cdots & \frac{w_i}{w_n} \\ \cdots & \cdots & \cdots & \cdots & \cdots & \cdots \\ \frac{w_n}{w_1} & \frac{w_n}{w_2} & \cdots & \frac{w_n}{w_{i'}} & \cdots & \frac{w_n}{w_n} \end{pmatrix} . \begin{pmatrix} w_1 \\ w_2 \\ \cdots \\ \cdots \\ \cdots \\ w_n \end{pmatrix} = n. \begin{pmatrix} w_1 \\ w_2 \\ \cdots \\ \cdots \\ \cdots \\ w_n \end{pmatrix} \qquad (3)$$

Source: MAMCA Methodology

In order to synthesise the various priority vectors are weighted by the global priorities of the parent criteria and synthesized. One starts this process at the top of the hierarchy. By doing so the final or global relative priorities for the lowest level elements (i.e. the alternatives) are obtained. These final or global relative priorities indicate the degree to which the alternatives contribute to the focus. These global priorities form a synthesis of the local priorities (i.e. the priorities within each subsystem), and as such they integrate the decision making process.

As regards the sequence of the pairwise comparisons, one can follow two procedures, namely the top-down procedure or the bottom-up procedure. In the former, the sub objectives are compared in pairs in terms of their contribution to the focus. Next, the constituent components of each sub objective are compared in pairs in terms of their contribution to the sub objective with which they have a causal relation, etc. This procedure continues until one reaches the lowest level of the hierarchy. The latter procedure starts at

the bottom of the hierarchy by comparing the alternatives in terms of contribution to the elements of the next higher level, etc. Next, this procedure is repeated at the next higher level. Finally one arrives at the top, comparing the sub objectives in terms of their contribution to the focus.

It is important that the decision maker or the expert to whom the task of making the pairwise comparisons has been delegated, is constantly aware of the exact content of the elements for which s/he is making pairwise comparisons. Therefore, the bottom-up method may be more suitable because of the learning character of its procedure. One starts at the lowest level, and subsequently moves to the higher levels, i.e. the levels at which the lower level elements are represented in a more aggregated form. However, when decision makers and stakeholders are involved in the decision making process from the beginning, both procedures may be considered equivalent.

Consistency check

In each pairwise comparison matrix, a number of the pairwise comparisons are redundant. When e.g. a_1 is compared to a_2 and a_2 is compared to a_3, the comparison of a_2 and a_3, becomes redundant from a theoretical point of view. In fact, in case of complete consistency, the following relation (Formula 4) holds.

$$Pc_i(a_l, a_{l''}) = Pc_i(a_l, a_{l'}).Pc_i(a_{l'}, a_{l''}) \forall i, l \qquad (4)$$

Whereby: $Pc_i(a_l,a_{l'})$ = the preference intensity for alternative a_l over alternative $a_{l'}$ according to criterion i.

However, the redundant comparisons are made, for two reasons. First, the redundancy makes it possible to neutralise estimation errors that may have occurred in the other pairwise comparisons of the same matrix, given the calculation of the eigenvector, described in the former section. Second, the redundancy makes it possible to check the consistency of all the pairwise comparisons within one matrix.

When the pairwise comparison matrices are completely consistent, the priority (or weight) vector is given by the right eigenvector (W) corresponding with the highest eigenvalue (λ_{max}). In that case, the latter is equal to the number of elements compared (n). In case the inconsistency of the pairwise comparison matrices is limited, λ_{max} slightly deviates from n. This deviation (λ_{max}-n) is used as a measure for inconsistency. This measure is divided by n-1. This yields the average of the other eigenvectors (Forman, 1990, p. 301). Hence, the "consistency index" (CI), is given by formula 5.

$$CI = \frac{\lambda_{\max} - n}{n-1} \qquad (5)$$

Whereby:

CI = the consistency index;
λ_{max} = the highest eigenvalue of the pairwise comparison matrix (A);
n = the number of elements compared in the pairwise comparison matrix (A).

The final consistency ratio (CR), on the basis of which one can conclude whether the evaluations are sufficiently consistent, is calculated as the ratio of the consistency index (CI) and the random consistency index (CI*), as indicated in Formula 6. The random consistency indices (the CI*s) are given in the following table. They correspond to the

degree of consistency that automatically occurs when filling in at random reciprocal matrices with the values given below.

Table 8: Random consistency indices (CI*s)

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CI*	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49	1.51	1.48	1.56	1.57	1.59

$$CR = \frac{CI}{CI*} \qquad (6)$$

Source: MAMCA Methodology

Whereby:

CR = the consistency ratio;
CI = the consistency index;
CI*= the random consistency index.

The consistency ratio in some applications (namely the computer program Expert Choice™ developed by Forman, 1998), is called inconsistency ratio (ICR), because it provides a measure for inconsistency and not for consistency.

Saaty (1982:82) argues that the inconsistency should not be higher than 10% (CR $\leq$ 0,10). Inconsistency higher than 10% means that the consistency of the pairwise comparisons is insufficient.

The consistency ratio for the whole hierarchy (CRH) is determined on the basis of the consistency indices for each pairwise comparison matrix. The CI of each of these matrices is then multiplied by the relative priority of the parent element in terms of contribution to the parent of this parent element. This process is repeated for each level of the hierarchy (except for the lowest level). The values obtained are summed. This yields the consistency index for the hierarchy (CIH). This value is then compared to the value that one would obtain by repeating the same process using the random consistency index (CI*). This yields the random consistency index for the hierarchy (CI*H). The consistency ratio for the hierarchy (CRH) is then given by the ratio of the CIH and the CI*H, as shown in Formula 7.

$$CRH = \frac{CIH}{CI*H} \qquad (7)$$

Whereby:

CRH = the consistency ratio (CR) for the whole hierarchy;
CIH = the consistency index (CI) for the whole hierarchy;
CI*H = the random consistency index (CI*) for the whole hierarchy.

9 ANNEX 9: COUNTRIES CLUSTERING BASED ON TRANSPORT ACCESSIBILITY

Table 9: Countries clustering related to transport accessibility

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
Austria	• Has a national Disability Equality Act • Every public transport operator had to offer accessible service and facilities by end of 2015. • Financial compensation claims possible for damage due to discrimination. • Prior notification for assistance limit in rail has been reduced to 12 hours (48 hours in the relevant EU Regulation (Regulation (EU) No 1371/2007)).	• No relief or claim for removal of barriers • UNCRPD Committee recommended Austria to improve accessibility of written information with regard to public transport. • Transportation hubs and building accessibility varies, according to each province.	**Provincial Model** • Significant differences between regions. • Overall good physical accessibility. • Information on accessible services and training of staff should be improved.
Belgium	• EU Regulations on long-distance transport modes (air, rail maritime and inland shipping) have been transposed into national laws. • Prior notice for assistance to rail reduced to only 3 hours for several main stations.	• Accessibility of local Public Transport (PT) mainly depending upon each Region. • All Regions have relevant plans and provisions but the state of implementation is not clear. • Both long-distance as well as local public transport are not fully accessible (example: Brussels) • ICT and web accessibility is aimed at but not regulated yet.	**Provincial Model** • Accessibility level varies across Regions. • Transport accessibility, including web and ICT accessibility, as well as staff training may be improved.
Bulgaria	• National Road Transport Act introduces provisions ensuring accessible bus stations and sanctions of violation. • Specially designated parking spaces for PwD are provided through a relevant parking card. • 35% of the total bus routes should be performed by accessible buses. • A National Plan for Directive 1300/2014 implementation (from December 2016) reports in detail the numbers and locations of railway	• Only 8 long-distance trains are currently accessible. Only around 1,000 PwD travel annually by train from an estimated total PRM population of over 100.000. • IRDA provision for accessible transport by Municipalities is still not realised, over 10 years later.	**Gap of Implementation Model** • Overall good legislation framework with quantified targets and due dates. • Implementation lacks behind.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
	stations and stops that are partially accessible and those to be adapted to comply to the Regulation. • Prior notification for assistance limit in rail is 24 hour, lower than that of the EU Regulation (48 hours). • Under the Integration of Persons with Disabilities Act (IPDA) the municipalities are responsible to provide accessible public or special transport to PwD (was to be achieved by end of 2006).	• UNCRPD concept paper for legislative amendments regarding accessibility not yet applied. New deadline for elaboration and adoption of amendment is 2020. • Bus stations designated to be accessible under Regulation (EU) No 181/2011 are to a large extent not accessible at all.	
Croatia	• Specific financial provisions exist for PwD with severe disability (80% or more physical disability) in terms of parking spaces, exemption from paying tolls, PT fares reductions, etc. Low floor trams in operation.		**Late-starter model** • Both legislation and implementation require improvement. • Long-distance transport accessibility lagging behind local transport one.
Cyprus	• Full transfer of relevant EU regulations, without exemptions. • Persons with Disability Law of 2000, refers to the right of PwD to accessible PT and other transportation means. • In the last 2 years, the government subsidizes PT companies for mass purchases of fully accessible new buses. • There is a social scheme funding the transportation needs of particular groups of PwD.	• No specific legislative or regulatory measures regarding web accessibility for private websites.	**Front-runners model** • Good legislation and implementation. • More emphasis needed on information accessibility.
Czech Republic	• Various implementation decrees and technical standards apply well the European Regulations. • Prior notification for assistance limit in rail is 24 hours, lower than in the relevant EU Regulation (48 hours). • Access to rail accessibility is included in the national rail website. • Public web sites accessibility is mandatory and controlled by a Decree from 2008.		**Mixed model** • In terms of long-distance transport the country is among the front-runners, but in terms of local transport is an improver, with implementation not yet fully achieved.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
Denmark	• Section 11 of Law on Traffic Companies (2010) obliges the companies to offer at least 104 journeys a year to the front door of the PRM, in a "suitable" vehicle. Traffic companies must include DPO's in the arrangement of such schemes. • A relevant national transport accessibility policy started in 2010, in dialogue with DPO's. It is currently promoted through a Dialogue Forum. • Prior notification for assistance limit in rail is 12 hours, instead of the 48 hours in the EU Regulation. • Buildings accessibility is well regulated; though with emphasis on wheelchair users. • National building accessibility scheme and sign exists.	• No National legislation about the accessibility of trains, buses, taxis, ferries, airplanes and other transportation means. • Was asked for exemption from staff training obligations of the bus and coaches EU Directive. • The special transport price for door to door service can be higher than ordinary prices, but not "considerably higher". And the customer must book it at a "reasonable time" in advance. • No specific legislation concerning ICT/websites accessibility.	**Self-regulation model** • The country follows the "Nordic" practice of no strict regulation on accessibility but in fact quite good implementation level. • Good cooperation with DPO's and social engagement towards accessibility. • Information on services accessibility can be improved. The same is true for staff training.
Estonia	• Use of European Social Fund resources to develop and provide social transport service in local municipalities. • Accessibility Council established in 2015, including all stakeholder representatives and elaborating plans for universal design and accessibility promotion. • EU package on Electronic communications Act (2009) has been implemented, aiming at accessible public web sites and electronic voting (meeting WCAG 2.0 criteria).	• Actual implementation of transport accessibility is still under development.	**Front-runners model** • Great effort is undertaken to provide an adequate legislative framework and implement it fast, to enhance PT accessibility. • This includes ICT and training of staff. • Full implementation requires funding and is in progress at local level.
Finland	• The Act of Public Transportation of 2009 requires transport operators to provide accessible services and define their Quality of Service (QoS). • Municipalities get subsidizes by the state to develop accessible local transport (Decree of 2010).	• Exempted from the staff training of the Bus and Coaches EU Regulation. • Built environment accessibility is not included in the Non-Discrimination Act of 2014, but some relevant regulations for new buildings in the Land Use and Building Act of 1999.	**Improvers model** • The legislative framework exists, accessibility level is good but "soft" measures (training of staff, accessibility info harmonisation) require more emphasis.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
		• No ICT and web accessibility legislation, but there exist guidelines and recommendations as of 2005, revised in 2012.	
France	• Legal framework for accessibility of transport and the built environment within a comprehensive law of 2005. • Inter-ministerial Observatory for accessibility and universal design developed in 2010 to monitor the implementation. • Accessibility of public ICT and web sites set-up by 2009 Decree, with implementation data in 2011 for the long-distance and 2012 for the local transport services.	• Targets set in the 2005 law were not met by the 2015 deadline and led to a partial redefinition of the targets which were weaker than the original ones as well as a further delay of implementation.	**Improvers model** • Strong political support and good legislative framework. • Physical accessibility is good but not yet achieved the target level. • More emphasis required on staff training.
Germany	• In the 2012 National passenger transport law it is defined that all public transport is to be accessible by 2022; whereas long-distance bus services by 2019. • Pre-notification for assistance to rail ranges from 24 hours to no need at all (in major stations). • New and reconstructed public buildings have to be accessible according to National and Federal state laws. • Since 2002 public service sectors are obliged to provide accessible websites.	• According to the 2016 amendment, only public operated transport services (not private) need to be accessible. The UNCRPD Committee commented negatively on this.	**Improvers model** • The country is in a transition phase from varying accessibility levels (according to city or hub) to a very high accessibility level overall. It is expected to be a front-runner by 2022. • The exemption of privately operated PT from the accessibility requirements needs to be further examined.
Greece	• Specific Ministerial Decree exists for commercial shipping accessibility as of 2006 and a law of 2008. • New Building Code of 2012 requires the accessibility of new public buildings as well as appropriate adaptation of older buildings by 2020.	• Actual accessibility status general logging behind beyond big cities and new infrastructure (such as Athens metro and airport; that have a high accessibility level).	**Gap of Implementation model** • The legislative framework is adequate but its implementation lags significantly behind.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
	• Public sector websites must comply with WCAG 2.0 of at least AA level (Ministerial Decree of 2012).		
Hungary	• Equal opportunities Act (of 1998) defines the accessibility requirements for public transport and buildings. • Public ICT and websites need to be accessible, without exemption, according to a Decree of 2005.	• Exempted from the staff training of the Bus and Coaches EU Regulation. • Deadlines on accessibility of transport systems for all Public Transport means of Equal Opportunities Act (of 1998) were deleted from the Act by an amendment in 2013. • Accessibility of PT vehicles and facilities has been assessed in 2009 by the Parliamentary Commissioner for Civil Rights and the accessibility percentages were very low for all cases. • Public buildings are exempted from accessibility obligations until 2013.	**Low-achievers model** • Legal framework taking steps backwards in relation to transport accessibility. • Implementation level is also quite low.
Ireland	• Disability Act of 2005 (updated on 2012) requires accessibility of public transport services (those funded by public funds). • The National Disability Authority has put out guidelines on conducting a built environment access audit and using universal design. • The Centre for Excellence in Universal Design (hosted by the National Disability Authority) published IT Accessibility Guidelines, an IT Procurement Toolkit and Web Accessibility.	• Airplanes and services provided by train or railway of historic or touristic interests are exempted from the Act. • Transportation outside major metropolitan areas remains at a high degree inaccessible. • In 2010 PwD found that the ICT accessibility needed improvement. • Has not ratified the UNCRPD.	**Low-achievers model** • Both the legal framework and the implementation require improvements. • Ireland is the only EU Member State that did not sign the UNCRPD.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
Italy	• Public Transport means should be accessible, according to a Decree of 1996. • The "Stanca Act" of 2004 includes measures to facilitate the access to ICT for PwD.	• Exempted from the staff training of the Bus and Coaches EU Regulation. • Major differences in transport accessibility across the country.	**Provincial Model** • Accessibility level varies significantly across the country.
Latvia	• According to an order of 2012, all information in a bus about bus stops shall be accessible in visual form and carried in audio form. • A 2007 order provides that services rendered by the bus station will be accessible to all visitors of the bus station and adjusted to PwD. • There are also regulations about accessible/assisted use of taxi (2012), design of accessible bus stops (2012) and on accessible pedestrian crossings (2010). • Quality standards on accessibility are set by the Riga International Airport. • Accessibility of buildings incorporated into the national standard "Latvian Building Code" in 2015, both for public and residential buildings.	• ICT accessibility still on the level of guidelines for 2014-2020. • Rail transport still largely inaccessible due to old rolling stock	**Front-runners model** • Legislation is adequate and covers all possible aspects (except overall ICT accessibility). • Implementation efforts are high and actual accessibility level is already at a good stage and improving.
Lithuania	• Accessibility of transport is improving at Vilnius and especially in the city centre. • Wide existence of support services, escorting and assisting the PRM from airport to rail and city transport; even to the use of ICT- to match inaccessibility barriers (including the "Disabled Enabled" practice). • The law on Integration of Disabled into Society provides for the accessibility of public websites	• Transport Accessibility not well harmonised across the country; depending upon Municipality.	**Late-starter model** • Accessibility depends on the city or mode of transport. • Overall both the legislation and the implementation can be improved. • Social assistance models bridges the gap in-between.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
Luxembourg	• There are several laws but there is very good de facto accessibility. • Public transport (PT) is accessible to a great extent. • New buildings accessibility is regulated (2001, 2008 Accessibility Acts) but not for older buildings. • "e-Luxembourg" Governmental project enhanced accessibility of official governmental and municipal websites.	• No legal requirement on web sites accessibility.	**Front-runners model** • Overall very good legislative framework and implementation level. • Soft measures, such as staff training and info on services accessibility, need more focus or to be better presented.
Malta	• Public transport is bus operated and is required to be accessible for all. A fleet of accessible buses operates the service since 2011. • Drivers and staff training has taken place. • Reduced PT fare for PRM. • Some taxi companies provide wheelchair-accessible taxis and vans. • An accessible van transportation company has been contacted by the state for door to door services to PRM. • Ferry service between Malta and Gozo is accessible, with trained staff and free of charge for certain PwD groups. • Government and commercial websites are audited and certified by the Foundation for Information Technology Accessibility (FITA), which also consults and assists on relevant required adaptations.	• Demand of door to door accessible transport exceeds supply and there are long waiting lists. • Private accessible taxis and vans can be very costly.	**Front-runners model** • Good legislation and implementation levels. • First/last mile and door-to-door services need more resources.
Netherlands	• Accessibility of PT is a provision on the Act on Equal Treatment since 2012. New buildings (stations) and vehicles have to be accessible. Older ones will be gradually made accessible; trams as from 2020, trains as from 2030. • Also private transport will have to be made accessible, based upon a new regulation (of 2017) and the ratification of UNCRPD.	• Exempted from the staff training obligations of Bus and Coaches EU Regulation. • Local transport, offered by municipalities is exempted from the Act. • Not full accessibility is targeted but a high degree.	**Improvers model** • The legislation is in place and is expected to boost the country to the front-runners sometime between 2020 and 2030 for long-distance transport.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
	• Quotas exist for big public buildings accessibility. A private organisation provides a relevant inspection upon request. • Lowered pre-notification time for assistance in rail services to 1 hour for 100 stations (from 48 hours in the EU Regulation).	• In case accessibility adaptation costs are higher; special transport to PRM may be provided instead. • In 2016 eight complaints on inaccessible PT were laid down before the Netherlands Institute of Human Rights. • For private transport services accessibility is vaguely referred to, using the terms "gradually" and "general accessibility". There is no concrete time schedule for implementation. • Private websites and ICT are not required to be accessible to PwD, including public ones. 100% accessibility of public web sites was targeted for 2015 but it was not met. • In 2012 only 40% of the National and 10% of local municipalities' web sites met the accessibility standards; which however was improved to 50% and 30% respectively in 2014.	• Local transport and "soft" measures (such as staff training and info accessibility) needs better implementation across the country.
Poland	• The Transportation Law of 1984 has accessibility provisions. • According to a 2006 regulation PT timetables should specify the modes of transportation that are accessible. • Improving transport accessibility is one of the goals of the Transport Development Strategy for 2020. • There are available public funds for buildings accessibility enhancement.	• No specific law dealing with transport accessibility, but relevant issues are mentioned in some regulations. • The Charter of Rights for PwD (1997) acknowledges the need of accessible transport but is not legally binding. • The Transportation law is not applicable to sea and air	**Low-achievers model** • In terms of long-distance transport both the legislation framework and the implementation need strengthening. • For local transport accessibility enhancement is improving, but still not very high.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
	• ICT access for PwD was not specifically referred to in the ICT Act of 2001; but in its Amendment on 2005 and minimum requirements on accessibility were set in 2010. 125 relevant ICT adaptation projects have been undertaken and funded between 2007-2013.	transport; where accessibility is not well regulated.	
Portugal	• There are Decrees on the accessibility of all new public transportation vehicles (public buses-2004, trains according to COST 335 norms-1999, transportation stations for all modes 2006). • Licensing of accessible taxis-Decree of 1998. • Deadlines for non-conformity to Decrees exist and there are high fines for non-compliance as of 2017 the deadlines were all met. • Road Code of 2013 includes provision for all "Vulnerable" users (PRM, children, elderly, pregnant women, pedestrians and bicycles). • The RAMPA programme (Accessibility Support Regime for Municipalities) included measures to support accessibility assessment, awareness-raising and training activities. • There are also programmes on "Accessible Beach for all", "Alert school", "Accessibility and Mobility for All". • ICT and website accessibility are required by a Resolution of 2003 and promoted through many programmes (ACCESS, Portuguese Digital Agenda, etc.).	• The National Plan for the promotion of Accessibility (2007-2015) established a set of activities to remove accessibility between on two phases: 2007-2010 and 2011-2015. The first phase ended, was evaluated, leaded to new measures prioritisation, but new measures were not established and the second phase never started. This is now rescheduled within the context of the strategic Plan of Transportation and Infrastructure 2014-2020.	**Gap of Implementation model** • The legislative framework is very strong. • Implementation is improving but still lagging behind targets.
Romania	• Accessibility of public Transport is well regulated (Law of 2006), including deadlines for old vehicles-stations adaptation. • Trains have to have at least one car adapted for wheelchair users. • All taxi operators have to have at least one adapted vehicle for PRMs; including wheelchair users.	• Two deadlines set for PT accessibility adaptations (2007 and 2010) were not met. Reality lacks behind regulations. • According to the National Strategy on Disability (2016), local and national public transport services have a low	**Gap of Implementation model** • Good legislative framework. • Implementation lags behind.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
	• A 2006 law sets rules for accessibility regarding ICT and web sites. By end of 2017 all public institutions 'web sites had to be accessible.	level of accessibility, rail being the least and air the more accessible sectors. • The public websites accessibility target for 2017 was not fully met.	
Slovakia	• There are significant economic sanctions for non-compliance with EU legislation. • National Disability Programme for 2014-2020 targets enhanced public transport accessibility. • 24 hours prior notification for assistance in rail services (below the 48 hours of the EU Regulation).	• Not well detailed regulation for local transport. • ICT accessibility is targeted at but not yet achieved (still being monitored, analysed and planned to be improved).	**Mixed model** • The country can be considered a front-runner in terms of long-distance transport but is an improver for the local transport.
Slovenia	• Public Administration portal is W3C WCAG accessible (level A) PwD can use internet for free.	• Public Transport Accessibility is part of an Act on 2010 but the act envisages a 10-15 years transition period; aiming to achieve it by 2025. • No specific time scales on relevant actions are given. Fines are envisaged after 2025. • Regulations related to ICT accessibility Act are not adopted yet. • Exempted from staff training obligations of Bus and Coaches Regulation of EU.	**Late-starter model** • Good legislation overall but actual implementation is expected to reach the goal only after 2025. • "Soft" measures on accessibility level information and staff training need improvement.
Spain	• Public Transport Accessibility regulated on the Law of 2003, but Autonomous Regions regulate that in their territories. • Abolished completely pre-notification for assistance at major rail stations. • According to a Law of 2015, travel agencies must facilitate information in appropriate, accessible and understandable formats.	• Accessibility of PT vehicles and infrastructure incorporates an accessibility assessment (fifth provision of 2003 Law) that examines alternatives and determines technical solutions needed to ensure universal accessibility. The term	**Provincial model** • Accessibility varies between provinces and transportation modes.

COUNTRY	STRENGTHS	WEAKNESSES	OVERALL ASSESSMENT
	• Content accessibility of public web sites must be achieved after end of 2012 but on "average level".	"alternatives" can be misinterpreted. • ICT accessibility is promoted (2003 Law) but not a legal obligation overall.	
Sweden	• Right of access to public transport for PwD established in national regulations since 1979/1980. • The Transport Administration, the Maritime Administration and the Transport Agency monitor the procedures and draw up regulations. • Transportation stations and hubs accessibility is in accordance to general building regulations (2010-2011), applying to both public and private owners of buildings.	• A 2001 Regulation specifies the government obligation to provide accessible info. There is no such obligation on municipalities. And the governmental obligation does not extend to the individuals' chosen accessible format.	**Self-regulated model** • Good overall accessibility without very strict legislative framework.
UK	• The Equality Act 2010 imposes accessibility requirements (in England, Scotland and Wales) for all elements of service (travel information, ticketing, assistance, use of vehicles, etc.). Relevant Act for N. Ireland is of 1995, updated in 2005. • In 2012 an "Action Plan to improve Accessibility for All" was published, updated in 2017. • There are several accessibility regulations and/or good practice guides (for new buses and coaches, rail stations, etc.). • eAccessibility Action Plan as of 2010, to improve ICT accessibility level.	• Exempted from the staff training obligations of Bus and Coaches Regulation of the EU. • No particular ICT accessibility legislation for private websites.	**Self-regulated model** • Implementation based mainly upon guidelines and codes of good practice. • Accessibility info and staff training need to be strengthened across the country.

10 ANNEX 10: ACCESSIBILITY EVALUATION OF TRANSPORT AND TOURISM APPS

10.1 WCAG2.0 validation

Web Content Accessibility Guidelines (WCAG) 2.0 defines how to make Web content more accessible to people with disabilities. Accessibility involves a wide range of disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities.

Although these guidelines cover a wide range of issues, they are not able to address the needs of people with all types, degrees, and combinations of disability. These guidelines also make Web content more usable by older individuals with changing abilities due to aging and often improve usability for users in general.

WCAG 2.0 is developed through the W3C process in cooperation with individuals and organisations around the world, with a goal of providing a shared standard for Web content accessibility that meets the needs of individuals, organisations, and governments internationally. WCAG 2.0 builds on WCAG 1.0 [WCAG10] and is designed to apply broadly to different Web technologies now and in the future, and to be testable with a combination of automated testing and human evaluation. For an introduction to WCAG, see the Web Content Accessibility Guidelines (WCAG) Overview.

Web accessibility depends not only on accessible content but also on accessible Web browsers and other user agents. Authoring tools also have an important role in Web accessibility.

10.1.1 WCAG 2.0 layers of guidance

The individuals and organisations that use WCAG vary widely and include Web designers and developers, policy makers, purchasing agents, teachers, and students. In order to meet the varying needs of this audience, several layers of guidance are provided including overall principles, general guidelines, testable success criteria and a rich collection of sufficient techniques, advisory techniques, and documented common failures with examples, resource links and code.

Principles - At the top are four principles that provide the foundation for Web accessibility: perceivable, operable, understandable, and robust.

Guidelines - Under the principles are guidelines. The 12 guidelines provide the basic goals that authors should work toward in order to make content more accessible to users with different disabilities. The guidelines are not testable, but provide the framework and overall objectives to help authors understand the success criteria and better implement the techniques.

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

Sufficient and Advisory Techniques - For each of the guidelines and success criteria in the WCAG 2.0 document itself, the working group has also documented a wide variety of techniques. The techniques are informative and fall into two categories: those that are sufficient for meeting the success criteria and those that are advisory. The advisory techniques go beyond what is required by the individual success criteria and allow authors to better address the guidelines. Some advisory techniques address accessibility barriers that are not covered by the testable success criteria. Where common failures are known, these are also documented. See also Sufficient and Advisory Techniques in Understanding WCAG 2.0.

All of these layers of guidance (principles, guidelines, success criteria, and sufficient and advisory techniques) work together to provide guidance on how to make content more accessible. Authors are encouraged to view and apply all layers that they are able to, including the advisory techniques, in order to best address the needs of the widest possible range of users.

Note that even content that conforms at the highest level (AAA) will not be accessible to individuals with all types, degrees, or combinations of disability, particularly in the cognitive language and learning areas. Authors are encouraged to consider the full range of techniques, including the advisory techniques, as well as to seek relevant advice about current best practice to ensure that Web content is accessible, as far as possible, to this community. Metadata may assist users in finding content most suitable for their needs.

Table 10: Accessibility evaluation according to the WCAG 2.0

WCAG2.0 Level AA	AChecker	WAVE	WaaT (% accessibility)
Booking.com	167 errors	5 errors	Level A – 29.42% - 36 errors
TripAdvisor	53 errors	10 errors	Level A – 29.42% - 1805 errors
rumbo	21 errors	18 errors	Level A – 62.5% - 959 errors
Airbnb	4 errors	3 errors	38.1% Level A – 776 errors Level AA – 1 error Level AAA – 1 error
trivago	No WCAG errors	2 errors	Level A – 62.5% - 7 errors
checkfelix	115 errors	26 errors	Level A – 29.42% - 6 errors
KAYAK	112 errors	29 errors	Level A – 29.42% - 10 errors
Skyscanner	No WCAG errors	21 errors	Invalid page URL/Filepath
Hotels.com	12 errors	2 errors	Level A – 29.42% - 1268 errors
Button NEATEBOX	No WCAG errors	7 errors	WaaT error
AppsMapper	14 errors	3 errors	54.57% Level A – 204 errors Level AA – 403 errors Level AAA – 424 errors
It's Accessible	8 errors	4 errors	73.23% Level A – 342 errors Level AA – 5 errors Level AAA – 13 errors
Changing Places	5 errors	7 errors	44.09% Level A –47 errors Level AA – 685 errors Level AAA – 741 errors

WCAG2.0 Level AA	AChecker	WAVE	WaaT (% accessibility)
TripTripHurray	2 errors	4 errors	44.86% Level A –2 errors Level AA – 1 error
Guide Dots	2 errors	1 error	58.54% Level A –3 errors Level AA – 3 errors Level AAA – 3 errors
Red Panic button	Not available	4 errors	39.92% Level A –1706 errors Level AA – 3 errors Level AAA – 6 errors
Inclusive Britain	1 error	1 error	55.25% Level A –1295 errors Level AA – 87 errors Level AAA – 106 errors
TUR2All	28 errors	9 errors	64.09% Level A –902 errors Level AA – 376 errors Level AAA – 415 errors
briometrix	21 errors	6 errors	N/A by WaaT
Tactile Paths	8 errors	3 errors	WaaT error

Source: Author's own elaboration based on Web Content Accessibility Guidelines (WCAG) 2.0

Contrast validation

WCAG2.0 Guideline 1.4.3

1.4.3 Contrast (Minimum): The visual presentation of text and images of text has a contrast ratio of at least 4.5:1, except for the following: (Level AA)

Large Text: Large-scale text and images of large-scale text have a contrast ratio of at least 3:1;

Incidental: Text or images of text that are part of an inactive user interface component, that are pure decoration, that are not visible to anyone, or that are part of a picture that contains significant other visual content, have no contrast requirement.

Logotypes: Text that is part of a logo or brand name has no minimum contrast requirement.

Table 11: Contrast Errors of apps according to WAVE

Contrast Errors	WAVE
Booking.com	124 errors
TripAdvisor	61 errors
Rumbo	69 errors
Airbnb	No errors
Trivago	2 errors
checkfelix	26 errors
KAYAK	30 errors

Contrast Errors	WAVE
Skyscanner	112 errors
Hotels.com	13 errors
Button NEATEBOX	12 errors
AppsMapper	22 errors
It's Accessible	92 errors
Changing Places	17 errors
TripTripHurray	1 error
Guide Dots	No errors
Red Panic button	2 errors
Tap Tap See	-
BlindSquare	29 errors
My DisabledGo London	Not working link
Wheelmap	Not available
Inclusive Britain	1 error
TUR2All	9 errors
briometrix	16 errors
Tactile Paths	62 errors

Source: Author's own elaboration

Colour Contrast Checker

URL of colour contrast checker
URL of colour contrast checker - checking the accessibility of white boxes with black letters
URL of colour contrast checker - checking the accessibility of orange boxes with white letters

Table 12: Colour contrast Errors of apps according to WebAIM

Contrast Checker	WebAIM
Booking.com	21:1
TripAdvisor	21:1
rumbo	21:1
Airbnb	21:1
trivago	21:1
checkfelix	21:1
KAYAK	2.78:1 FAIL
Skyscanner	21:1
Hotels.com	21:1

Source: Author's own elaboration

All sites have selected black letters (#000000 is the colour code of black in the computers' world) on white background (#FFFFFF is the colour code of white) on their main search window. This choice provides large contrast ration (greater than 20 over 1) and passes WCAG2.0 guideline 1.4.3 validation for both levels AA and AAA.

10.2 HTML5 validation

W3C Markup Validation Service
W3C Validation Basics - What is Markup Validation?

Most pages on the World Wide Web are written in computer languages (such as HTML) that allow Web authors to structure text, add multimedia content, and specify what appearance, or style, the result should have.

As for every language, these have their own grammar, vocabulary and syntax, and every document written with these computer languages are supposed to follow these rules. The (X)HTML languages, for all versions up to XHTML 1.1, are using machine-readable grammars called DTDs, a mechanism inherited from SGML.

However, just as texts in a natural language can include spelling or grammar errors, documents using Mark-up languages may (for various reasons) not be following these rules. The process of verifying whether a document actually follows the rules for the language(s) it uses is called validation, and the tool used for that is a validator. A document that passes this process with success is called valid.

With these concepts in mind, we can define "mark-up validation" as the process of checking a Web document against the grammar (generally a DTD) it claims to be using.

Table 13: HTML5 validation of apps

HTML5 validation	W3C HTML Checker	AChecker	WAVE
Booking.com	93 errors	79 errors	82 errors
TripAdvisor	75 errors	209 errors	No HTML5 errors
rumbo	06 errors	6 errors	8 errors
Airbnb	59 errors	56 errors	47 errors
trivago	30 errors	28 errors	45 errors
checkfelix	61 errors	61 errors	473 errors
KAYAK	87 errors	86 errors	351 errors
Skyscanner	12 errors	No WCAG errors	7 errors
Hotels.com	51 errors	51 errors	46 errors
Button NEATEBOX	29 errors	29 errors	13 errors
AppsMapper	4 errors	4 errors	4 errors
It's Accessible	15 errors	52 errors	39 errors
Changing Places	25 errors	20 errors	No HTML5 errors
TripTripHurray	No HTML5 errors	27 errors	No HTML5 errors
Guide Dots	1 error	No HTML5 errors	No HTML5 errors
Red Panic button	1 error	Not available	1 error
Tap Tap See	-	-	-
BlindSquare	61 errors		98 errors
My DisabledGo London	Not working	Not working	Not working
Wheelmap	17 errors	17 errors	Not available
Inclusive Britain	1 error	1 error	3 errors
TUR2All	2 errors	2 errors	3 errors
briometrix	No HTML5 errors	No HTML5 errors	6 errors
Tactile Paths	70 errors	62 errors	23 errors

Source: Author's own elaboration

10.3 CSS validation

W3C Validation Service
W3C Validation Service - About the CSS validator

The W3C CSS Validation Service is a free software created by the W3C to help Web designers and Web developers check Cascading Style Sheets (CSS). It can be used on this free service on the web, or downloaded and used either as a java program, or as a java servlet on a Web server.

Most documents on the Web are written in a computer language called HTML. This language can be used to create pages with structured information, links, and multimedia objects. For colour, text, and layout, HTML uses a styling language called CSS, short for "Cascading Style Sheets". What this tool does is help people authoring CSS check, and fix if necessary, their CSS Style Sheets.

Table 14: CSS3 validation of apps

CSS3 validation	W3C CSS Checker	AChecker	WAVE
Booking.com	63 errors	139 errors	74 errors
TripAdvisor	19 errors	31 errors	23 errors
rumbo	36 errors	42 errors	22 errors
Airbnb	32 errors	44 errors	10 errors
trivago	62 errors	188 errors	33 errors
checkfelix	17 errors	69 errors	12 errors
KAYAK	15 errors	51 errors	44 errors
Skyscanner	I/O Error Requested Range Not Satisfiable	No WCAG errors	47 errors
Hotels.com	23 errors	29 errors	35 errors
Button NEATEBOX	100 errors	331 errors	11 errors
AppsMapper	4 errors	5 errors	14 errors
It's Accessible	6 errors	8 errors	18 errors
Changing Places	No CSS errors	1 error	22 errors
TripTripHurray	No CSS errors	533 errors	2 errors
Guide Dots	No CSS errors	No CSS errors	No CSS errors
Red Panic button	17 errors	Not available	23 errors
Tap Tap See	-	-	-
BlindSquare	69 errors		91 errors
My DisabledGo London	Not working	Not working	Not working
Wheelmap	3 errors	9 errors	Not available
Inclusive Britain	2 errors	9 errors	4 errors
TUR2All	3 errors	7 errors	34 errors
briometrix	6 errors	15 errors	9 errors
Tactile Paths	11 errors	16 errors	31 errors

Source: Author's own elaboration

10.4 Evaluation tools and options

10.4.1 AChecker

AChecker accessibility validator URL

AChecker is a web based tool that checks single HTML pages for conformance with accessibility standards to ensure the content can be accessed by everyone. See the Handbook link to the upper right for more about the Web Accessibility Checker.

It has been set to evaluate the websites with all options enabled i.e. HTML, CSS and WCAG 2.0 - Level AA.

10.4.2 WAVE - web accessibility evaluation tool

WebAim WAVE accessibility validator URL

WAVE is a web based tool to help web developers make their web content more accessible. WAVE cannot identify if a web content is accessible. Only a human can determine true accessibility. But, WAVE can help developers evaluate the accessibility of web content. It has been set to evaluate HTML, CSS and WCAG 2.0 on all levels (A, AA and AAA).

WAVE web accessibility evaluation tool and WebAIM Colour Contrast Checker (used on Contrast validation) are applications developed from WebAIM web accessibility in mind non-profit organisation.

10.4.3 WaaT - Web accessibility assessment Tool

Accessible EU Project – Application Design and Development (FP7)

Web accessibility assessment Tool – WaaT URL

WaaT is a Web applications assessment tool for the accessibility verification of Web applications. ACCESSIBLE EU project developed two different versions of the tool. Thus, potential web site developers may choose between a standalone version and a web based version (that can be accessed through the ACCESSIBLE portal). The developer may define input parameters/rules/constraints regarding the overall assessment process (e.g. evaluate a web page according to a specific WCAG 2.0 accessibility technique, or according to a specific disability, etc.).

The standalone version has been used and it has been set to one page URL evaluation and to WCAG2.0 Level A and AA evaluation. It can be said that WaaT uses the WCAG guidelines on a very strict manner.

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This study has undertaken literature reviews, user and experts' questionnaires, interviews and workshop surveys, analysis of EU legislation, SWOT and Multi-Criteria Analysis, identification of best practices and analyses of case studies. This has led to a mapping of accessibility across the EU Member States (identifying relevant state clusters) for three different sectors: local transport, long-distance transport, and tourism. Specific policies, research priorities and recommendations are made per state clusters and for the EU, which can enhance accessibility in each of the three sectors.

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